

FACTORS AFFECTING THE EFFECTIVENESS OF PRINT MEDIA IN THE DISSEMINATION OF AGRICULTURAL INFORMATION

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ABSTRACT

Pakistan is predominantly an agricultural country; its development is mainly dependent on this sector. However, despite accelerated government efforts which are under way for a rapid breakthrough in agricultural productivity, average per hectare yield of various crops in the country is still much lower than that obtained in many other countries of the world. It may mainly be attributed to poor farm management by farmers. This situation demands proper education of farmers about latest agricultural technology, which can be achieved through non-formal education by extension agencies. Extension teaching methods used for this purpose are classified into three categories: individual, group and mass contacts. Individual and group methods cannot reach every one who might need and use the information. So mass media (electronic and print) are used to reach large number of people quickly. Among mass media, print media are the important means to convey the latest agricultural information to the farmers. Presently a lot of printed material is being published by public and private organizations for the dissemination of agricultural information. However, it has been observed that the print media are not playing their expected role. Keeping in view the importance of print media, the present study was designed to determine the factors affecting their effectiveness in the dissemination of agricultural information among farmers in the Punjab. The population for the study was the subscribers of the top three agricultural magazines (with respect to their circulation). A sampling frame was constructed by listing all the subscribers of the selected agricultural magazines. A sample of 361 respondents was selected from the entire population. The data were collected in July-Dec. 2008 with the help of a pre-tested and validated questionnaire designed for this purpose and was analyzed by using computer software Statistical Package for Social Sciences (SPSS). The results showed that the print media were major sources of information of the farmers. Some important factors which affected their effectiveness were quality of information, newness, farmers' interest, in time publication, easy access to print media, relevance of information, literacy level of farmers, comprehensiveness, and cost of print media.

Key Words: Agricultural information, dissemination, print media

Citation: Rehman, F., S. Muhammad, I. Ashraf and S. Hassan. 2011. Factors affecting the effectiveness of print media in the dissemination of Agricultural information. Sarhad J. Agric. 27(1): 119-124

INTRODUCTION

Agriculture forms the backbone of the global economy and serves as the means of revenue of almost 50% of the world's population (Abdullah *et al.*, 2005). Pakistan is predominantly an agricultural country, having sufficient natural resources, suitable climatic conditions, deep soils, favorable topography, and water resources, thus the country has huge potential for crop and livestock production (Mallah, 2005 and Khan, 2006). Agriculture is playing an important role in generating economic growth, as it contributes 21.80% of GDP and employs 44.70% of the total work force. However, average per hectare yield of various crops is far less than that obtained in many other countries of the world (FAO, 2008). This low yield may be attributed to non-adoption of the latest agricultural technologies and poor farm management by farmers (Farooq *et al.*, 2007). Abbas *et al.*, (2008) argue that lack of information adapted to local needs and lack of technical knowledge at farm level are the important factors responsible for this low yield. Information is therefore considered as one of the most important resources in agricultural and rural development that assists the farmers to take decisions and appropriate actions for further development related to farming (Harris *et al.*, 2001; Morrow *et al.*, 2002 and Stefano *et al.*, 2005).

Agricultural extension has a strong reliance to transfer agricultural knowledge (Hedjazi *et al.*, 2006) generated through research with the aim of acquiring useful information and changing attitudes and practices by farmers. It is considered as a process of bringing desirable change in the behaviour of the farmers to adopt innovations relating to agriculture in such a way that they are clear and convinced of their utility (Khan, 2005). Thus agricultural extension organizations are entrusted with the primary task of educating farmers and disseminating the latest agricultural technologies through various extension teaching methods including individual, group, and mass contacts. Among the mass media, print media are no less important due to a number of characteristics like durability, extensive and intensive coverage, low cost and choice of contents. The print media are highly qualified for their use in the dissemination of agricultural information among farmers (Hussain, 2005). Print media are important tools for transfer of technology to the literate farmers (Flor, 2002) and field workers at the grassroot level. They may also help illiterate farmers who have literate kids and neighbours (Jennings & Packham, 2001 and Govt. of Bangladesh, 2008).

Education	Awareness			Total
	Low	Medium	High	
Up to matric	14 25.00%	36 64.29%	6 10.71%	56 23.33%
Matric to intermediate	5 9.26%	6 11.11%	43 79.63%	54 22.50%
Intermediate to graduation	5 8.93%	5 8.93%	46 82.14%	56 23.33%
Above graduation	4 5.41%	22 29.73%	48 64.86%	74 30.83%
Total	28 11.67%	69 28.75%	143 59.58%	240 100.00%

Chi-Square value = 80.98** DF = 6 Gamma = 0.431

Table III lists the agricultural information sources used by the respondents, which show that the print media were the major sources of agricultural information and were ranked as 1st followed by fellow farmers who were ranked as 2nd. TV, extension field staff, private sector, radio, NGOs, and others were ranked at 3rd, 4th, 5th, 6th, 7th, and 8th, respectively. With respect to print media, the results of the study are in accordance with those of Farooque (2004) and Ngathou *et al.*, (2006) who found the print media as most preferred and useful sources of information. Similarly the results are also similar to those of Goly *et al.*, (2000); Phipps *et al.*, (2001); Butt (2002); Howell & Habron (2004); Luqman (2004); Parthaap and Ponnusamy (2006); and Clifford and William (2007) who found the print media as the most useful sources of information. These findings are also in accordance with those of Edeoghon *et al.*, (2008) who found that other farmers, friends and relatives were the most significant sources of information used by the farmers to get information on sustainable agricultural practices.

Table-III Rank order, mean and standard deviation of agricultural information sources based on their use

Information sources	Rank Order	Score	Mean (X)	S D
Print media	1	832	3.47	1.23
Fellow farmers	2	715	3.31	1.26
TV	3	630	2.93	1.26
Extension field staff	4	547	2.76	1.30
Private sector	5	504	2.80	1.30
Radio	6	408	2.17	1.32
NGOs	7	283	2.13	1.23
Others*	8	92	3.29	1.51

* = Internet, progressive farmers, research institutes, agri. conferences, seminars, growers' associations and exhibition

Print media are effective means of communicating the latest technology to increase agricultural production (Ashraf, 2001; Ayaz, 2005 and Samad, 2005). Based on the respondents' perception about various forms of print media, the data given in Table IV indicate that magazines were the most important form of print media with regard to their effectiveness in the dissemination of agricultural information, which were ranked 1st. Newspapers, books/booklets, pamphlets, posters, leaflets and others were ranked at 2nd, 3rd, 4th, 5th, 6th, and 7th, respectively. The results of the present study are similar to those of Hameed (2009) who found that the most effective forms of print media were magazines followed by books/booklets, newspapers and posters while studying the role of mass media in the effective dissemination and utilization of livestock production technology.

Table IV Rank order, mean and standard deviation of various forms of print media based on their effectiveness

Forms of print media	Rank Order	Score	Mean (X)	S D
Magazines	1	856	3.58	1.17
Newspapers	2	710	3.24	1.11
Books/Booklets	3	703	3.25	1.12
Pamphlets	4	678	3.26	1.13
Posters	5	630	3.10	1.12
Leaflets	6	577	3.09	1.14
Others*	7	26	3.25	1.58

* = Wall chalking, hording, banners and sign boards

The data in Table V depict that the important determinants of effectiveness of print media in the dissemination of agricultural information were quality of information followed by newness, farmers' interest, and in time publications with mean values ranging between 'medium' and 'high' categories but tending towards 'high' category. The other important factors, which fell between 'medium' and 'high' categories but tended toward 'medium' category, were easy access to print media, relevance of information, literacy level of farmers, comprehensiveness, and cost of print media.

Table-V Rank order, mean and standard deviation of the factors as determinants of effectiveness of print media

Factors	Rank Order	Score	Mean(X)	S D
Quality of information	1	832	3.59	1.23
Newness	2	819	3.56	1.26
Farmers' interest	3	812	3.55	1.26
In time publication	4	794	3.61	1.30
Easy access to print media	5	793	3.45	1.43
Relevance of information	6	792	3.49	1.23
Literacy level of farmers	7	760	3.23	1.44
Comprehensiveness	8	752	3.40	1.17
Cost of print media	9	727	3.23	1.21

CONCLUSION AND RECOMMENDATIONS

It can be concluded that the print media were the major sources of agricultural information, followed by fellow farmers and TV. Among the print media the respondents ranked the magazines, newspapers, books/booklets, and pamphlets 1st, 2nd, 3rd, and 4th, respectively with regard to their effectiveness. The quality of information, newness, farmers' interest, and timeliness were perceived to be the major determinants of effectiveness of print media in the dissemination of agricultural information among farmers. Therefore, all these factors must be given due consideration to make the print media as effective information sources.

The quality of information, newness, farmers' interest, and timeliness were perceived to be the major determinants of effectiveness of print media in the dissemination of agricultural information among farmers. All these factors need to be given due consideration by the extension organizations while using print media as a tool of information dissemination. The information passed in this way to farmers through various forms of print media, would certainly increase the knowledge/awareness and interest of the farmers in latest agricultural technology, which in turn may persuade the farmers for its adoption with resultant increase in per hectare yield. The extension agencies must acknowledge the role of print media as important source of agricultural information; this must begin with the effective use of print media that targets high yield/ productivity. This will require the extension agencies producing print media for agricultural purposes to address the hindering factors, which affect the effectiveness of print media. The focus should be on quality of information in term of its relevance to farmers' need/ interest, newness and in time delivery to the farmers. The Government needs to encourage the institutional reforms leading to the delivery of effective extension message through print media. The services must be directed towards the poor small-scale farmers who need them.

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