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Information Communication behavior of dairy farmers in Haryana

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ABSTRACT

Information is seen as a decisive feature in sustainable farming. Present era can be seen as a period of information insurgency. With the development of new technologies and rapid advances in communication system, possibilities of disseminating and sharing of information have greatly increased. The present study was undertaken to find out the information seeking, processing and sharing behavior of dairy farmers in Haryana. For the study, 240 respondents were selected from four agro-climatic zone of Haryana. From each zone one district was selected purposively on the basis of milch animal population. From each district two blocks were selected randomly. From each block two villages were selected randomly. From each village 15 dairy farmers were selected randomly. From the study it was revealed that, the 40.00 per cent respondents had low information seeking behavior. About 47.91 per cent respondents had medium information processing behavior. 48.75 per cent respondents had medium information dissemination behavior. 46.66 per cent respondents had low communication behavior towards dairy farm information.The study suggest that, extension functionaries need to give more emphasis on their strategy for information dissemination so that more no of farmers can get benefit of their services

Key Words: *Information, Communication, Seeking, Possessing, behavior, dissemination*

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INTRODUCTION

The rapid changes in technological innovations, fluctuating economic trends, changing policy initiatives and several uncertain factors operating in the production and marketing environment have made the decision-making task of farmers exceedingly complex. In order to minimize the risk in decision-making, availability and access to accurate, reliable and timely information becomes all the more important. It provides the means by which problems are recognized, defined and eventually solved. If the information is better, more complete, more reliable and timely, it is easier for farmers to make a right and rational decision. Mass media consisting of newspapers, magazines, traditional media, radio, TV and information technology have proven to be the most powerful opinion makers in this information age. They cover more people in less time and less cost. This strength of mass media is of great help to extension worker in providing cost effective and efficient service to farmers. The information may come to farmers from various sources [16]. They may be personal/impersonal, institutional/non-institutional, localite/ cosmopolite or mass-media in nature. The appropriateness of these sources varies from enterprise to enterprise, situation to situation and from time to time. Further, the credibility of information sources also varies with respect to their competency and trustworthiness. Hence, it becomes quite important to channelize the right information at the right time through the right channel, for which knowledge of different information sources consulted and used by farmers under different situations and at different times is required by all those concerned. Keeping this in mind, the information communication behavior

of dairy farmers was studied purposively in Haryana. Hence, this study was undertaken with following objective:

To find out the information seeking, processing and sharing behavior of dairy farmers.

MATERIAL AND METHODS

The study was conducted in purposively selected four agro-climatic zones of Haryana namely, Northern, Southern, Central and Western zone. From each zone one district was selected purposively on the basis of milch animal population. From each district two blocks were selected randomly. From each block two villages were selected randomly. From each village 15 dairy farmers were selected randomly. Thus, in total 240 dairy farmers were selected, as the respondents for this study. The information regarding communication behavior from the respondents was collected through personal interview. For the study, index was developed and data was analyzed by the following formula:

The index for each component was calculated. It was calculated by calculating the simple mean of the indices of their respective items. That was:

$$\mathbf{Iij} = \frac{Xij - MinXij}{MaxXij - MinXij}$$

$$ISB = \frac{\sum Ij}{I}$$ **ISB= Information Seeking Behavior Index (I=22)**

$$\mathbf{IPB} = \frac{\sum Ij}{I}$$ **IPB= Information Processing Behavior Index (I=17)**

$$\mathbf{IDB} = \frac{\sum Ij}{I}$$ **IDB= Information Dissemination Behavior Index (I=16)**

The Communication Behavior Index was calculated as the weighted mean of the indices of three dimension /components of communication behavior by using the following formula.

$$CBI = \frac{W_1 ISBI + W_2 IPBI + W_3 IShBI}{3}$$

Where,

CBI	=	Communication behavior index
W	=	Weightage assigned to respective component of Communication behavior.
ISBI	=	Information seeking behavior index
IPBI	=	Information processing behavior index
IShBI	=	Information sharing behavior index

RESULT AND DISCUSSION

The communication behavior of dairy farmers was measured with the help of communication behavior indices with respect to all the dimensions. The possible reason could be, the communication behavior of dairy farmers was the outcome of different dimensions such as information seeking, information processing and information dissemination behavior.

Distribution of respondents on the basis of communication behavior of dairy farmers

A perusal of the Table 1.1 revealed that 40.00 per cent respondents had low information seeking behavior towards dairy farm information. About 39.16 per cent respondents had medium information seeking behavior towards dairy farm information. While, 20.84 per cent of them had a high information seeking behavior towards dairy farm information. A critical look of the Table 1.1 revealed that 38.34 per cent respondents had low information processing behavior towards dairy farm information. About 47.91 per cent respondents had medium information processing behavior towards dairy farm information. And 13.75 per cent of them had high information processing behavior towards dairy farm information. Table 1.1 further revealed that 29.16 per cent respondents had low information dissemination behavior towards dairy farm information. About 48.75 per cent respondents had medium information dissemination behavior towards dairy farm information. About 22.09 per cent respondents had high information dissemination behavior towards dairy farm information. A close analysis of the Table 1.1 revealed that 46.66 per cent respondents had low communication behavior towards dairy farm information. About 35.00 per cent respondents had medium communication behavior towards dairy farm

information. About 18.34 per cent of respondents who had high communication behavior towards dairy farm information. Similar findings were reported by Kumar [4] and Tyagi [18]. Analysis of all the dimensions of communication behavior indicated that most of the respondents belonged to a low category with respect to all these dimensions.

Table- 1.1:Distribution of respondents on the basis of Communication behavior of dairy farmers

N=240

Sl.No.	Components of Communication Behavior	Level	Score range	Respondents
1.	Information seeking behavior	Low	<0.602	96 (40.00)
		Medium	0.602-0.699	94 (39.16)
		High	>0.699	50 (20.84)
2.	Information processing behavior	Low	<0.364	92 (38.34)
		Medium	0.364-0.425	115 (47.91)
		High	>0.425	33 (13.75)
3.	Information dissemination behavior	Low	<0.282	70 (29.16)
		Medium	0.282-0.367	117 (48.75)
		High	>112	53 (22.09)
4.	Communication behavior	Low	<0.435	112 (46.66)
		Medium	0.435-0.468	84 (35.00)
		High	>0.468	44 (18.34)

Figures in parentheses indicate percentage

Distribution of respondents on their frequency of using different sources of dairy information

A perusal of Table 1.2 reveals that a vast majority (90.41%) of the respondents used veterinary officer for seeking information on improved dairy farming practices. Radio, television, relatives, friends, stockman, neighbor and KVK were regularly consulted by the respondents (87.50%, 80.84%, 79.16%, 74.16%, 68.00%, 75.00% and 71.00%), respectively, followed by progressive milk producers (52.08%), veterinary scientist (60.00%) and campaign (57.09%) regularly. About 43.34 per cent of the respondents were using progressive milk producers as a source of information occasionally. Further it was found that the respondents used the VDO/VLW, dairy mela and co-operatives occasionally as a source of information (38.34%, 38.75% and 37.50%) respectively. As regard to the regular use of other sources such as agriculture extension officer, news letter, sarpanch, demonstration, magazines and local leaders were found to be relatively meager. The data presented in the Table clearly indicates that veterinary officers, Radio, television, relatives, friends, stockman, neighbor and KVK were the most frequently used information sources by dairy farmers. Similar results were also reported by Lionfore and Chug (1998), Swarni and Agrasar [17]. The findings seem to be logical because dairy farmers have directly contact with veterinary officers. Veterinary officer conveyed the relevant important information like government policies, subsidy, dairy schemes and training programmes about improved dairy farming practices. Sources of information concerned, Radio, television, relatives, friends, stockman, neighbor and KVK were the most quoted sources of information. Agriculture extension officer, news letter, sarpanch, demonstration, magazines and local leaders were the least-cited sources of information among dairy farmers. The findings seem to be logical because of the reason that radio, television and KVKs provide the wide coverage with rationality. These results are supported by the observation of Prakash and Singh [12], Sharma and Khanna [14], Nala and Chilam [7], Lionfore and Chug [6], Siddhu *et.al*. [15] and Pande [10].

Table-1.2:Distribution of respondents on their frequency of using different sources of dairy information N=240

Sl. No.	Sources of Dairy Information	Frequency of use of different sources of Dairy information				
		Often	Occasionally	Never	Score	Rank
1	Veterinary officers	217 (90.41)	17 (7.09)	6 (2.50)	451	I
2	Radio	210 (87.50)	22 (9.17)	8 (3.33)	442	II
3	Television	194 (80.84)	40 (16.66)	6 (2.50)	428	III
4	Relatives	190 (79.16)	37 (15.42)	13 (5.42)	417	IV
5	Friends	178 (74.16)	57 (23.75)	5 (1.09)	413	V
6	Stockman	165 (68.75)	65 (27.09)	10 (4.16)	395	VI
7	Neighbor	180 (75.00)	34 (14.16)	26 (10.84)	394	VII
8	KVK	171 (71.25)	50 (20.83)	19 (7.92)	392	VIII
9	Progressive milk producers	125 (52.08)	104 (43.34)	11 (4.58)	354	IX
10	Veterinary Scientist	144 (60.00)	46 (19.17)	50 (20.83)	334	X
11	Campaign	137 (57.09)	49 (20.41)	54 (22.50)	323	XI
12	Agricultural university	108 (45.00)	82 (34.16)	50 (20.84)	298	XII
13	VDO/VLW	101 (42.91)	94 (38.34)	45 (18.75)	296	XIII
14	Field day/Field visits	105 (43.75)	75 (31.25)	60 (25.00)	285	XIV
15	Agriculture extension officer	106 (44.17)	62 (25.83)	72 (30.00)	274	XV
16	Newsletter	84 (35.00)	80 (33.34)	76 (31.66)	248	XVI
17	Sarpanch	70 (29.17)	39 (16.25)	131 (54.58)	179	XVII
18	Demonstration	70 (29.16)	37 (15.42)	133 (55.42)	177	XVIII
19	Local leaders	60 (25.00)	51 (21.25)	129 (53.75)	171	XIX
20	Dairy Mela	13 (5.42)	93 (38.75)	134 (55.83)	119	XX
21	Co-operative	14 (5.84)	90 (37.50)	136 (56.66)	118	XXI
22	Magazine	7 (2.91)	89 (37.09)	144 (60.00)	103	XXII

Figures in parentheses indicate percentage

Distribution of respondents on the basis of dairy information preservation

It is evident from the Table 1.3 that 80.00 per cent of the respondents regularly followed the method 'Memorization' for storage of dairy information followed by 'preserved printed literature' to remember (77.91%). However, 72.50 per cent of respondents maintain the subject matter file. Among the other methods of storage, 74.58 per cent of respondents 'noted in diary'. Eighty per cent respondents preserved the information as 'cursory look'. Twenty five per cent respondents preserved the information occasionally 'by preserving the printed literature' followed by 'write on the wall' and maintain a subject matter file 21.66 per cent and 20.00 per cent respectively. It appears from the same Table that the dairy farmers preserved the information in their memory as reflected by the data having ranked 'first'. The preservation of the information in the form of printed literature was ranked 'second'. It may be understood that dairy farmers having lower level of education can simply listen and try to memorize. The preservation of information in the form of maintaining of subject matter file was the third important way of preservation of information among the dairy farmers. The findings seem to be logical because of dairy farmers kept the registers for dairy related activities. This habit helped them to maintain subject matter file. These results are supported by the observation of Needana *et.al*. [8], Gamle and Khandoori [2].

Table- 1.3:Distribution of respondents on the basis of dairy information preservation

N=240

Sl. No.	Statements	Frequency				
		Often	Occasionally	Never	Score	Rank
1	By memorization	192 (80.00)	39 (16.25)	9 (3.75)	423	I
2	By preserving the printed literature	187 (77.91)	36 (15.00)	17 (7.09)	410	II
3	Maintain a subject- matter file	174 (72.50)	60 (25.00)	6 (2.50)	408	III
4	Note in diary	179 (74.58)	48 (20.00)	13 (5.42)	406	IV
5	Cursory look	192 (80.00)	20 (8.34)	28 (11.66)	404	V
6	Write on the wall	168 (70.00)	52 (21.66)	20 (8.34)	388	VI

Figures in parentheses indicate percentage

Distribution of respondents on the basis of dairy information evaluation

It is clear from the Table 1.4 that the respondents had evaluated the dairy information often by discussing with family members (83.75%), fellow farmers (82.50%), relatives (70.00%), groups (51.25%), in light of past experiences (58.34%), consult with local institution (55.84%), discuss with progressive farmers (44.17%), wait for training and evaluate during training (42.92%), wait for demonstration on other's farm (41.25%), discuss with key communicator (42.92%), with key communicator (32.92%). The respondents had evaluated the dairy information occasionally by discussing with family members (10.83%), fellow farmers (6.25%), relatives (21.66%), groups (43.75%), in light of past experiences (20.00%), consult with local institution (21.25%), discuss with progressive farmers (34.16%), wait for training and evaluate during training (39.17%), wait for demonstration on other's farm (32.09%), discuss with key communicator (26.25%), with key communicator (34.58%). The percentage of respondents who never evaluated the dairy information by these methods was 5.42 per cent, 11.25 per cent and 32.50 per cent respectively. These results are supported by the observation of Sikara [16], Pande [9], Lemanker and Chanda [5], Rikale [13], Prajapati *et.al*. [10].

Table- 1.4:Distribution of respondents on the basis of dairy information evaluation N=240

Sl. No.	Statements	Frequency				
		Often	Occasionally	Never	Score	Rank
1	Discuss with family member	201 (83.75)	26 (10.83)	13 (5.42)	428	I
2	Discuss with fellow farmers	198 (82.50)	15 (6.25)	27 (11.25)	411	II
3	Discuss with relatives	168 (70.00)	52 (21.66)	20 (8.34)	388	III
4	Discuss with group	123 (51.25)	105 (43.75)	12 (5.00)	351	IV
5	Discuss in light of past experiences	140 (58.34)	48 (20.00)	52 (21.66)	328	V
6	Consult with local Institution	134 (55.84)	51 (21.25)	55 (22.91)	319	VI
7	Discuss with progressive farmers	106 (44.17)	82 (34.16)	52 (21.67)	294	VII
8	Wait for training and evaluate during training	99 (41.25)	94 (39.17)	47 (19.58)	292	VIII
9	Wait for demonstration on other's farm	101 (42.08)	77 (32.09)	62 (25.83)	279	IX
10	Discuss with key communicator	103 (42.92)	63 (26.25)	74 (30.83)	269	X
11	Discuss with Sarpanch	79 (32.92)	83 (34.58)	78 (32.50)	241	XI

Figures in parentheses indicate percentage

Distribution of respondents on the basis of information dissemination behavior

It is apparent from the Table 1.5 that respondents had disseminated the dairy information often to family members (82.09%), to those who were cultivating in my land (69.58%), neighbors (51.66%), friends (59.16%), relatives (56.66%), group members (42.09%), the person who contacted (41.66%), the

farmers of neighbor villages (42.92%), all the person known (42.92%) and other group member (34.16%). It was also observed in the Table 4.2.4 that respondents had disseminated the dairy information occasionally to family members (6.66%), to those who were cultivating in my land (22.50%), neighbors (43.76%), friends (20.00%), relatives (20.84%), group members (39.16%), the person who contacted (37.50%), the farmers of neighbor villages (31.66%), all the person known (26.66%) and other group member (33.75%). The percentage of respondents who never disseminated the dairy information to family members were 11.25 per cent, 7.92 per cent, and 32.09 per cent. These results are supported by the observation of Sikara [16], Jainath *et.al.* [3], and Deboo *et.al*. [1].

Table- 1.5: Distribution of respondents on the basis of information dissemination behavior

N=240

Sl. No.	Statements	Frequency				
		Often	Occasionally	Never	Score	Rank
1	Family members	197 (82.09)	16 (6.66)	27 (11.25)	410	I
2	To those who are cultivating in my land	167 (69.58)	54 (22.50)	19 (7.92)	388	II
3	Neighbors	124 (51.66)	105 (43.76)	11 (4.58)	353	III
4	Friends	142 (59.16)	48 (20.00)	50 (20.84)	332	IV
5	Relatives	136 (56.66)	50 (20.84)	54 (22.50)	322	V
6	Group members	101 (42.09)	94 (39.16)	45 (18.75)	296	VI
7	The person who contacted	100 (41.66)	90 (37.50)	50 (20.84)	290	VII
8	To the farmers of neighbor villages	103 (42.92)	76 (31.66)	61 (25.42)	282	VIII
9	To all the person known	103 (42.92)	64 (26.66)	73 (30.42)	270	IX
10	Other group member	82 (34.16)	81 (33.75)	77 (32.09)	245	X

Figures in parentheses indicate percentage

Distribution of respondents on the basis of Feedback to Extension/Developmental Personnel

It is clear from the Table 1.6 that the respondents had given feedback often to veterinary officers (57.09%), veterinary scientist (42.92%), agriculture officers (43.75%), KVK personnel (44.17%), development officer (35.00%) and veterinary pharmacist (29.17%). It is evident from the Table 1.6 that the respondents had given feedback occasionally to veterinary officers (20.41%), veterinary scientist (38.33%), agriculture officers (31.25%), KVK personnel (25.83%), development officer (33.34%) and veterinary pharmacist (16.25%). The percentages of respondents who never given feedback to veterinary officer were 22.50 per cent and in case of veterinary pharmacist were 54.58 per cent.

Table-1.6: Distribution of respondents on the basis of Feedback to Extension/Developmental Personnel

N=240

Statements		Frequency				
Feedback to		Often	Occasionally	Never	Score	Rank
1	Veterinary officers	137 (57.09)	49 (20.41)	54 (22.50)	323	I
2	Veterinary assistant	103 (42.92)	92 (38.33)	45 (18.75)	298	II
3	Agriculture officer	105 (43.75)	75 (31.25)	60 (25.00)	285	III
4	KVK personnel	106 (44.17)	62 (25.83)	72 (30.00)	274	IV
5	Development officer	84 (35.00)	80 (33.34)	76 (31.66)	248	V
6	Veterinary pharmacist	70 (29.17)	39 (16.25)	131 (54.58)	179	VI

Figures in parentheses indicate percentage

CONCLUSION

Study revealed that the intra and inter communication patterns among farmers. The study wasfound the various sources of information used by the dairy farmers for seeking, processing and disseminating information. It was also focused on processing of the acquired information in terms of storage, evaluation and transformation methods.40.00 per cent respondents had low information seeking behavior. About 47.91 per cent respondents had medium information processing behavior. 48.75 per cent respondents had medium information dissemination behavior. 46.66 per cent respondents had low communication behavior towards dairy farm information.Vast majority (90.41%) of the respondents used veterinary officer for seeking information on improved dairy farming practices. Radio, television, relatives, friends, stockman, neighbor and KVK were regularly consulted by the respondents (87.50%, 80.84%, 79.16%, 74.16%, 68.00%, 75.00% and 71.00%), respectively. 80.00 per cent of the respondents regularly followed the method 'Memorization' for storage of dairy information followed by 'preserved printed literature' to remember (77.91%). The respondents had evaluated the dairy information often by discussing with family members (83.75%), fellow farmers (82.50%), relatives (70.00%), groups (51.25%), in light of past experiences (58.34%) etc.The study suggested that the government take initiative on training of ICTs which will help to the farmers in changing the existing pattern of communication behavior. It will also help in recruiting right type of personnel's for extension and scientific profession. The study will be of great value to the planners, policy makers, extension workers, agricultural scientists and students of extension education who are involved directly or indirectly with dairy development.

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