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Socio-communicational attributes of the Maize growers

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Abstract

This investigation was carried out in three district of Bastar plateau of Chhattisgarh State to assess the level of Communicational attributes of the respondents. 270 farmers were consider as respondents for this study. Respondents were interviewed through personal interview. Collected data were analyzed with the help of suitable statistical methods. The analysis of the results showed that most of the respondents were regarding to their collected agricultural information from REOs/ADOs, progressive farmers, friends, agricultural input dealers and relatives. Majority of the respondents contact to REOs, ADOs occasionally, and their participation in extension activities had overall medium.

Keywords: Socio-communicational attributes

Introduction

Maize (*Zea mays* L.) is one of the most important cereal crops in the world and has the highest production among all the cereals. It is a miracle crop, it has very high yield potential, there is no cereal on the earth which has so immense potentiality and that is why it is called 'queen of cereal'. Besides, maize has many types like normal yellow, white grain, sweet corn, baby corn, pop-corn, waxy corn, high amylase corn, high oil corn, quality protein maize, etc. Maize is the most important crop in the world after wheat and rice (Verheys, Undated). It is an important staple food in many countries and is also used as animal feed and many industrial applications. Maize is 3rd major crop in India after rice and wheat (Cox, R., 1956 & Reddy *et al.* 2013) ^[10]. Maize is important cereal crop which provides food, feed, fodder and serves as a source of basic raw material for a number of industrial products *viz.*, starch, protein, oil, food sweeteners, alcoholic beverages, cosmetics, bio-fuel etc. it is cultivated over 8.12 million hectare area with an annual production of 19.77 million tones and an average productivity of 2,435 kg ha⁻¹ (Langade *et. al.* 2013) ^[13]. Maize is the third most important food grain in India after wheat and rice. In India, about 28% of maize produced is used for food purpose, 11% as livestock feed, 48% as poultry feed, 12% in wet milling industry (for example starch and oil production) and 1% as seed (AICRP on Maize, 2007). Maize crop in the state has an area of 123430 ha with the production 254134 MT (C.G. Agriculture Statistic Report 2014). The area and production of Maize crop in Kanker district was 11511 ha and 25705 MT respectively, area of maize crop in Kondagaon district is 13586 ha with production of 31831 MT while the coverage of maize in Bastar district is 9560 ha with the production of 22398 (C.G. Ag. statistic Report 2014). The Socio-communicational attributes indicate the social standing or class of an individual or group. It is often measured as a combination of education, income and occupation of respondents. The present study was undertaken with specific objectives to assess the Socio-communicational attributes of the maize growers of Bastar plateau of Chhattisgarh.

Material and Methods

The present study was carried out in Bastar plateau of Chhattisgarh State. Three districts in the zone *i.e.* Kanker, Kondagaon and Bastar were undertaken for the study. Two blocks from each of the selected district Block Antagarh and Koylibeda in Kanker District, Keshkal and Baderajpur in Kondagaon, Bastar and Bakawand in Bastar District. Each selected block 3 villages *viz.*

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Irrabodi, Amagaon, Godri, in Antagarh Block, Chotekapsi, Kodosalhebhat, Manegaon, in Koylibeda Block, Cherbeda, Toraibeda, Amoda in Keshkal Block, Baderajpur, Toraipara, Khargaon (Manduki) in Baderajpur Block, Ikchapur, Bagmohlai, Dubeumargaon in Bastar Block, Belputi, Khotlapal and Mangnar in Bakawand Block were selected and from each selected village, 15 farmers were selected randomly. In this way total two hundred seventy respondents were selected to response as per the interview schedule designed for the study. Collected data were analyzed by the help of various statistical tools *i.e.* frequency, percentage, mean, standard deviation, correlation and regression, *etc.* In this study, the Socio-communicational attributes indicate the social standing or class of an individual or group. The scoring procedure was used as follow.

Communicational Attributes

Source of information

It refers to the frequency with which the sources are consulted by the respondents in order to seek information regarding crop production technology. To find out the extent of consultation of information to each of these sources were fitted in the three point continuum that is regularly, occasionally and never and the scoring of 2, 1 and 0 followed respectively. Source of information was measured by using the scale followed by Byrareddy (1971) [13] and as modified by Mangala (2008) [14] with slight modification and categorised as follow.

Categories	Score
Never	0
Occasionally	1
Regular	2

Contact with extension personnel

It is operationalised as the frequency of contacts of the respondents with extension personnel of developments during one year, with a view to seek guidance on the issues related to agriculture in general. Agriculture extension personnel may be involved in applied research, marketing, providing specialist services and regulation. In this study, extension personnel namely, Rural Agricultural Extension Officer (RAEO), Agriculture Development Officer (ADO), Subject Matter Specialist (SMS), Scientist, Farmers friend, and Block Technical Manager were identified and considered for the study. Contact with extension personnel was measured by using the scale developed by Sawant (1999) [15] with slight modifications and categorised as follow.

Categories	Score
Awareness	
Yes	1
No	0
Regular	4
Occasionally	2
Never	0

Participation in extension activities

It refers to identify the factors associated with participation in extension activities and innovation adoption of the respondents and also provides a new direction to operationalize farmer-oriented policies of agriculture. Participation in extension activities was measured by using

the scale developed by Siddaramaiah and Jalihal (1983) [16] with slight modification. The scale consists of 15 items. It was administered to the respondents and information was obtained on the participation of respondents in different extension activities. The scoring procedure was used as follow.

Categories	Score
Not Participated	0
Participated	1

Result and Discussion

The result and discussion of the present study have been summarized on the basis of response of respondents regarding to Socio-communicational attributes among the respondents are represented in the following.

Communicational Attributes

Source of information

Data pertaining to source of information based on the information collected from different respondents are depicted in Table No. 1. The respondents used to collect various information related to agriculture from different sources. It is indicated that majority of the respondents occasionally used the agricultural information from friends (64.4%), neighbor (47.4%), progressive farmers (70%), RAEOs (56%), input dealers (55.5%), while majority of respondents never used the information sources like relatives (58.9%), agriculture scientist(93.3%), newspaper (65.9%), radio(69.6%), demonstration and exhibition (66.3%), training (58.1%) and kisan mela (97.4%). 40 percent and 27.8 percent of the respondents regularly visit the REAOs and input dealers for collecting agricultural information. Similar findings were reported by Patel (2011) [17] who reported 68.80 and 89.60 percent respondents had received from different information source (village level worker and pesticide dealer).

Table 1: Distribution of the respondents on the basis of source of information

S. No.	Source of information	Regular		Occasional		Never	
		No	%	No	%	No	%
1	Friend	32	11.9	174	64.4	64	23.7
2	Relative	16	5.9	95	35.2	159	58.9
3	Neighbors	55	20.4	128	47.4	87	32.2
4	Progressive farmer	31	11.5	189	70.0	50	18.5
5	REOs/ADOs	107	40	151	56	12	4
6	Agriculture Scientist	3	1.1	15	5.6	252	93.3
7	Input Dealer	75	27.8	150	55.5	45	16.7
8	News paper/Agriculture mag.	14	5.2	78	28.9	178	65.9
9	Radio	35	13.0	47	17.4	188	69.6
10	Demonstration and Ag. Exhibition	6	2.2	85	31.5	179	66.3
11	Training	8	3.0	105	38.9	157	58.1
12	Kisan Mela	0	0.0	7	2.6	263	97.4
13	Others (Private worker)	6	2.2	84	31.1	180	66.7

*Data are based on multiple respondents

Contact with extension personnel

Data on distribution of respondents on the basis of overall contact with extension personnel *viz.* RAEOs/ADOs, scientist, SMS etc. are categorized and represented in the Table No.2. The overall contact of the respondents with the extension personnel indicated that 85.56percent of the respondents had medium level of contact with extension

personnel followed by 13.70percent respondents had high level of contact. Only 0.74percent of the respondents had low level of contact with extension personnel's.

Table 2: A Distribution of the respondents on the basis of overall contact with extension personnel

S. No.	Category	Frequency	Percentage
1	Low (Up to 4 score)	2	0.74
2	Medium (5 – 8 score)	231	85.56
3	High (above 8 score)	37	13.70
	Total	270	100.00
		Mean-6.74	SD- 2.2

There was no only contact establishment of respondents with extension personnel's particularly with SMS, Agriculture scientist, Blok Technical management at the rate

of 97, 93 and 82.6 percent respectively. Respondents used to contact with RAEOs, ADOs, Farmers friends and other at the rate of 98.1, 53.3, 88.9 and 54.4 percent respectively. Contact of respondents with 46.7 percent ADOs, 97percent SMS, 93 percent Agriculture Scientist and 82.6 percent Blok Technical Management was never established, whereas the contact with REAOs, ADOs and farmers friends was occasional and found 93.3,52.2 and 81.5 percent respectively. Comparatively less respondents were found to be regularly contacting with all the extension personnel. Similarly findings were reported by Paikra (2014) [18] in the study area who observed 73.34 and 63.33 percent of the respondents had occasional contact with SADOs and REOs respectively.

Table 3: Distribution of the respondents on the basis of their contact with extension personnel

S.No.	Extension personnel	Extent of contact									
		Y		N		Never		Occasional		Regular	
		F	%	F	%	F	%	F	%	F	%
1	Rural agriculture extension officer	265	98.1	5	1.9	5	1.9	252	93.3	13	4.8
2	Agriculture development officer	144	53.3	126	46.7	126	46.7	141	52.2	3	1.1
3	Subject matter specialist	8	3.0	262	97.0	262	97.0	8	3.0	0	0
4	K.V.K./ Agriculture scientist	19	7.0	251	93.0	251	93.0	14	5.0	5	2.0
5	Farmers' friend	240	88.9	30	11.1	30	11.1	220	81.5	20	7.4
6	Block Technical Management	47	17.4	223	82.6	223	82.6	47	17.4	0	0
7	Other (Private worker)	147	54.4	123	45.6	123	45.6	147	54.4	0	0

*Data are based on multiple respondents

Participation in extension activities

Data overall exposure of the respondents to the different extension activities are presented in Table no. 4. It was found that 61.10 percent of respondents had medium level of participation in extension activities, whereas 21.50 and 17.40 percent of respondents had low and high level of participation in extension activities.

Table 4: Distribution of the respondents on the basis of overall participation in extension activities

S. No.	Category	Frequency	Percentage
1	Low (Up to 2 score)	58	21.50
2	Medium (3 – 5 score)	165	61.10
3	High (above 5 score)	47	17.40
	Total	270	100.00
		Mean-3.97	SD- 1.65

Table 5: Distribution of the respondents on the basis of their participation in extension activities

S. No.	Extension participation	Frequency	Percentage
1	Demonstration conducted on my field	107	39.62
2	Observed neighbor's demonstrated field	101	37.40
3	Discussion with extension agent	184	68.14
4	Participate in farmer's day on farmer's field	9	3.33
5	Participate in farmers' fare	154	57.03
6	Participate in extension meeting	94	34.81
7	Participate in kisan mela	17	6.29
8	Participate in agriculture exhibition	55	20.37
9	Participate in training programme	150	55.55
10	Kisan call centre	3	1.11
11	Visit College of Agriculture & Research Station	12	4.44
12	Kisan credit card	103	38.14
13	Participate in reading of extension publications	4	1.48
14	Agriculture based programme hearing on Radio/ watching on TV	75	27.77
15	Visit of Krishi. Vigyan Kendra	5	1.85

*Data are based on multiple responses

Participation in different extension activities of respondent's data showed in TableNo.5. Among the different extension activities discussion with extension agent was found highest as 68.14percent where respondents had participated followed by farmers fare and training programme (55.55%). Least number of respondents had participated in Kisan call

center (1.11%), reading of extension publication (1.48percent) and visit of Krishi Vigyan Kendra (1.85%). Similar findings were reported by Paikra (2014) [18] who found that 92.50 and 49.17 percent respondents had actively participated to discussion with extension agent and farmers fare respectively in the study area.

Conclusion

From the above research findings it can be concluded that most of the respondents were collected agricultural information from REOs/ADOs, contact to REOs, ADOs occasionally, and their participation in extension activities had overall medium.

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