

Farmers' Information Sources and their Relative Effectiveness

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ABSTRACT

Greater exposure of farmers to information sources is a sign of interest taken by them in farming. Very low contact with information sources results in poor technology transfer among the potential users. Farmers who are exposed to many and varied sources of information, are more likely to be better adopters. It can also reflect the interest taken by the extension field staff in motivating farmers to use as many information sources as they can. By and large neighbors/friends/relatives appeared to be the major sources of information followed by radio as the second major source. The major mode of information flow from farmer-to-farmer appeared to be through observation rather than through dialogue. The contribution of contact farmers as information source for their fellow contact farmers and non-contact farmers has been found highly disappointing. Field Assistants' role as information source also appeared to be far behind their expected role. The same was true in case of Agriculture Officers, which implies that the interactions between farmers and extension field staff were negligible.

Key Words: Extension field staff; Farmers' information exposure; Information dissemination; Information sources

INTRODUCTION

Extension education especially in the developing world has, in recent years, increasingly become a subject of great importance amongst various development agencies in the overall development model. Agriculture being the main profession of rural people, holds a vital position in this scenario. In fact "no country anywhere has ever reached an advanced stage of economic development in the absence of agriculture as its primary engine of growth" (Pickering, 1989). Thus agricultural development can be closely and directly linked to the overall development of these countries. However, agricultural production in these countries continues to be low and it is generally believed that lack of technical knowledge at the farm level is the principal factor behind this low and stagnant production. According to an FAO report (1985), in many developing countries wide adoption of research results by majority of farmers remains quite limited. This situation calls for a system which allows adequate information flow from farmers to researchers and from researchers to farmers. Agricultural extension services have a central role in facilitating the exposure of farmers to a variety of information sources. Greater exposure of farmers to information will not only show the interest taken by them in educational pursuits but also reflect the interest taken by extension field staff (EFS) in motivating farmers to obtain more and more information. Knowledge about farmers' information sources could be valuable to identify the role played by different information sources in disseminating agricultural information among the farmers. The

popularity of any information source would reflect its reliability and credibility in the eyes of the farmers (Oakley & Garforth, 1985). The present study attempts to identify farmers' information sources and their relative effectiveness to develop an appropriate strategy for effective dissemination of agricultural information among farmers.

MATERIALS AND METHODS

An empirical study was undertaken in one of the tehsils of Faisalabad district to identify farmers' information sources and their relative effectiveness as perceived by them. 60 contact farmers (CFs) and 128 non-contact farmers (NCFs) were randomly selected from 16 villages selected at random through multistage sampling technique. Sugarcane, being one of the major crops of the area, was selected as a reference crop to assess the information level of the farmers. The recommendations regarding sugarcane production practices served as the main basis for this investigation. The data were collected through personal interviews and were analyzed using 'Minitab' statistical package.

RESULTS AND DISCUSSION

The data regarding information sources can serve as an important source for strengthening the existing communication system. Therefore, respondents with any sort of information regarding the recommendations included in the study were asked about their sources of information. Their responses in

Table I. Distribution of respondents on the basis of the nature of their information contact

Nature of contact		Contact farmers		Non-contact farmers	
		No.	%	No.	%
Interpersonal only	Localite only	4	6.4	43	33.6
	Cosmopolite only	1	1.6	-	-
	Both	5	7.9	4	3.1
Mass media only		3	4.8	2	1.6
Both interpersonal and mass media	Localite + mass media	14	22.2	50	39.0
	Cosmopolite + mass media	15	23.8	2	1.6
	Localite + cosmopolite + mass	13	20.6	11	8.6
No information source		8	12.7	16	12.5
Total		63	100.0	128	100.0

this regard indicated that among various information sources, neighbours/friends/ relatives (NFRs) were the major sources of information as reported by a large majority (73.8%) of the respondents. Lowdermilk's work carried out in Khanewal, the then Multan district of the Punjab province (Antholt, 1990) and many other studies conducted in other parts of the country also showed a similar pattern (Sofranko *et al.*, 1988; Cromwell, 1990). The available literature supports the same (Brown, 1981; Kashem, 1986; Byerlee, 1988; Feder *et al.*, 1988; Hawkins, 1988; Sutherland, 1988; Van den Ban & Feder & Slade cited in Reijntjes *et al.*, 1992). But this information flow was mainly through observations rather than through dialogue. The farmers mostly observed their NFRs and tried to follow the same at their farms. This finding is supported by the fact that only about eight per cent of the respondents discussed their problems with their NFRs.

Empirical evidence showed that mostly the respondents relied on their neighbouring farmers and radio for their information needs. It is significant to note here that the CFs who are generally considered to play a key role in disseminating agricultural information among their fellow farmers under T&V system (Benor & Harrison, 1977) served as a source of information for only 2.6% of the respondents which means that their contribution as information source for other farmers especially non-contact ones was almost nil. It is food for thought that the CFs could not find a good place in the existing communication system as information source whereas the success of T&V system of extension is greatly influenced by the active role of the CFs (Kashem & Islam, 1990). A similar observation regarding CFs' role as information source for others has been recorded by Pickering (1983:11) in Thailand. He says "until recently there has been little

evidence of farmers' communicating with contact farmers". This may imply that EFS have failed to select appropriate farmers for this purpose who could be regarded as trustworthy by the rest of the farming community.

Field Assistants (FAs) who are also expected to have regular fortnightly contact with CFs and some of their fellow NCFs under T&V system, were found far behind the expectations as only 18.3% of the respondents reported them as their source of information. The more significant figure was that only about 46% of CFs mentioned FAs as their source of information and most of those only "to some extent". The same was true in case of Agriculture Officers (AOs). These findings are in agreement, in a way, with those of Haider *et al.* (1990) which revealed that about two-thirds of the CFs had no contact with the Block Supervisors (front line worker in Bangladesh) compared to only 17% having regular contact. The findings are also partially supported by those presented by Kashem and Jones (1988) who concluded that among individual contacts, small farmers had the highest contact with fellow farmers and seed and fertilizer dealers. Relatively little contact was found with the local extension workers, but T&V system of extension education, in its true spirit, demands that all CFs and a significant number of other farmers should be in direct contact with trained/competent EFS once every two weeks (Benor *et al.*, 1984).

The respondents had very limited access to Ayub Agricultural Research Institute (AARI), Faisalabad and University of Agriculture, Faisalabad (UAF) for obtaining information about farming (3.1% & 1.1%, respectively). Overall the mass media proved relatively popular among the farming community. The respondents were classified into different groups on

Table II. Relative score of various information sources of respondents

Information sources		Used to much extent x3		Used to an average extent x2		Used to some extent x1		Total	
		No.	Score	No.	Score	No.	Score	No.	Score
CFs		2	6	1	2	2	2	5	10
FAs		5	15	6	12	24	24	35	51
AOs		-	-	-	-	5	5	5	5
EADA		-	-	1	2	1	1	2	3
AARI		-	-	-	-	6	6	6	6
UAF		1	3	-	-	1	1	2	4
Sugar Mills		1	3	2	4	7	7	10	14
NFRs		50	150	55	110	36	36	141	296
Mass media	Radio	26	78	57	114	9	9	92	201
	TV	2	6	32	64	9	9	43	79
	Print media	13	39	6	12	2	2	21	53
Pesticide dealers/agencies		1	3	1	2	7	7	9	12

the basis of nature of information contacts (Table I). It is evident from the data that most of the respondents of both categories had both interpersonal and mass media contacts. However, about one-third NCFs had only interpersonal contacts. A large difference has been found between them with regard to localite/cosmopolite contact, with CFs more exposed to cosmopolite sources. Almost equal proportion in both categories did not have any source of information.

In order to know the relative contribution of each information source to information dissemination, their relative scores were computed by multiplying the weighted score allotted to each category of the scale, indicating the extent of information received, with the frequency counts. The relative scores computed in this way are presented in Table II. The data indicated that NFRs received the highest score as an information source followed by radio, television, print media, FAs, sugar mills, pesticides dealers/agencies, CFs, AARI, AOs, UAF and Extra Assistant Director of Agriculture (EADA). Regarding village-level extension worker, Farrington (1979) reported a similar experience in Sri Lanka: 72% of farmers were not visited by a KVS (village-level worker) during the 12 months reference period in five of the six villages.

Effectiveness of information sources as perceived by the farmers. It is quite possible that the information source commonly used by the respondents may be regarded as less effective by them as compared to a source which is not so common among the farming community possibly due to its limited access or availability to the farmers or due to any other factor. Respondents were, therefore, asked how effective they

thought each information source to be. The relative effectiveness of each information source as perceived by the respondents was computed by multiplying the score value allotted to each category of the scale used to assess the effectiveness with the frequency percentages. The scores computed in this way are presented in Table III. It is evident that print media were regarded as the most effective source by the respondents although they were used as a source of information by only 11% of the respondents. It implies that if the access of the respondents to print media is improved it could have much positive impact as an information source especially among literate farmers. UAF proved to be the second most effective information source for the respondents in spite of the fact that very few people had access to this information source. Farmers' exposure to this source through adopting appropriate measures could yield better results to equip them with the latest information regarding agriculture. AARI achieved third position on the basis of its effectiveness as an information source in the eyes of the respondents though it was the least exposed to the respondents.

Radio was ranked fourth, but was regarded as a source of information by about half of the respondents probably due to its easy availability to the farmers because it has now found a place in almost every house. It implies that there is a lot of scope for the improvement of its existing standard. EADA and TV were ranked fifth followed by sugar mills, NFRs, CFs, pesticides dealers/agencies, AOs and FAs.

It is a cause for concern that the FA who should be playing an important role in the communication

Table III. Relative effectiveness of information sources

Information sources	Much effective x3		Moderately effective x2		Less effective x1		Ineffective x0		Total score	
	%	Score	%	Score	%	Score	%	Score		
CFs	20.0	60.0	40.0	80.0	40.0	40.0	-	-	180.0	
FAs	11.4	34.2	14.3	28.6	57.1	57.1	17.1	0.0	120.0	
AOs	-	-	40.0	80.0	60.0	60.0	-	-	140.0	
EADA	-	-	100.0	200.0	-	-	-	-	200.0	
AARI	33.3	99.9	66.7	133.4	-	-	-	-	233.3	
UAF	50.0	150.0	50.0	100.0	-	-	-	-	250.0	
Sugar Mills	20.0	60.0	50.0	100.0	30.0	30.0	-	-	190.0	
NFRs	12.1	36.3	61.0	122.0	27.0	27.0	-	-	185.3	
Mass media	Radio	18.5	55.5	72.8	145.6	8.7	8.7	-	-	209.8
	TV	9.3	27.9	81.4	162.8	9.3	9.3	-	-	200.0
	Print media	85.7	257.1	14.3	28.6	-	-	-	-	285.7
Pesticides dealers/agencies	11.1	33.3	33.3	66.6	55.6	55.6	-	-	155.5	

system was found to be the least effective of all information sources, closely followed by AOs who are supposed to backstop the front line workers through effective supervision. Similar conclusions were drawn by Ahmad (1992) who observed that a large majority (85%) of his respondents was dissatisfied with the present working of EFS and did not appreciate their role in agricultural development. CFs were regarded as relatively better than FAs and AOs by the respondents although they were also one of the least effective sources. Thus these seem to be the most critical links in the overall information system.

CONCLUSIONS

By and large farmers tended to depend more upon one another (NFRs) for information than other sources. Observation appeared to be the major mode of information dissemination: interpersonal communication among farmers was extremely lacking. Radio was the second major source followed by television. Mass media proved relatively more popular than the direct contact. CFs' role as information sources for NCFs was almost nil. Since mostly farmers relied on NFRs, a very poor contribution of CFs may be attributed to their inappropriate selection by EFS. Similarly the situation regarding EFS has also been found very disappointing: they had contacts with less than half of the CFs and their contacts with NCFs were almost nil. Printed materials were perceived as the most effective communication channel by farmer respondents. UAF and AARI were the second and third most effective sources, respectively. However, these were the least exposed sources to the respondents. Amongst various information sources of

the respondents, EFS were regarded as the least effective by them.

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