Information Flow Pattern of Livestock Development Officers : A System Analysis

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Communication plays a vital role in diffusion of new knowledge and new technologies. The new knowledge acquired through research has to be disseminated to farmers to bring about change. Information management behaviour consists of inter-connected individuals who are linked by patterned flow of information. It is of significant interest to know how Livestock Development Officers obtain information for carrying out his day to day extension work. It is also desirable to know precisely to what extent a Livestock Development Officers tries to understand the problems of the farmers. What sources and channels does he use to get farmers problem ? How do they process the research ideas ? How do they evaluate the innovations ? What methods do they use to communicate field problems to the scientists ? What are the methods and media they uses to pass the new information to the users agency ? What are the constraints that acts as limiting factors to generate information flow ?

These are some of the questions which would bring out answers to the effective functioning of the Livestock Development Officials for management of information. This study was focused on these problems in terms of general system theory and Research approach advocated by Bertalhaffy (1955).

Keeping the above factors in view, a research study was undertaken to study the function of extension system with reference to dairy production technologies, thus, input, processing and output information behaviour. The specific objectives of the study were :

1   To study the information input behaviour of Livestock Development Officers.

2   To study the information processing patterns of Livestock Development Officers.

3   To study the information output patterns of Livestock Development Officers.

METHODOLOGY

The present investigation was undertaken in Maharashtra. All the technical staffs of Animal Husbandry Department of Thane district were the universe for the investigation. This universe was grouped into three sub-systems. The extension worker of senior level, middle level and lower level were grouped and randomly selected in sub-system I, II and III respectively.

Thus, a total of 31 extension personnel of Animal Husbandry Department of Thane district constituted the sample for the investigation. The data were collected through personal interview with the help of structured schedule and analysed to draw the meaningful conclusion.

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RESULTS AND DISCUSSION

(A) Information Input Flow Pattern :

Inspite of vast knowledge available in various disciplines of Veterinary Science and all the progress that has been made so far, the fact is that, man's present understanding is still limited. As one becomes familiar with the subject, he becomes conscious of its limitation. Man experience with knowledge proves again and again that the more he knows, the more he finds he has to learn. Therefore, the need to up-date knowledge of a Livestock Extension personnel needs no emphasis. In the present study, the information input flow pattern of Livestock Extension personnel was measured by using the Information input indices developed by Reddy (1984) and has been ranked in the order of maximum used source to the least. Date presented in Table 1 indicate that, Livestock Extension personnel used progressive farmers to fairly high degree to acquire scientific knowledge followed by colleagues, trainings, immediate superiors and sales representatives. The possible reason for this might be their easy availability. The extension system is supposed to be a vital link between research and client system. They pass on the problem from the field to reach to the research system for their solutions. This is probably reason why progressive farmers were reported by maximum extension personnel as important sources of information inputs. This finding was in conformity with the finding of Reddy (1984).

The' finding of Extension publication, radio talks, seminars, research journals being the least used sources contradict the finding of Shete (1974). Probably, they are research oriented, they are not of much practical significance in the actual field situation for extension personnel. Moreover, scientific language used in them presents difficulty of understanding by the lower level of extension personnel, who generally lack higher professional qualification. In case of radio talks, the less coverage of dairy programme could be reason.

Table 2 shows that there was no significant difference in information input flow patterns of different level of Livestock Extension personnel.

(B) Information Processing flow pattern :

The processing patterns of communication were examined from three angles (i) Methods of innovation evaluation (ii) Preservation of information and (iii) methods of transformation.

The data presented in Table 3 exhibits that, 80.61 per cent of Extension personnel used the method of memorising followed by noting in dairy, keeping literature and making notes were the most used methods. Similar results were reported by Reddy (1984). Maintaining reference cards was used by LDOs only. Since the maintenance of reference cards required special skill. This method was used by LDOs only who are generally degree holders. The other categories of Extension personnel probably lacked proper skill and facilities for maintaining reference cards and therefore preferred other methods of information preservation.

Table 4 show that, there was significant difference in the average indices of LDOs, ALDOs and LS. It suggest that, there was variation in the use of different methods of processing between two sub-

Table 1. Utilisation of different sources/channels for information input purposes by the Livestock Extension personnel.

Sr. No.	Sources/ Channels	Livestock Extension personnel Sub-system							
		I LDO's N=14		II ALDOs N=8		III LS N=9		Total System N=32	
		AS	R	AS	R	AS	R	AS	R
1.	Progressive farmers	1.30	III	1.80	I	1.90	I	1.90	I
2.	Colleagues	2.20	I	1.20	III	1.10	IV	1.33	II
3.	Training	1.38	II	1.25	II	1.12	III	1.27	III
4.	Immediate superiors	1.02	IV	1.21	IV	1.28	II	1.14	IV
5.	Sales representative	0.70	VI	0.19	VIII	0.29	V	0.45	V
6.	Dairy scientists	0.80	V	0.20	VII	0.10	VII	0.44	VI
7.	Magazines	0.50	VII	0.36	V	0.14	VI	0.36	VII
8.	Extension publication	0.12	VIII	0.21	VI	-		0.15	VIII
9.	Visit to Vet. college	0.10	IX	0.02	IX	-		0.05	IX
10.	Radio	0.04	X	-	-	-		0.01	X
11.	Seminars	-		-	-	-		-	
12.	Research journals	-		-	-	-		-	

AS : Average Score   R : Rank
LDO : Livestock Development Officer.
ALDO : Assistant Livestock Development Officer.
LS : Livestock Supervisor

Table 2. Information input indices of different sub-system of Extension personnel.

Sub-system	Average score	'T' value		
		I LDOS	II ALDOS	III LS
LDOS	28.04	-	-	-
ALDOS	30.04	1.28 NS	-	-
LS	30.09	1.34 NS	0.42 NS	-

Table 3. Methods of Preservation of Information by Extension personnel

Sr. No.	Preservation method	I LDOS N=14		II ALDOS N=8		III LS N=9		Total N=31	
		F	%	F	%	F	%	F	%
1.	Memorising	12	85.71	6	75.00	7	77.77	25	80.61
2.	Noting in dairy	10	71.42	7	87.50	5	55.55	22	70.90
3.	Keeping literature	8	57.14	5	62.52	3	33.33	16	51.16
4.	Making notes	4	28.57	3	37.50	4	44.44	11	35.48
5.	Maintaining subjectwise file	2	14.28	2	25.00	1	11.11	5	16.5
6.	Maintaining reference cards	1	7.14	-		-		1	3.22

Table 4. Information Processing indices of different sub-system of Extension personnel.

Sub-system	Average score	'T' value Sub-system		
		I LDOS	II ALDOS	III LS
LDOs	30.26	-	-	-
ALDOs	24.94	2.82*	-	-
LSs	25.51	2.89*	1.86 NS	-

* Significant at 1 per cent level of probability.   NS = Non-significant

systems. The average processing indices of LDOs was slightly higher than those of ALDOs and LSs. These findings were in conformity with the findings of Reddy (1984). This may be because of higher amount of proximity by LDO's to the availability of greater amount of proximity by LDO's to the availability of greater amount of facilities both physical and financial.

Information output flow pattern :

In order to pass on the scientific information, a number of methods and media are employed by the scientists. The information output indices developed by Reddy (1984) was used to measure the information output for the present study.

The study revealed that, the most important methods used by Extension personnel were Farm and home visits, general meeting, training and office calls.

This finding was in according with the findings of Reddy (1984). Farm and home visits was most popular amongst extension personnel for information output. The obvious reason for the success of this method in dairy was the presence of sick animals at home. As soon as an animal falls sick, he invited extension personnel for help, guidance and treatment. This is an excellent opportunity to the extension personnel for information output. It is for the mutual benefit of farmer and extension personnel that farm and home visit is requird. It was but natural that this method was used more by lower cadre like LSs and ALDO's as their job was more field oriented.

The popular used methods were general meeting, training and office call preferred these methods which required face to face situation. This could be because of the reason that, diary is practical type of field, needs lot of demonstration.

The data presented in Table 5 indicates that, there was significant difference in the average indices of LDOs, ALDOs and LSs. It suggests that, there was variation in the use of different methods and media for information output. There was no significant difference between the ALDOs and LSs with regard to information output also. As regards average scores of information output indices, LDOs had the lowest. This finding was supported by Ambastha (1978). LDOs used maximum number of methods for information output. But, the frequency of use of these methods was lower as compared to ALDOs and LSs. The ALDs and LSs being close to the farmers are expected to have more information output and use of variety of methods. But, it is not so because of lack of transport facilities, lack of accommodation for experts, trust of superiors, posting at desired place and lack of encouragement and incentives.

CONCLUSION

1. It was observed from the study that, frequency of progressive farmers, col-

Table 5. **Information output indices of different sub-system of Extension personnel.**

| Sub-system | Average score | 'T' value Sub-system | | |
		I LDOS	II ALDOS	III LS
LDOs	29.04	-	-	-
ALDOs	20.15	4.28*	-	-
LSs	19.20	3.96*	1.92 NS	-

* Significant at 1 per cent level of probability.   NS = Non-significant.

leagues, training and immediate superiors were the most used sources for extension personnel to acquire scientific knowledge which need encouragement and up-to-date knowledge of Livestock extension personnel.

2. The extension personnel used to evaluate the information by discussing with colleagues, accept it unreserved, discussion with farmers and superiors. It is worthwhile consideration which may followed in future also.

3. The LDOs used less variety of methods for information output as compared to ALDOs and LSs. But, the quality of information output was good. But, this is a disturbing factor which should be corrected to reduce to his burden by creating a new post in block so as to have higher output of information.

4. The study indicated that LDOs used to possess more information and preserved in a better way as compared to ALDOs and LSs. The research institutes and Agricultural Universities should enocourage frequent training camps and professional meetings to discuss field problems and its solution.

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