



Research Article

COMMUNICATION PATTERN FOLLOWED BY ADOPTERS OF VARIOUS FARMING SYSTEMS IN NORTHERN HILLS ZONE OF CHHATTISGARH

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Received: December 03, 2019; Revised: December 16, 2019; Accepted: December 19, 2019; Published: December 30, 2019

Abstract: This investigation are done in all five districts of Northern Hills Zone of Chhattisgarh to suggest which particular farming system viz. cereal based, pulse based, sugarcane based and dairy based farming system is most productive or beneficial for farmers. The findings revealed that majority (69.33%) of the respondents were obtained information from RAEOs, followed by friends/relatives (64%) and about 27 percent of them obtained from Kisanmitras. In case of credibility, the progressive farmers were found most credible amongst the all sources of information. Regarding contact with extension personnel, about 37 percent of the respondents made contact with Rural Agricultural Extension officer (RAEOs) and half of the respondents used 1 to 2 sources of mass media, followed by 47 percent used 1 source of mass media. The majority of the respondents (59%) had contacted to city/town monthly and more.

Keywords: Farming system, Sources of information, Extension contact, Cosmopoliteness and Mass media exposure

Citation: Narbaria S. and Khan M.A. (2019) Communication Pattern Followed by Adopters of Various Farming Systems in Northern Hills Zone of Chhattisgarh. International Journal of Agriculture Sciences, ISSN: 0975-3710 & E-ISSN: 0975-9107, Volume 11, Issue 24, pp.- 9326-9328.

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Academic Editor / Reviewer: Dr R. L. Kalasariya

Introduction

Chhattisgarh state is having 137.9 lakh ha geographical area, out of which about 46.77 lakh ha is under cultivation. Rice is the main crops of the state occupying about 37 lakh ha area. In addition to rice several other crops like Grass pea, Chickpea, Wheat, Moong, Urd etc. are also growing on a considerable area. The aggregate *rabi* crop area is about 17 lakh ha to make the state's cropping intensity 137 percent. The state is divided into three agro-climatic zones. Each agro-climatic zone has its own peculiar agriculture and livelihood patterns due to agro-ecological diversity. The Northern hills agro-climatic zone is dominated by scheduled tribe population. Their main occupation is agriculture followed by practicing less remunerative subsidiary occupations like animal husbandry, horticulture and related agro-forestry based income sources. The existing scenario of productivity of crops and allied sectors is not up to the desired level, may be due to the low or non-adoption of recommended farm practices in the region. This situation leads to poverty, mal-nutrition and dependence on forest produces for sustaining their livelihood system. In these circumstances, it is required to identify various farming system prevailing in the region along with the adoption pattern of different practices. It is required to design appropriate extension strategies for the socio-economic upliftment of farmers by intervening the critical and prioritized factors involved in the farm enterprise

Materials and Methods

This study was done during the period of 2014-15 and 2015-16 in the most diverse agro-climatic zone of Chhattisgarh state, which comprises of five districts. All the five districts in the zone, Surguja, Korja, Surajpur, Balrampur and Jaspur were undertaken for the study. Two Block from each selected district were selected randomly for this investigation. In this way a total of 10 blocks (2 X 5 = 10) were taken for this study. Two random villages were selected from every selected block and 15 farmers who were engaged in practicing different farming systems selected for the purpose of data collection. So, a total of 300 farmers were chosen for this study.

Method of data collection

The interview schedule was designed on the basis of objectives and independent and dependent variables considered for present investigation. To facilitate the respondents, the interview schedule was framed in "Hindi". Each question was thoroughly examined and discussed with the experts before finalizing the interview schedule. Adequate precautions and care were taken into consideration to formulate the questions in a manner that they were well understood by the respondents and would find it easier to respond. Before using prepared interview schedule for collection of data it was pre-tested by 20 non-sample respondents and also checked its reliability and validity. On the basis of experience gained in pre-testing, the necessary modifications and suggestions were incorporated before giving a final touch to interview schedule. The final interview schedule is given in appendix.

Result and discussion

Communicational characteristics / Source of information

Source of information includes both information sources from where the respondents are getting information about farm practices for increasing productivity and profitability. The data regarding utilization of information sources for seeking the information about farm practices are presented in the [Table-1] and [Fig-1]. The finding reveals that in the study area, majority of the respondents (69.33%) were obtained information regarding farm practices from RAEOs. The study also reveals that 64 % of the respondents obtained the information from friend/relatives. About 27 % of the respondents obtained information from kisanmitra, 22 % from agriculture input dealer, 16% from T.V. and 13 % respondents were using radio as information source. Quite similar results were obtained by Painkra *et al.*, (2014) [1]. Fourteen percent of the respondents obtained information from neighbour and demonstrations, followed by 4.33 percent of them were contacting progressive farmers and SMS as information sources. 4 % of respondents obtained information from ADOs, followed by 1.33 and 1% were using panch/sarpanch and newspaper as information source.

The findings further reveal that respondents obtained information often from RAEOs, friends/relatives and kisanmitra. While, almost all the information sources were used by the respondents for seeking the information about farm practices. These findings find some support from Adesope *et al.* (2012) [2] who found that about 44 percent of the farmers gain knowledge about organic farming from friends/relative/neighbours.

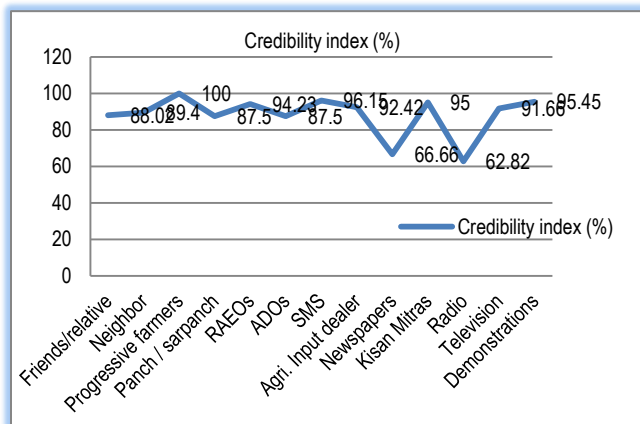


Fig-1 Credibility of information sources amongst the respondents

Table-1 Distribution of respondents according to their source of information

SN	Sources	Frequency	Percentage
1	Friends/relative	192	64.00
2	Neighbor	33	11.00
3	Progressive farmers	43	14.33
4	Panch / sarpanch	4	1.33
5	RAEOs	208	69.33
6	ADOs	12	4.00
7	SMS	13	4.33
8	Agri. Input dealer	66	22.00
9	Newspapers	3	1.00
10	KisanMitras	80	26.67
11	Radio	39	13.00
12	Television	48	16.00
13	Demonstrations	33	11.00

*Data are based on multiple responses

Table-3 Distribution of respondents according to their contact with extension personnel

Extension personnel	Never		1 to 3 times in a year		Once in month		Twice or more in a month	
	F*	%	F*	%	F*	%	F*	%
RAEO's	58	19.33	78	26	111	37	53	17.67
ADO's	230	76.67	54	18	10	3.33	6	2
SADO's	286	95.33	12	4	2	0.67	0	0
SMS/Agri. Scientist	292	97.33	7	2.34	1	0.33	0	0

*Data are based on multiple responses, F= Frequency, %= Percentage

Table-4 Distribution of respondents according to their mass media exposure

SN	Level of exposure	Frequency	Percentage
1	Up to 1 source	141	47
2	1 to 2 Sources	154	51.33
3	more than 2 sources	5	1.67

Table-5 Distribution of respondents according to their cosmopolitaness

SN	Contact to city / town	Frequency	Percentage
1	Daily	28	9.33
2	Weekly	66	22
3	Fortnightly	29	9.67
4	Monthly and more	177	59

Regarding contact with SADOs, the data reveals that majority (95.33%) of the respondents had never contacted with SADOs, 4 percent of respondents had contacted 1 to 3 times in a year, 0.67 percent of respondents monthly contacted with SADOs and no respondent had contacted them twice or more in a month. Regarding contact with SMS and scientists, the data shows that most of the respondents (97.33%) had never contacted them. About 2.5 and 0.33 percent of

Table-2 Distribution of respondents according to number of information sources utilized by them

SN	Particulars	Frequency	Percentage
1	Up to 2 sources	139	46.34
2	3 to 4 sources	151	50.33
3	More than 4 sources	10	3.33

Mean= 2.67 S.D. = 0.9

The findings also revealed that in the study area, progressive farmers were having highest credibility (100%) amongst the respondents for gaining information about farm practices. It was further found that the credibility of agricultural scientists (96.15%) and demonstrations (95.45%) was also very high. Credibility towards kisanmitras was 95 percent, 94.23 percent towards RAEOs, 92.42 percent towards agriculture input dealers, 91.66 percent towards T.V, and 89.4 percent towards neighbor. The credibility towards friends/relative, ADOs, panch/sarpanch, and newspapers were 88, 87.5 and 66.66 percent, respectively. The lowest credibility was found towards radio (62.82%). The data on overall utilization of information sources by the respondents are presented in [Table-2]. The findings indicate that majority of the respondents (50.33%) were using 3 to 4 sources, followed by 46.34 percent were using up to 2 information sources. Only 3.33 percent of the respondents were using more than 4 sources for gaining information about improved farm practices.

Contact with extension personnel

The contacts of extension personnel with the respondents were asked and result are compiled in [Table-3]. The data is compiled as per the distribution of the respondents with respect to their frequency of contact with extension personnel. About 37 percent of the respondents made contact with Rural Agricultural Extension Officer (RAEOs) once in a month, 26 percent contacted 1 to 3 times in a year and about 18 percent respondents contacted RAEOs twice or more in a month, while about 20 percent respondents had no contacts with RAEOs. With regard to Agricultural Development Officer (ADOs), the findings show that majority (76.67%) had never contacted with them and 18 percent of respondents had contacted 1 to 3 times in a year, followed by 3 percent respondents had monthly contact with ADOs and 2 percent respondents made contact twice or more in a month with ADOs.

respondents contacted them 1 to 3 times and once in a month, respectively and none of the respondent contacted twice or more in a month with SADOs.

Exposure to mass media

The respondents were asked about the mass media sources used by them and results are compiled in [Table-4]. The data reveals that about half of the respondents used 1 to 2 sources of mass media, followed by 47 percent of respondents were using up to 1 source of mass media and about 2 percent of respondents were using more than 2 sources.

Cosmopolitaness

Cosmopolitaness is the degree to which an individual is oriented outside to his immediate social system. It provides outside exposure to the farmers that may be beneficial for them. The respondents were asked about how many times they contacted outside to immediate social system and the findings are compiled in [Table-5]. It is clear from the table that majority of the respondents (59%) had contacted to city/town monthly and more, followed by 22 percent of the respondents contacted weekly, about 10 percent respondents contacted

fortnightly to city/town and only 9.33 percent of the respondents had contacted city/town daily. These findings find little support from Sahu (2006) [3] and Narbaria *et al.* (2015) [4].

Conclusion

It was found from the study that the most of the respondents used only two mass media sources and they had very low contact with the extension personnel and they monthly contacted the outside the village boundary this may reflected their exposure towards adoption of modern or advanced technology adoption. On the basis of observation sought during the course of investigation and discussion with the various stakeholders the following strategies are suggested, the government should create the more connectivity of extension personnel with the farmers, the timely supply of information, respondents should visit on the farm of progressive farmers and other agriculture institution like KVK farm, Agril. University farm and farmers fair *etc.*

Application of Research: This research is very important for formulating farming system based research strategies for Northern Hills Zone of Chhattisgarh State.

Research Category: Post facto research

Abbreviations:

RAEO's: Rural Agricultural Extension Officer

ADO: Agriculture Development Officer

SMS: Subject Matter Specialist

T.V.: Television

Acknowledgement / Funding: Authors are thankful to Department of Agricultural Extension, Collage of Agriculture, Indira Gandhi Krishi Vishwavidyalaya, Raipur, 492012, India. Authors are also thankful to University Grant Commission (UGC) New Delhi for providing financial assistance as fellowship for entire Ph.D. programme as RGNF for SC candidate.

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Research project name or number: PhD Thesis

Author Contributions: All authors equally contributed

Author statement: All authors read, reviewed, agreed and approved the final manuscript. Note-All authors agreed that- Written informed consent was obtained from all participants prior to publish / enrolment

Study area / Sample Collection: Five districts of Northern Hills Agro-Climatic Zone namely Surguja, Koria, Surajpur, Jaspur and Balrampur.

Cultivar / Variety / Breed name: Nil

Conflict of Interest: None declared

Ethical approval: This article does not contain any studies with human participants or animals performed by any of the authors.

Ethical Committee Approval Number: Nil

References

- [1] Painkra V.K., Khan M.A., Pradhan S.K., Narbaria S and Sharma M.L. (2014) *Journal of Communication Studies* XXXII, 13-19.
- [2] Adesope O.M., Matthews E.C., Oguzor N.S. and Ugwuja V.C. (2012) *Crop Production Technologies, 1st Edition, In Tech China, Shanghai, China*, 215.
- [3] Sahu V.K. (2006) M.Sc. (Ag.) Thesis, IGKV, Raipur, 26-29.
- [4] Narbaria S., Sharma M.L. Khan M.A and Painkra V.K. (2015) *Journal of Communication Studies*, XXXIII, 56-60.