



ROLE OF INFORMATION IN IMPROVED CROP PRODUCTION TECHNOLOGY – A CASE STUDY OF PARDHANA VILLAGE OF PANIPAT DISTRICT

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Abstract: *Haryana has made tremendous progress on all fronts of agriculture. As during the past four decades, the Govt. of Haryana has put great emphasis on improving irrigation facilities, road network and other infrastructure to support farming community and agriculture. But the population of our country is increasing at a considerable rate. Therefore, it is necessary to increase our food production to feed the rising population. Improved agricultural technology should be very helpful in this direction. The adoption of improved technology brings about the desirable changes in the attitude and skills of the farmers which pave the way towards the agricultural development. An attempt has been made in the present study regarding the use of improved technology in Pardhana village of Panipat district.*

Key words: *Improved varieties, quality seeds, fertilizer application, plant protection, input dealer, extension agent, kisan melas, agricultural development officer etc.*

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INTRODUCTION

Importance of agriculture in the economic development of any country, rich or poor, is borne out by the fact that it is the primary sector of the economy, which provides the basic ingredients, necessary for the existence of human race. Agriculture is one of the main sectors of Indian economy and its importance is self evident as larger part of population depends upon it. (Somra & Kuldeep, 2010) Agriculture sector fulfills our food requirement and also helpful in income and employment generation. As the population of our country is increasing at a considerable rate, therefore, it is necessary to increase agricultural production at the same rate. Improved technology may be very useful in this direction. The adoption of improved crop production technology brings about the desirable changes in the attitude and skills of the farmers which pave the way towards the agricultural development. In the present era, numbers of sources are available regarding the use of improved crop technology. It includes research institution, government organization, input dealers, government extension agents, non- government organization, news paper, magazines, radio, television, telephone, mobile, internet, agricultural development officer etc. In the present study, an attempt has been made for analyzing the farmers' awareness towards these sources.

OBJECTIVES

1. To examine the existing sources used by the farmers to acquire information on improved crop production technology.
2. To find out the priority given to different sources on improved crop production practices by the farmers.
3. To examine the farmers' willingness for any change in the existing sources.

DATABASE AND RESEARCH METHODOLOGY

The present study is based on primary information during 2013. It is a case study of Pardhana village of Panipat district. Primary information has been collected from 90 farmers randomly selected from the study area on a prepared schedule for the study through personal interview. But in the final sample selection, only 85 respondents have been included and 5 respondents have been dropped out on account of inadequacy of desired information. Respondent have been classified into three categories on the basis of land holding. The respondent farmers having land holding 0 to 5 acres have been placed under



small farmer category, 5.01 to 10 acres under medium category and the farmers with more than 10 acres of land holding under large farmer category.

Information has been collected on the education level of the respondents, holding size, main occupation, sources of information for proper sowing time, improved varieties, quality seeds, quantity and time of application of fertilizers, irrigation schedule, plant protection measures and output price. Respondent priorities have also been analyzed regarding acquire information related to different agricultural crop production practices. Transport expenses and other expenses like tea and cold drink served by the farmers to acquire information from different sources have been considered for measuring the expenditure.

Tabular and percentage method have been used for data analysis.

RESULTS AND DISCUSSION

Socio-cultural and economic profile of the respondents have been presented in the table no. 1. It is evident from the table that only 11 respondents are illiterate. Literacy rate of the respondents has been found very high which 87.05 per cent is. Among literate farmers, 41.89 per cent respondents were matriculate, 24.32 per cent were pre- university and 17.56 per cent were studied up to middle level. Only 8 per cent respondents were graduates and 4 per cent were found up to primary level. Majority of the families were nuclear (67.05 per cent) and only 32.94 per cent family were joint. Agriculture has been observed as the main source of livelihood for the respondents as more than 90 per cent respondents were engaged in agriculture. 7 respondents have been found working in service sector as their main occupation and only 5 respondents were working in other activities. 7 respondents were working in agriculture, 6 respondents in service sector and 12 were engaged in other activities as their subsidiary occupation. Large farmers were very few in the study area which is only 15. Only 27 respondents were belonged to medium category. Small farmers have been found more in number which are about 50 per cent of the total respondents.



Table No. 1

Socio- Economic Profile of the Respondents

Particulars	Number	Percentage
Education		
Illiterate	11	12.94
Literate	74	87.05
Primary	4	5.40
Middle	13	17.56
Matric	31	41.89
Pre- university	18	24.32
Graduate	8	10.81
Type of Family		
Joint	28	32.94
Nuclear	57	67.05
Main Occupation		
Agriculture	73	90.12
Service	7	8.23
Any other	5	5.88
Subsidiary Occupation		
Agriculture	7	8.23
Service	6	7.05
Any other	12	14.1
Land Holding		
Small(up to 5 acres)	43	50.58
Medium(5.01-10 acres)	27	31.76
Large(above 10 acres)	15	17.64

Sources- Field Survey

Frequency distribution of the respondents according to their prioritization of the information acquired on different crop production practices has been presented in Table No. 2. Most of the farmers were interested to get information regarding improved varieties of seeds. 75 respondents have given it first priority and 58 have given it second priority. The largest number of respondents (75 respondents) gave first priority to the information related to improved variety, followed by 56 respondents to quality seeds, 8 respondents to sowing time, 2 respondents to fertilizer application and irrigation schedule. Most of the farmers have also been interested to get information regarding fertilizer application and plant protection. 70 respondents gave second priority to quality seeds, 56 gave third priority to fertilizer application, 68 gave fourth preference to plant protection. On the other hand, 56 respondents gave fifth preference to irrigation, 25 respondents gave fifth priority to sowing time. Almost all the farmers have no interest to acquire knowledge about the



output price. Thus, the table conveys that the farmers were more interested to get the knowledge about improved varieties, quality of seeds, plant protection and fertilizer application.

Table 2
Prioritization of information regarding different crop production practices by the Respondents

Sowing Time		Improved Varieties		Quality seeds		Fertilizer application		Irrigation		Plant Protection		Output Price	
No. of Farm-ers	Priority	No. of Farm-ers	Priority	No. of Farm-ers	Priority	No. of Farm-ers	Priority	No. of Farm-ers	Priority	No. of Farm-ers	Priority	No. of Farm-ers	Priority
8	I	75	I	56	I	2	I	2	I	0	I	0	I
5	II	58	II	70	II	2	II	4	II	2	II	0	II
20	III	4	III	20	III	56	III	3	III	7	III	0	III
15	IV	2	IV	1	IV	32	IV	8	IV	68	IV	0	IV
25	V	1	V	2	V	3	V	56	V	20	V	1	V
7	VI	1	VI	1	VI	8	VI	13	VI	15	VI	1	VI
1	VII	0	VII	0	VII	0	VII	1	VII	0	VII	83	VII

Sources- Field Survey

Table 3
Sources of Information used by the respondent for different Agricultural Practices

Source of Information ↓	No. of Farmers				
	Small	Medium	Large	Total	Percentage
Extension Agent	27	23	12	62	72.94
Input Dealers	25	23	13	61	71.76
Magazines/newspapers	5	7	7	19	22.35
Television/Radio	8	5	4	17	20
Telephone/Mobile	40	25	14	79	92.94
Kisan Mela	0	2	3	5	5.88
Experienced Farmers	20	20	7	47	55.64
Agricultural Development Officer	40	25	14	79	92.94
None	1	2	2	5	5.88

Sources- Field Survey

The Table (No. 3) shows that the number of sources used by the respondents to acquire information for different agricultural practices. Largest number of respondents has acquired the information from agricultural development officer, which is 92.94 per cent. Telephone and mobile have been used by the same (92.94%) respondents. Sources of extension agents



and input dealers have been used at the second position. 49 farmers have used information acquired from the experienced farmers.

19 respondents have used the newspaper and magazines followed by 17 respondents which have used the television and radio sources. Only 5 respondents used to visit Kisan Melas. 5 farmers did not try to get information from any sources.

During field survey, the researcher has tried to know the information about the average expenditure incurred by the farmers on different sources in the form of transport cost and other expenses if any during a year. Small farmers have been spending Rs.600 on and average during a year in order to acquire the knowledge from different sources. Medium and large farmers have accepted that they were spending on and average Rs.700 to Rs.900 during a year.

Farmers also wanted some change in the existing sources. They want that good quality seeds should be available in their village. Fertilizers, pesticides and quality seeds should be provided at subsidized prices in their village. It will be very helpful for the farmers to increase their agricultural production.

CONCLUSION:-

The study concluded that about 90 per cent respondents were literate and agriculture was observed to be their main source of livelihood. Large category farmers were very few in the village which has more than 10 acres of land holdings. 50 per cent of the respondents were belonged to small category which has the 5 acres land holdings. Most of the farmers have keen interest to get the information regarding the fertilizer application and plant protection, improved varieties and quality seeds. Largest number of respondents has acquired information from the agriculture development officer which is 92.92 per cent of the total respondents. Telephone and mobile services have been used by the same respondents. Maximum farmers also acquired the knowledge from extension agents and inputs dealers. Experienced farmers have proved to be an important source of information. Farmers wanted that quality seeds should be available at the local level. Pesticides, fertilizers and quality seeds should be provided at subsidized prices in their village.

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