Critical Analysis of Information Sources and Channels Preferred by Rapeseed-Mustard Farmers

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ABSTRACT

An effective communication or information is pre-requisite for adoption of an innovation or a technology. The present study was conducted in 2003-04 to study the utilization and credibility pattern of information sources and channels by the rapeseed-mustard farmers in Rajasthan. The 350 rapeseed-mustard growers from five districts of Rajasthan were interviewed. The study reported that personal localite sources like neighbours, friends, progressive farmers and opinion leaders were playing important role in transfer of rapeseed-mustard technologies to the fellow farmers. These sources with high credibility were widely used by majority of the respondents. The most revealing finding of the study is that VLWs or Agriculture Supervisors had lost their credibility among the farmers while the input dealers and agents of commercial seed, fertilizers, plant protection, etc., played a critical role in information network of rapeseed-mustard farmers, however their credibility is low. It was important to note that scientists and agriculture officers were perceived a much credible source of information by rapeseed-mustard farmers, however these sources were less accessible to the farmers. Further, the increasing literacy rate and easy accessibility of the mass media channels resulted in increased utilization of these media by the farmers.

Key words : *Information sources and channels; Utilization; Credibility; Adoption;*

Rapeseed-mustard is the important oilseed crop of India. Rajasthan occupying a prime position among the states and accounts for around 40 per cent of acreage and 38 per cent of total production of rapeseed-mustard in India. A number of technical information or innovations for increasing rapeseed-mustard production and productivity have been generated by the research system. The farmers have adopted some of them but still there are many, which have not reached to the farmers. An important pre-requisite for the adoption and diffusion of an innovation within a social system is the effective communication of information relating to the innovation involved.

In this context, the sources and channels of information utilized by farmers play an important role. Indian farmers have their own information networks where they continuously interact to get the information about agriculture and to get the solution of their problems. A farmer relies on a few information sources and rejects many others. Therefore, it is necessary to identify different sources and channels of agriculture information available to the rapeseed- mustard farmers and to locate the most utilized sources and channels so as to develop a suitable communication strategy. The utilization of sources and channels may vary from region to region and crop to crop. No study has been done to identify the information sources and channels utilized by rapeseed-mustard farmers in Rajasthan. Identification of these information sources and channels, their utilization pattern and their credibility perceived by the rapeseed-mustard farmers will be helpful for extension agencies and personnel engaged in transfer of technology programmes in selecting appropriate information sources and channels for effective and rapid transfer of new agriculture technologies. The present study was undertaken with the following objectives.

1. To study the utilization and credibility pattern of information sources and channels used by rapeseed-mustard farmers.
2. To make the suggestions/recommendations for making information sources and channels more effective for rapid transfer of recommended agriculture technologies.

METHODOLOGY

The visitors advisory service was being provided

regularly by Extension, Communication and Training unit of National Research Centre on Rapeseed-Mustard, Bharatpur. Under the service, all the visitor farmers were extended technical advice on different aspects of rapeseed-mustard production technologies, solutions of farmers problems related to rapeseed-mustard cultivation, etc. Every year thousands of farmers from different parts of the country visit the centre to seek technical guidance. This investigation is based on the interview of farmers from all the five districts of Bharatpur zone of Rajasthan namely, Alwar, Bharatpur, Dholpur, Karoli and Swai Madhopur district. From each of the 5 districts, 70 rapeseed-mustard farmers, who visited NRC on Rapeseed-Mustard at Bharatpur from Sept 2003 to March 2004 to seek technical guidance, were randomly interviewed for the present investigation, thus making a total sample of 350 respondents.

The data were collected through personal interview techniques with a structured schedule prepared for the present investigation. To measure the extent of utilization, the respondents were asked to state the extent of utilization of available sources and channels of agricultural information on a three point continuum scale viz., always, sometimes and never by assigning 2, 1 and 0 score, respectively. The credibility of information sources and channels were also measured on three-point continuum viz., most credible, somewhat credible and not credible with weighted score 2, 1 and 0, respectively. Mean per cent scores were calculated with respect to individual sources and channel and as such were put in the order of priority.

RESULTS AND DISCUSSION

1. Utilization and credibility pattern of information sources and channels by rapeseed-mustard farmers:

(a) Utilization and credibility pattern of information sources: Most utilized has low credibility and most credible is lowly utilized

Data in table 1 revealed that the scientists and agriculture officers though were very high on credibility scale (MPS 63.42) but they were not easy to approach for information due to inaccessibility (MPS 19.42), while the input dealers and commission agents were the highly utilized information sources (MPS 76.57) because of easy accessibility but had low credibility (MPS 39.42) due to the lack of scientific knowledge. It was also revealed that the personal localite sources like, progressive farmers and opinion leaders were still widely used (MPS 70.42) and was the second most credible sources of information required in the rapeseed-mustard cultivation in all the five districts of Bharatpur zone of Rajasthan. The study revealed that opinion leaders and progressive farmers frequently visited and provided advice to fellow farmers in the region. The other personal localite sources like relatives and friends and neighbours & other fellow farmers were highly utilized and perceived high ranked credible sources as indicated in Table 1. Chandawat (1997), Panjabi et. al (1998), Gunawardana & Sharma (2006) and Hai et. al (2003) also reported similar findings. Agriculture Supervisors or VLWs of this zone, due to less frequent and limited visits and furnishing incomplete information, had low credibility (MPS 33.71) and were less utilized (MPS 45) by the rapeseed-mustard farmers.

The study further reported that officials of bank and cooperative societies were generally not utilized by the majority of the rapeseed-mustard farmers. Sometimes, farmers sought information from bank officers and officials of cooperative societies, respectively. There was poor utilization and credibility of NGOs as a source of information regarding rapeseed-mustard production technologies. The reasons might be that the activities of NGOs in the area under study were related to rural development activities, other income generating sources, soil and water conservation, literacy, women child welfare and less consideration was given to rapeseed-mustard production improvement strategies.

Table 1. Utilization and credibility of information sources of rapeseed- mustard farmers

Information sources	Utilization (MPS)	Rank	Credibility (MPS)	Rank
Progressive farmers and Opinion leader	70.42	4	59.85	2
Village leaders	28.71	6	28.71	10
Relatives and friends	81.14	2	59.28	3
Neighbours & other fellow farmers	83.71	1	52.57	4
Agriculture Supervisors / VLWs	45.00	5	33.71	8
Input dealers/ Com. Agents	76.57	3	39.42	6
Personnel of NGOs	8.28	10	30.42	9
Ag Officers/ KVK staff/ Scientist	19.42	7	63.42	1
Bank Officer	14	9	37.14	7
Officials of cooperative societies	17.14	8	44.14	5

(b) Utilization and credibility pattern of information channels : Table 2 showed that field demonstrations were relatively less utilized (MPS 37.57) by the farmers and this information channel was not perceived much

credible source (MPS 50.57). The respondents awarded high credibility to the mass media. The increasing literacy rate and easy accessibility of the newspaper in Hindi in the villages were making the newspaper an important information channel for utilization (MPS 56.14) with high credibility (MPS 64.42). Panjabi et al (1998) also supported the findings. In view of increasing literacy among the farm families, farm publication or printed extension literature in the form of leaflets, booklets, handouts, periodicals, like monthly newsletters, circulars, monthly farm magazines, etc, may be a useful tool for creating awareness about the recommended rapeseed-mustard technologies among the farmers.

Table 2: Utilization & credibility of information channels of rapeseed- mustard farmers

Information sources	Utilization (MPS)	Rank	Credibility (MPS)	Rank
Exhibition/ Farmers' fair	41	7	47.28	8
Meetings/ Kisan mandal	44.71	6	46.71	9
Demonstrations	37.57	9	50.57	6
Training	27	11	53.28	5
Field trip/field day	38	8	48.57	7
Group discussion	60.85	1	37.28	10
Telephone consultations	8.57	12	27	12
Radio	48.28	5	63.71	3
TV	51	4	65.14	1
Newspaper	56.14	2	64.42	2
Farm publication	32.71	10	60.28	4
Printed material of private agencies	55.28	3	32.85	11

CONCLUSION

In India, Agriculture Supervisor or VLW is the key source of agriculture information for the farmers at village level. But it is inferred from the study that this source of information is loosing credibility among the farmers due to less frequent visit and incomplete information available with them. The easy accessibility of agro-input agencies made the farmers to widely use them but the lack of scientific and systematic knowledge among input dealers/ com. agents placed them at low credibility level by the rapeseed-mustard farmers. It was also observed that there was limited attendance by farmers to exhibition, farmers' fair, field trip, field day, meetings and training related to rapeseed-mustard production technologies. While use of mass media by the rapeseed-mustard farmers are increasing day by day. To enhance the rate of adoption of recommended rapeseed-mustard production technologies by making the different information sources and channels more effective, the following steps should be taken into consideration by all the concerned.

1. There is scope and urgent need for enriching the communication role and functions of Village Level Worker and other village level change agents. The extension agent must have complete information about a technology. How it can be applied, its cost, its availability, relative profit, etc. and related information whether it can be applied in group or individually, if two chemicals can be mixed or not, its side effects etc. Further, VLWs must increase their interaction with the farmers to contribute the more knowledge of rapeseed-mustard technologies and gain the confidence of the farmers.
2. Keeping in view the credibility of scientists, agriculture officers, KVK staffs, more number of farmers-scientists interactions, Kisan Gosthies, field days, farmers' tour to research stations, etc. should be organized for better interaction between farmers and scientists and other officials.
3. It is very clearly revealed by many investigators that the necessary steps and techniques were not clearly followed by the extension personnel in conducting demonstrations. The extension personnel should be imparted thorough training in the steps and technique of conducting demonstrations so that demonstrations can be well conducted.
4. The efforts should be made to educate the farmers to participate in training, field days, field trip, exhibition for increasing awareness and knowledge and better understanding of the technologies that how a particular technology works in a particular situation.
5. In view of increasing literacy among the farm families, printed extension literature in the form of leaflets, handout, pamphlets, etc. should be supplied to the large number of farmers so that they could use these printed material for reference.
6. Recent several studies showed that mass media viz. radio, TV, newspapers were increasingly becoming more and more important. Therefore, steps may be taken for effective utilization of these modern innovations for creating awareness among farmers about improved and new rapeseed-mustard technologies.
7. Progressive farmers or opinion leaders or key communicators were playing an important role in diffusion of innovations. To enhance the effectiveness of opinion leader and progressive farmers in transfer of rapeseed-mustard production technologies, there is a need to equip them with technically accurate

information through training and other educational programmes and the field workers should use them to maximum possible extent.

8. Knowledge is being continuously generated and less profitable information is being replaced by the more profitable ones. The farmers may, therefore, be advised to use mass media like radio, television, educational film, newspapers, farm publications etc. and take initiative in conducting and/or visiting demonstrations, field trip, agriculture exhibitions and farmers' fair.
9. If the frequency of NGOs visits could be increased and include in their goals specifically the extension of rapeseed- mustard production technologies and other necessary support provided, then rapeseed-mustard production through adoption of recommended technologies would probably be enhanced in the region.
10. To provide the information to the farmers at their home through telephone, the Govt. of India launched the "Kisan Call Centre", which have been operated since 21st Jan, 2004. It is being operated through toll free telephones bearing the number 1551 from eight selected locations covering all states and regional languages. These call centers should be popularized among the farmers and motivate them to use this facility.
11. The easy and local accessibility of agro-input agencies resulted in increased use of these agencies by the rapeseed-mustard farmers but these agencies could not get the desired level of credibility among the farmers. Therefore, all the leading agro-industries should be encouraged to set up an advisory service staffed with well-qualified and trained extension personnel.
12. Advertisements have a greater impact on the psyche of the people. Every product is being advertised by its manufacturer to popularize and increase its sale. In this way, the agricultural technologies being input or information are also needed to be advertised. The advertisement campaign of an individual technology must be prepared by taking the help of famous persons, celebrity, like role models, film stars, cricketers, reputed farmers, etc. and these should be published telecasted/broadcasted on different mass media viz. newspapers, radio, and TV to make the farmers aware of improved agriculture production technology. The celebrities have their impact on the people's attitude. This would definitely help in changing farmers' attitude and motivate them for adoption of the recommended agriculture technologies. as it is being done in the case of malaria, dengue-fever, TB, Pulse Polio, AIDS,etc. and agriculture implements, tractors, sprinkler irrigation system, fertilizers, etc. which are also being advertised by their manufacturing companies by taking the help of film actors and others.

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