USE OF INFORMATION SOURCES BY FARMERS OF RAIPUR DISTRICT OF CHHATTISGARH

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Abstract: Information is key to development. Information is power an informed society is more conducive for development. Arang and Dharsiwa blocks were purposively chosen for the study owing to their proximity to the state capital *i.e.* Raipur. One hundred farmers were randomly selected from nine villages of the above two blocks. A structured interview schedule was developed on the basis of the objectives of the study and the respondents were personally interviewed by the researchers for collecting the primary data. It was found that the majority of the respondents were middle aged, studied up to primary school, belonged to schedule caste, medium sized family, had small sized family, had no membership in any organization, had small sized land holding , had other sources of irrigation, had agriculture + labour as their occupation, had annual income of Rs. 35,00 to Rs. 60,000, sold their farm produce at mandi. It was also found that majority of the respondents had medium overall contact with extension personnel, had medium overall use of information sources, had medium scientific orientation, had moderately favorable attitude towards use of different mass information source. Form the correlation and mutipal analysis it found the variables education, size of land holding, sources of irrigation, occupation, annual income, marketing, scientific orientation and attitude had positive and significant relationship with use of information sources at 0.01 level of probability, while the variable contact with extension personnel had positive significant relationship with the variable use of information sources at 0.05 level of probability. The variable age had negative and significant relationship with use of information sources at 0.01 level of probability.

Keywards: Information Sources, Communication, Scientific Orientation

INTRODUCTION

Communication is the basic need of all human beings and it is a continues process throughout ones life. The present era is the era of information and knowledge revolution. Information is key to development. Information is power an informed society is more conducive for development. Communication of information about man and material resources; information on market, prices, supply and demand, about policy makers, producer and ultimate users *etc*. are essential. This is being made possible with the use of new communication technology.

Research estimated often by new information is sustained by continues flow of information. Information acts as a back bone for any dynamic and efficient researches. There is a universal assumption that man was born innocent or ignorant and should actively seek knowledge. "Information seeking behavior is thus a natural and necessary mechanism of human existence." Information seeking behavior is the purposive seeking for information as a consequence of a need to satisfy some goal. In the course of information seeking the individual may interact with manual information systems such as news paper, magazines, folders, pamphlets or electronic information systems such as T.V. or Radio or with Computer based systems like internet, e-mail, CD-ROMs *etc*.

In our country, reach of radio and television has extended to more than 80 per cent of the population and the area. It aims at promoting national integration, dissemination of message, educating people, providing healthy entertainment and dissemination of essential knowledge to stimulate agricultural production. The information needs of rural population include expert guidance on day-to-day problems like crop planning, pest management, animal husbandry, hand pumps installation and repairs. Individual information requirements could include job/education opportunities bank loans and land records. For local level planning, the government/ Panchayat requirement could include health information including vital events (like birth, death and outbreak of certain disease), besides status of different development activities and vital infrastructure like roads, wells and transport.

Considerable time of extension worker is spent for administrative work and trend. In this situation, it is very difficult to provide latest information and farm technologies to the farmers in the shortest time. To solve such a problem, cost effective and efficient support systems like mass media is required. Newspapers, magazines, traditional media, radio, television *etc*. home proved to be most powerful opinion makers in this information age.

Keeping these facts in mind a micro study was conducted with the following specific objectives:-

1. To analyse the profile of farmers,
2. To find out the extent of use of information sources by the farmers and
3. To obtained the relationship between the use of information sources and the profile characteristics of the farmers.

METHODOLOGY

Out of the eight blocks of Raipur district, Arang and Dharsiwa blocks were purposively chosen for the study owing to their proximity to the state capital *i.e.* Raipur. It was perceived that due to their locational advantage the villages under these blocks would have better access to information sources as compared to others. One hundred farmers were randomly selected from nine villages of the above two blocks. A structured interview schedule was developed on the basis of the objectives of the study and the respondents were personally interviewed by the researchers for collecting the primary data. Likert type attitude scale as suggested by Ray and Mondal (2011) was used to measure the attitude of farmers towards use of information sources. Social participation of the farmers was measured by using the scale developed by Trivedi (1963) with slight modifications. Occupation was studied on the basis of the assumption that it directly/indirectly influences the extent of use of information sources by the farmers. It was determined with the help of socio-economic status scale developed by Trivedi (1963) with some modifications. The sources of information like radio, television, newspapers, magazines, leaflet, posters, friends, relatives are utilized by farmers for obtaining farm related information useful for agricultural development. Thirteen commonly used information sources were shortlisted and the farmers were asked to state the frequency with which they commonly used the above sources as frequent use, often use, never use with scores 3, 2 and 1 respectively. The scores of each sources of information was summated up to obtain the total score for each respondent. These summated scores were used in statistical analysis and the respondents were grouped into there categories by using the following formula:

Information sources index (I.S.I.) = ($\overline{X}$) ± S.D. categories

Categories	
Low level of use of information sources	(< $\overline{X}$ – S.D.)
Medium level of use of information sources	(in between $\overline{X}$ ± S.D.)
High level of use of information sources	(> $\overline{X}$ + S.D.)

In order to ascertain the relationship between dependent and independent variables the coefficient of correlation and multiple regression were worked out with the help of following formula:

$$r = \frac{N\sum xy - \sum x \sum y}{\sqrt{N\sum x^2 - (\sum x)^2 \cdot N\sum y^2 - (\sum y)^2}}$$

Where,

r = Correlation coefficient
x = Score of independent variable
y = Score of dependent variable
N = Number of observation

and

$Y_1 = a + b_1x_1 + b_2x_2 + \ldots\ldots\ldots + b_nx_n$

Where,

Y_1 = Dependent variable
$x_1 \ldots x_n$ = Independent variables
a = Constant value
$b_1 \ldots b_n$ = The regression coefficient for respective independent variables

RESULT AND DISCUSSION

Table 1: Distribution of respondents according to their socio-personal characteristics n = 100

S. No.	Characteristics	Frequency	Per cent
1.	**Age**		
	Young (below 34 years)	16	16.00
	Middle (34 to 56 years)	68	68.00
	Old (above 56 years)	16	16.00
2.	**Education**		
	Illiterate	22	22.00
	Primary school	26	26.00
	Middle school	21	21.00
	High school	12	12.00
	Higher Secondary	10	10.00
	College and above	09	09.00
3.	**Caste**		
	Schedule tribes	16	16.00
	Schedule caste	60	60.00
	Other backward class	19	19.00

	General	05	05.00
4.	**Size of family**		
	Small (up to 2 members)	03	03.00
	Medium (2 to 16 members)	90	90.00
	Big (> 16 members)	07	07.00
5.	**Type of family**		
	Nuclear	31	31.00
	Joint	69	69.00
6.	**Social participation**		
	No membership	81	81.00
	Membership in one organization	16	16.00
	Membership in two and more than two organization	01	01.00
	Executive / office bearer	02	02.00

The data given in Table 1 show the socio-personal characteristics of the respondents. It was found that 68.00 per cent of the farmers were middle aged and 16.00 per cent of the were young, while another 16.00 per cent were of old aged. So for as educational status of the farmers is concerned 26.00 per cent of them had studied up to primary school, 22.00 per cent were illiterate, 21.00 per cent were educated up to middle school, 12.00 per cent were educated up to high school level, 10.00 per cent up to higher secondary and only 09.00 per cent of them were educated up to college and above. As regards caste, the study revealed that the majority of the farmers (60.00%) belonged to schedule caste, 19.00 per cent belonged to OBC, 16.00 per cent belonged to schedule tribes and 05.00 per cent of them were from general caste. A considerable majority (90.00%) of the farmers belonged to medium sized family, 07.00 per cent had big sized family whereas only 03.00 per cent of them had small sized family. The data on type of family showed that 69.00 per cent of the farmers had joint family and 31.00 per cent of them had nuclear family. Regarding social participation it was found that more than four-fifth (81.00%) of the surveyed farmers had no membership in any organization, indicating very poor social participation, 16.00 per cent of the farmers had membership in one organization, while only 2.00 per cent and 1.00 per cent of them were office bearers/executive and had membership in two or more than two organization respectively.

Table 2: Distribution of respondents according to their size of land holding

n=100

S. No.	Size of land holding	Frequency	Per cent
1.	Marginal (less than 1 ha)	30	30.00
2.	Small (1 to 2 ha)	38	38.00
3.	Medium (2.1 to 4 ha)	16	16.00
4.	Large (above 4 ha)	16	16.00
	Total	**100**	**100.00**

As shown in Table 2, 38.00 per cent of the farmers had small sized land holding (1 to 2 ha), 30 per cent of them were marginal farmers (less than 1 ha land) and 16.00 per cent farmers each had medium (2.1 to 4.00 ha) and large (above 4.00 ha) sized land holding.

Table 3: Distribution of the respondents according to sources of irrigation n=100

S. No.	Sources of irrigation	Frequency	Per cent
1.	Tube well	18	18.00
2.	Pond	03	03.00
3.	Well	00	00.00
4.	Cannel	00	00.00
5.	Others	57	57.00
6.	No source of irrigation	37	37.00

*Frequency based on multiple responses

More than half (57.00%) of the farmers had other sources of irrigation, 37.00 per cent of them had no sources of irrigation, 18.00 per cent of the farmers had tube well as the main source of irrigation, 03.00 per cent had ponds as a source of irrigation none of the farmers had wells and canals as a source of irrigation (Table 3).

Table 4: Distribution of respondents according to their occupation

n=100

S. No.	Occupation	Frequency	Per cent
1.	Agriculture	24	24.00
2.	Agriculture + Animal husbandry	04	04.00
3.	Agriculture + Labour	58	58.00
4.	Agriculture + Service	03	03.00
5.	Agriculture + business	10	10.00
6.	Agriculture + Other	01	01.00

Majority of the farmers (58.00%) had agriculture + labour as their occupation, 24.00 per cent of them had only agriculture as their occupation, 10.00 per cent of the farmers had agriculture + business as their occupation, while 04.00, 03.00 and 01.00 per cent of them had agriculture + animal husbandry, agriculture + service and agriculture + other as their occupation respectively (Table.4).

Table 5: Distribution of respondents according to their annual income

n=100

S. No.	Annual income	Frequency	Per cent
1.	Up to Rs.35,000	17	17.00
2.	Rs.35,001 to 60,000	47	47.00
3.	Rs.60,001 to 1,00,000	17	17.00
4.	Above Rs.1,00,000	19	19.00
	Total	**100**	**100.00**

Just below half of the respondents (47.00%) had annual income of Rs. 35,00 to Rs. 60,000, 19.00 per cent of them had annual income of above Rs. 1,00,000, whereas 17.00 per cent of the respondents each had annual income of upto Rs. 35,000 and between Rs. 60,001 to Rs. 1,00,000 (Table 5).

Table 6: Distribution of respondents according to selling place of their farm produce

n=100

S.N.	Selling place	Frequency	Per cent
1.	Broker	00	00.00
2.	Shop	00	00.00
3.	Mandi	49	49.00
4.	Co-operative society	20	20.00
5.	Other	01	01.00
6.	Not decided	30	30.00
	Total	**100**	**100.00**

The survey revealed that about half (49.00%) of the respondents sold their farm produce at mandi (APMC), 20.00 per cent of them sold their farm produce at cooperative society, 30.00 per cent had not decided where to sell their produce, whereas only 01.00 per cent of them had sold it at other places, none of them (0.00%) sold it to broker or grocery shop (Table 6).

Table 7: Distribution of respondents according to overall contact with extension personnel

n=100

S.N.	Categories	Frequency	Per cent
1.	Low (up to 2 score)	19	19.00
2.	Medium (2 –6 score)	71	71.00
3.	High (above 6 score)	10	10.00
	Total	**100.00**	**100.00**

$\bar{X}$ **= 4.24** S.D. = **1.76**

It is revealed from Table 7 that majority of the respondents (71.00%) had medium overall contact with extension personnel, 19.00 per cent had low overall contact with extension personnel, while 10.00 per cent of them had high overall contact with extension personnel.

Table 8: Distribution of respondents according to overall use of Information sources

n=100

S.N.	Sources of information	Frequency	Per cent
1.	Low (up to 15 score)	07	07.00
2.	Medium (15 – 22 score)	75	75.00
3.	High (above 22 score)	18	18.00
	Total	**100**	**100.00**

$\bar{X}$ = **18.85** S.D. = **3.48**

Table 8 shows that three-fourth the farmers (75.00%) had medium overall use of information sources, 18.00 per cent had high overall use of information sources, while 07.00 per cent of the farmers had low overall use of information sources.

Table 9: Distribution of respondents according to their scientific orientation

n = 100

S.N.	Level of scientific orientation	Frequency	Per cent
1.	Low (below 16 score)	15	15.00
2.	Medium (16 to 26 score)	68	68.00
3.	High (above 26 score)	17	17.00
	Total	**100**	**100.00**

$\bar{X}$= **20.59** S.D.= **4.93**

It is observed from the data in Table 9 that the majority of the farmers (68.00%) had medium scientific orientation, 17.00 per cent of them had high scientific orientation and 15.00 per cent of the farmers had low scientific orientation.

Table 10: Distribution of respondents according to their attitude regarding use of different mass information sources n = 100

S.N.	Level of attitude	Frequency	Per cent
1.	Less favourable (below 16 score)	14	14.00
2.	Moderately favorable (16 to 25 score)	66	66.00
3.	Favorable (above 25 score)	20	20.00
	Total	**100**	**100.00**

$\bar{X}$= **20.52** S.D.= **4.58**

As regards attitude of farmers regarding use of different mass information sources (Table 10) it was found that majority of the farmers surveyed (66.00%) had moderately favorable attitude towards use of different mass information source, 20.00 per cent of them had favorable attitude towards use of different mass information source, whereas 14.00 per cent of the farmers had less favorable attitude towards use of different mass information sources.

Table 11: Correlation analysis of independent variables with the use of information

S.N.	Independent variables	Correlation coefficient "r" value
01.	Age	-0.264**
02.	Education	0.621**
03.	Caste	0.015
04.	Size of family	0.111
05.	Type of family	-0.067
06.	Social participation	0.156
07.	Size of land holding	0.406**
08.	Sources of irrigation	0.334**
09.	Occupation	0.286**

10.	Annual income	0.439**
11.	Marketing	0.313**
12.	Contact with extension personnel	0.154*
13.	Scientific orientation	0.731**
14.	Attitude	0.698**
15.	Sources of information	0.843**

** Significant at 0.01 level of probability

* Significant at 0.05 level of probability

In order to find out the relationship between the profile characteristics of farmers and use of information sources correlation analysis was done the result of which are shown in Table 11. It is evident that the variables education, size of land holding, sources of irrigation, occupation, annual income, marketing, scientific orientation and attitude had positive and significant relationship with use of information sources at 0.01 level of probability, while the variable contact with extension personnel had positive significant relationship with the variable use of information sources at 0.05 level of probability. The variable age had negative and significant relationship with use of information sources at 0.01 level of probability. The remaining four variables caste, size of family, type of family and social participation had non significant relationship with use of information sources.

Table 12: Multiple regression analyses of independent variables with use of information

S.N.	Independent variables	Correlation coefficient "b" value	"t" Value
01.	Age	-0.116**	-3.118
02.	Education	0.135	0.372
03.	Caste	-0.268	-0.472
04.	Size of family	-0.098	-1.532
05.	Type of family	-0.108	-0.204
06.	Social participation	1.671*	2.150
07.	Size of land holding	-0.015	-0.134
08.	Sources of irrigation	1.133	-0.889
09.	Occupation	0.324	0.274
10.	Annual income	0.014	1.078
11.	Marketing	-0.137	-0.494
12.	Contact with extension personnel	-0.524*	-2.095
13.	Scientific orientation	0.470	1.537
14.	Attitude	-0.112	-0.338
15.	Sources of information	1.433**	7.799

** Significant at 0.01 level of probability $R^2 = 0.789$

* Significant at 0.05 level of probability F= 20.92

To ascertain the contribution of different independent variables on use of information sources multiple regression analysis was done. It was found from the Table 12, that the variable social participation had positive and significant contribution towards use of information sources at 0.05 level of probability. The b value 1.671 shows that one unit increase in social participation would consequently increase the use of information sources by 1.671 units and vice versa. The variable source of information was found to contribute positively and significantly towards use of information sources at 0.01 level of probability. The b value 1.433 indicates that for every one unit increase in sources of information there would be 1.433 unit increases in use of information sources and wise versa. Tow variables namely contact with extension personnel and age were found to have negative and significant relationship with use of information sources at 0.05 and 0.01 level of probability respectively. The respective 'b' values -0.524 and -0.116 showed that for every one unit increase in contact with extension personnel and age there would be 0.544 and 0.116 unit decrease in use of information sources respectively and vice versa. The R^2 value 0.789 indicated that all the fifteen independent variables jointly contributed towards use of information sources to the extent of 78.09 per cent.

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