

EFFECTIVENESS OF AGRICULTURAL EXTENSION SERVICES IN DISSEMINATION OF INFORMATION TO THE FARMING COMMUNITY OF DISTRICT BHIMBER, AZAD JAMMU AND KASHMIR

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ABSTRACT:- This study was designed to assess the effectiveness of extension advisory services for farming community of Bhimber district of Azad Jammu and Kashmir. The convenient sampling as well as multistage sampling method was used to collect the data from the study area. The overall data consists of 150 farmers. The study revealed that respondent's acquaintance with extension staff was very low as only 18.00% of the respondents had personal acquaintance with the extension staff and 12.67% of them knew extension staff through their neighbour, while 38% of respondents from their friends. The farmers who knew extension staff through relatives were only 16%. It was also found that demonstration, personal contact, group meetings and training were effective methods of communication. The study concluded that other sources of information i.e., relatives, friends were more influential in bringing changes in the behavior of the respondents and solving the problems of farm related issues. It was found that 38% of the aware respondents yield was 50% greater than unaware farmers. It was also concluded that 80% of the respondents had increased the production of wheat while 80.67% had increased the production of maize and 68% had increased the production of millet after getting benefits from the extension services provided by the agriculture department. It is recommended that visits of extension field staff should be made regularly. The progressive farmers may be involved in extension activities because they are less in number and are easily approachable. Demonstrations, personal contacts and radio services were found most effective methods; therefore, it is recommended that these methods should be followed more effectively and used in modern shape.

Key Words: Extension Services; Agriculture Information Sources; Field Staff; Farming Community; Communication; Pakistan.

INTRODUCTION

Agriculture sector plays an important role in economic development of Pakistan. It is still under developed and the growth rate is far below its potential. Pakistan is also not self sufficient in agricultural

commodities and every year the government has to spend a fair amount of foreign exchange importing these commodities. Low yields for most crops reflect an inadequate access of farmers to better farming technology, which means agricultural services are of

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poor quality. Agriculture, being the largest sector of the economy, accounts for 21.4% of the GDP and employs about 45% of the total employed labor force (GoP, 2012-13). There is big gap between the average and potential yields of major crops. This gap could be bridged by strengthening research efforts to develop improved agricultural technology. But at the same time all the efforts would be of no use if these innovations are not properly diffused among their ultimate users, the farmer. There may be many reasons for low agricultural productivity in Pakistan, but the non-adoption of latest technology seems to be the most important one. The past experience demonstrates that extension has a key role to play in agricultural development. The research wing of the Agriculture department has been entrusted with the evolution and recommendation of suitable technology packages, while the extension wing is responsible for the diffusion of research findings among the farming community, thus the two wings are interdependent (Nawaz, 1989).

For an effective transfer of technology, the government has launched different extension approaches under the umbrella of the Agriculture department. In Government sectors many efforts have been made to improve the situation of extension in the country. In spite of serious deficiencies and financial constraints, agriculture extension has made significant contribution in increasing agricultural production (Shah, 1990).

As extension is a non formal educational function that applies to any institution that disseminates information and advice to promote knowledge attitudes, skills and

aspirations, although the term "extension" tends to be associated with agriculture and rural development. Agricultural extension continues to be in transition worldwide. At the same time, extension is a political and organization instrument utilized to facilitate development. Its purposes may differ, from technology transfer companies organized around specific, usually non cropping farms systems to problem solving educational approaches to participatory programmes aimed at alleviating poverty and advancing community involvement in the process of development.

Chi and Yamada (2002) stated that adoption of new technology depends upon various factors like education, age and progressive farmers. That's why all the farming community not willing to adopt latest technologies because most of them are old farmers and they use old and traditional methods with their own experiences. Some other important factors which affect the adoption process are capital, improper guidance from government and non government sectors and lack of skills.

Hussain et al. (2009) concluded that most important technology interventions have a key role to play in improving the competence of the farmer, but the level of the compliance of these technologies has been the major concern of farmers. On account of poor access to these technologies in terms of cost effectiveness and availability, farmers' rate of adoption has been very low as it was found that considerable percentage of farmers with medium level of education, surplus income, farm size, etc. have attained high rates of adoption, which indicates that farmers do adapt to technologies as

per their accessibility.

Okunlola et al. (2011) reported that various socio-economic characteristics have key role in the adoption of latest technologies among the farmers. Other than socio-economic factors extension advisory services also effect the adoption of these technologies. Ogunwala and Laogan (1998) reported that the use of combination of extension methods was recommended to facilitate extension services and the adoption of farm technologies.

The objective of the study was to find out extension services and to evaluate the effect of these extension services on farmers yield in six randomly selected union councils of district Bhimber.

MATERIALS AND METHODS

The current study focused the district Bhimber, Azad Jammu and Kashmir (AJK) which consists of 18 union councils. The convenient sampling as well as multistage sampling method was used to collect the data from the study area. Initially six union councils were taken from the 18 union councils and then 5 villages were selected from each union council. Later on, 5 farmers were randomly selected from each village. The overall data consist of 150 farmers. All the information of the respondents was recorded through direct enumeration/personal interviews as per schedule. The data were arranged and organized on a tally sheet, data were tabulated and percentages were worked out for their interpretation.

RESULTS AND DISCUSSION

Data revealed that 18.00%,

Table 1. Summary statistics of respondent's source for familiarities

Category	AO	AD	SMS	Others	Total
Personal (No.)	7	9	3	8	27
(%)	13.73	23.08	13.04	21.62	18.00
Neighbor (No.)	9	4	3	3	19
(%)	17.65	10.26	13.04	8.11	12.67
Friends (No.)	22	16	1	18	57
(%)	43.14	41.03	4.35	48.65	38.00
Relatives (No.)	9	3	10	2	24
(%)	17.65	7.69	43.48	5.41	16.00
Others (No.)	4	7	6	6	23
(%)	7.84	17.95	26.09	16.22	15.33
Total (No.)	51	39	23	37	150
(%)	100.00	100.00	100.00	100.00	100.00

AO: Agriculture Officer, AD: Assistant Director, SMS: Subject Matter Specialist

12.67%, 38.00%, 16.00% and 15.33% of the farmers knew with respect to personal, neighbor, friends, relatives and others about the extension staff comprising Agriculture Officer, Assistant Director, Subject Matter Specialist and others respectively (Table 1). These results are in agreement with Hameed (2006), who reported that 15.7%, 16.7%, 40.3%, 18.6% and 13.7% knew extension through personal contact, neighbors, friends, relatives and through others (radio, TV, etc.).

The data also indicated that the maximum visits of field assistants and agriculture offices are on monthly basis whereas slightly less on weekly and daily basis, respectively (Figure 1). On the other hand, 12 and 24 respondents/obtained that no field assistant and agriculture officer had visited them, respectively.

The respondents percentage regarding the timely availability of seed is highest i.e., 55% (Figure 2). It indicates a good sign of responsibility of the extension staff regarding the provision of seed. These results are consistent with Jamil (1993).

The education and recommended new technology are highly significant

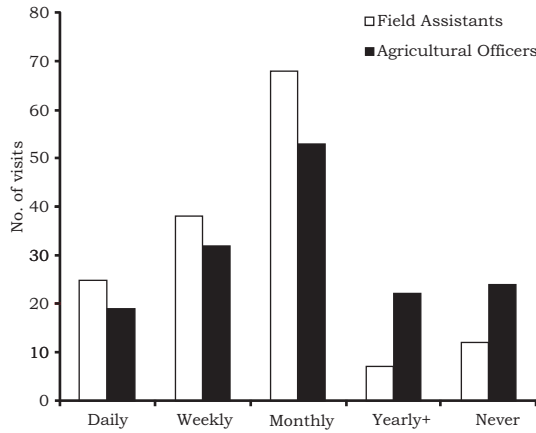


Figure 1. Multiple bar diagram of extension field staff visits with respect to time

and are associated (Table 2). It may also be concluded that to adopt the new technology the farmers should be motivated for education. These results are in agreement with Kashif (2000), who reported that literate farmers (80%) had adopted new farming technologies (weed control, crop rotation and wheat rapper), while only 20% of the illiterate farmers had adopted such new technologies.

Result demonstration, method demonstration, farm/home visits, radio programmes and agricultural fairs were most effective methods regarded by 91.3%, 72.67%, 52.66%, 68% and 15% of the respondents, respectively (Table 3). The effective methods were exhibitions, pamphlets

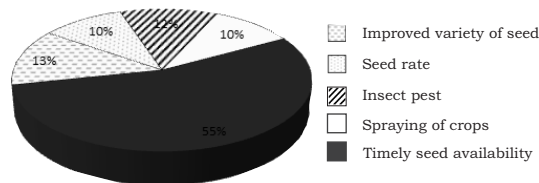


Figure 2. Percentage distribution of respondents' satisfaction with extension services

Table 2. Association between education and recommended new technology

Category	Adopted	Not adopted	Total
Literate (No.)	49	8	57
(%)	86	14	38
Illiterate (No.)	13	80	93
(%)	14	86	62
Total (No.)	62	88	150
(%)	100	100	100

Chi-Sq = 75.522, DF = 1, P-Value = 0.000

and Television programmes on perception by 48.67%, 47.33% and 82.33% of the respondents, respectively. The least effective methods were personal letters and newspapers with percentages 92.67% and 41.33% of respondents, respectively.

Regarding importance of information source, to them shows that agriculture department was an important source of information 32.67% of the respondents agreed that agriculture department was helpful to them (Table 4). About 30.66% of the respondents suggested that friends, relatives and neighbors were important source of information. About 12.67% of the respondent suggested radio and television were important source of information and 10.66% of them suggested print media as important source of information. These findings are in agreement with those obtained by Razzaque (1999), who reported that 34.86%, 28.80%, 14.77% and 12.23% of agriculture department, friends and relatives, radio and print media were the major sources of information by the respondents respectively.

The data revealed that 19.33% of the respondents had the view that aware farmers have 10% higher yield than unaware farmers. About 24.67%

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Table 3. Frequency distribution of effectiveness of different extension methods

Extension Method		Most effective	Effective	Least effective	Total
Result Demonstration	(No.)	137	12	1	150
	(%)	91.33	8.00	0.67	100
Method Demonstration	(No.)	109	37	4	150
	(%)	72.67	24.66	2.66	100
Farm/Home Visit	(No.)	79	27	44	150
	(%)	52.66	18.00	29.34	100
Agricultural Fairs	(No.)	77	23	50	150
	(%)	51.33	15.33	33.33	100
Radio Program	(No.)	102	14	34	150
	(%)	68.00	9.33	22.67	100
Exhibition	(No.)	23	73	54	150
	(%)	15.33	48.67	36.00	100
Pamphlets/Journal	(No.)	6	71	73	150
	(%)	4.00	47.33	48.67	100
Television Program	(No.)	1	123	26	150
	(%)	0.67	82.00	17.33	100
Personal Letters	(No.)	1	10	139	150
	(%)	0.67	6.67	92.67	100
Newspapers	(No.)	28	60	62	150
	(%)	18.67	40.00	41.33	100

of the respondents had the view that aware farmers have higher production. About 38% of the respondents said that their yield was 50% greater than unaware farmers. It was concluded that 38% of the respondents said that aware farmers had

higher production, as they were well informed about new farming technologies.

Table 4. Importance of sources of information by the respondents

Source		Helpful	Not Helpful	Total
Agriculture Depart.	(No.)	49	7	56
	(%)	32.67	4.67	37.33
Friends, Relatives & Neighbours	(No.)	46	6	52
	(%)	30.67	4.00	34.67
Radio & Television	(No.)	19	4	23
	(%)	12.67	2.67	15.33
Print Media	(No.)	16	3	19
	(%)	10.67	2.00	12.67
Total	(No.)	130	20	150
	(%)	86.68	13.32	100.00

It is clear from the study that 80.00%, 80.67% and 68.00% of the respondents had increased the production of wheat. Maize and millet after getting benefits from the extension services provided by the agriculture department.

RECOMMENDATIONS

The government, policy makers, administration and agriculture supervisory staff concerned with agricultural activities may consider the following recommendations:

- Literate farmers were more receptive to new farming ideas

- and innovations. Therefore there is a need to initiate and strengthen the special extension education/training in the rural area. Moreover, the government should open more schools in rural areas.
- The department of agriculture extension should issue clear instructions to its field staff that they should make visits effectively and regularly to disseminate latest agricultural information for farmers and involves progressive farmers of the area in extension activities as there are few extension field staff in the area.
 - Short duration training programmes should be arranged for farmers to educate them and remain them well informed about new farming technology and innovations.
 - As the impact of the extension services on farm yield is evident, but to increase this percentage, some steps should be taken like providing good quality of seeds made easily available to the farmers by establishing more seeds producing farms. Some sort of attraction like prizes, cash award and publicity should also be introduced.
 - Demonstration, personal contacts and radio were found as most effective methods, therefore, it is recommended these methods should be followed more effectively and used in modern shape.
- ng Delta. *Omonrice*, 10: 94-100.
- GoP. 2012-2013. Economic Survey of Pakistan, Finance Division, Economic Advisor's Wing, Islamabad.
- Hameed, M. 2006. An analysis of the farmer's perception regarding the role of public and private sectors in enhancing agricultural production in tehsil Faisalabad. Msc (Hons) Agricultural Extension Thesis, University of Agriculture, Faisalabad.
- Hussain, A., J. Chauhan, A.K. Singh and S. Yusuf. 2009. A study on adoption behavior of farmers in Kashmir valley. *Indian Res. J. Ext. Edu.* 9(2): 46-49.
- Jamil, M. 1993. Role of demonstration in the adoption of recommended agriculture technology by wheat growers of tehsil Swabi, M.Sc. (Hons) Agricultural Extension Thesis, University of Agriculture, Peshawar.
- Kashif, M. 2000. A study of into the effectiveness of training programs conducted by AKRSP, for farming community in Gilgit. M.Sc. (Hons) Agricultural Extension thesis. Agriculture University, Peshawar.
- Nawaz, M. 1989. Farmers' participation of working of extension field staff in Tehsil Jhang. M.Sc. (Hons.) Agric. Ext. Thesis. Univ. of Agriculture, Faisalabad.
- Ogunwala, A.B. and E.A. Laogan. 1998. Analysis of source of farm information and improved technologies used by farmers in Nigerian agricultural development program. *J. Ext. Sys.* 14: 72-83.
- Okunlola, J.O., A.O. Oludare and B.O. Akinwalere. 2011. Adoption of new technologies by fish farmers in Akure, Ondo State, Nigeria. *J. Agri. Technology.* 7(6):

LITERATURE CITED

- Chi, T.T.N. and R. Yamada. 2002. Factors affecting farmers' adoption of technologies in farming system: A case study in OMon district, can Tho province, Meko-

- 1539-1548.
- Razzaque, M. 1999. Effectiveness of the sources of information in the dissemination of recommended maize growing practices among the farmers of tehsil Mansehra, M.Sc. (Hons) Agricultural Extension Thesis. University of Agriculture, Peshawar.
- Shah, S.M. 1990. Technology transfer in agriculture in Nepal. A survey of technology transfer in agriculture in Asia and Pacific. APO, Tokyo, Japan.

AUTHORSHIP AND CONTRIBUTION DECLARATION

S. No	Author Name	Contribution to the paper
1.	Mr. M. Asif Jamil	Conceived the idea, Wrote abstract, Conclusion, Results and discussion
2.	Dr. Nowshad Khan	Technical input at every step
3.	Dr. Farhatullah Khan	Overall management of the article
4.	Dr. Muhammad Zakria	Data entry in SPSS and analysis

(Received September 2013 and Accepted June 2015)
