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TV AS DIVERSIFIED AGRICULTURAL INFORMATION SOURCE PERCEIVED BY FARMERS: ISSUES AND CONCERNS

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ABSTRACT

Pakistan is agricultural country where majority of the population resides on agriculture. Dimension of agriculture are changing because of extended technology implications. These technologies are disseminated via various means and electronic media stays prominent in this perspective. Among the different electronic media tools TV is most important as it holds tendency to disseminate technology to the millions of people in very short time span. Present study was conducted in Lahore, Pakistan to assess the existence of TV as diversified information source followed by the challenges being faced. 120 respondents were selected through simple random sampling. Data were collected from 120 randomly selected respondents and collected data were analysed through SPSS (Statistical Package for Social Sciences). Findings indicated that 58.3% respondents owned TV sets followed by the 10.8% respondents who didn't had TV but were having access to the TV. Farmers were getting information about the all aspects of agriculture but average mean of all the aspects fall in between the low to medium showing the information gap of medium level as well. Factor such as load shedding, lack of interest, less time and inappropriate timings and broadcasts were responsible for the information gap. It is recommended on the basis of findings that agricultural relevant programs should be broadcasted on TV with appropriate timings and programs should also be launched for the capacity buildings of farmers.

Keywords: TV, information source, agriculture extension, electronic Media.

INTRODUCTION:

Pakistan is a developing country but population is increasing day by day at the growth rate of 1.57% (Government of United States of America., 2012). To feed such a fast growing population is not an easy task especially in the circumstances when country is under international debt and agricultural productivity is declining at pace. It can be estimated from the figure that agriculture share has landed to 20.8% from the 29% in the last few years. For such a growing population more food production is required but enormous gap exists between the major crops production. At the existence production it is impossible to feed the population and to boost the national economy. Average per hectare yields of major crops obtained are almost half than potential

and very low compared to other countries. (Government of Pakistan, 2011). If this situation persists it would be almost impossible to feed such a growing population. It is assumed that every problem holds the solution and the prominent solution to this problem is to equip farmers with latest technologies and motivate them to produce more food through efficient utilization of available resources. With the passage of time many new techniques have been developed but farmer cannot adopt because of unawareness and somewhat limited resources. Adoption of these technologies could bring encouraging change in the agricultural outcome and national economy as well. In this regard to boost the limited adoption agricultural extension can play a pivotal role through utilization of different visual aids (Jansen *et al.*, 2010; Abbas *et al.*, 2003).

It is common to all that world has become global village and brand new technologies are replacing the older

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techniques. Electronic media is one of the improved forms of technologies. Electronic media comprises different essentials like radio, TV, mobile and computer etc. these all are increasing in enormous fashion and helping every individual making their lives comfortable. Farming communities because of limited resources and limited formal education are behind their usage. So, there is need to deliver all farmers accurate and timely required agricultural information (Ferroni and Zhou, 2011) and electronic media such as TV can be vital in this context. In Pakistan majority of the farmers are small farmers and most of them reside in rural areas and TV is considered best information sources among them. Abbas *et al.* (2003) reported that among various mass media used for technology transfer process, TV seems to be a more powerful way to communicate the latest information to the farmers. TV is playing important role in technology dissemination as several programmes are broadcasted on different channels. Farmers' knowledge about

different agricultural TV broadcasts is an indication of their interest and attention paid towards TV. Sohni Dharti TV is first 24 hour agricultural TV channel in Pakistan which provides almost multidimensional agricultural information to the viewers. Agricultural technologies, as well as market information is provided through this channel. "Hamari Zarat", "Kissan Hujra", "Sabz Inqilab", "Dehat Sudhar", "Khait Se Mandi Tak", "Agro Online" and "Future Agriculture" are some important programs of Sohni Dharti TV. Some other TV channels also telecast agricultural programs such as "Haryali" on PTV Home, "Kissan Time" on Channel 5, "Zarai Pandal" on Royal TV. Considering the importance of television as a major source for disseminating agricultural information and playing a significant role in adoption of new technologies across the world, this study was planned to analyze that to what extent the farmers of district Lahore Pakistan are getting benefits from television and the effectiveness of agricultural telecast.

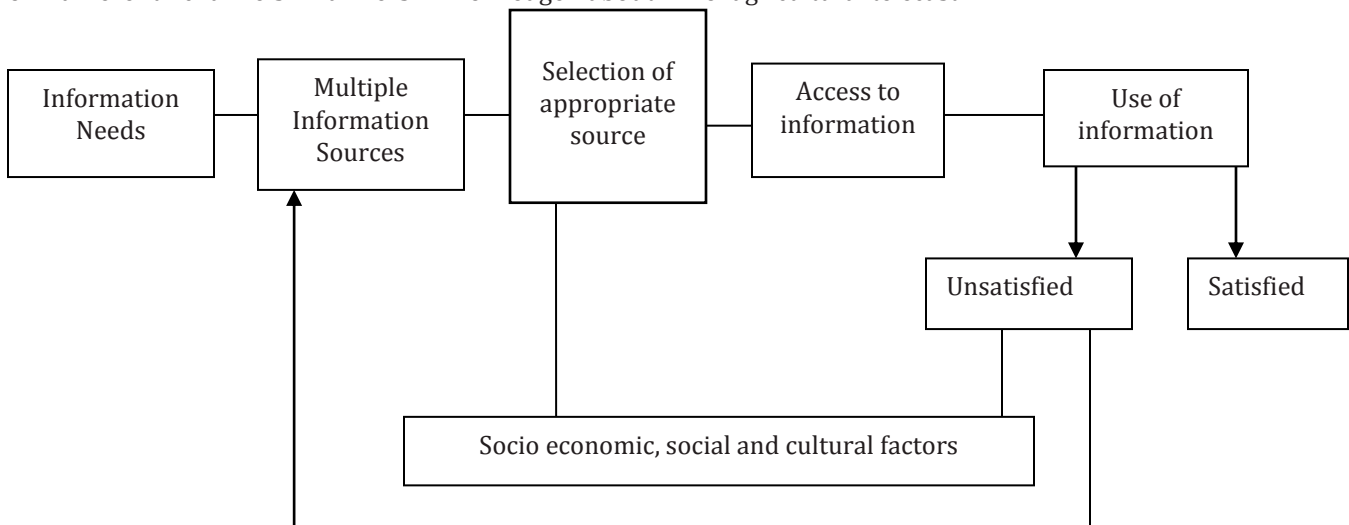


Figure 1. Framework derived by author.

Generally study emphasis on the farmers information needs, multiple information sources that exist in the community for benefits, farmers preference of information source, farmers access to the information source and then usage of information that they have been provided. Next comes the satisfaction of farmers over the information perceived through various sources. Some farmers become satisfied while some unsatisfied. Several factors are assumed as responsible from this unsatisfaction. These factors include social, socio economic, broadcasting, time frame difference and most important management of the information source by concerning

authority. Selection of information media is the most important step which decides the satisfaction level of viewer. In this study TV was predefined media and rest of the study revolved around the presented framework.

METHODOLOGY

Population: Lahore renowned as the "heart of Pakistan" is the capital of Punjab province. Farming communities of district Lahore were assumed as population for the present study.

Selection of Sample: There were five "markaz" in the research district. From these five "markaz", two were selected randomly and from each selected "markaz," two

union councils were selected at random. From each selected union council, two villages were selected randomly. From each selected village 15 farmers were selected at random, thus made a sample size of 120 respondents.

Collection of Data

Preparation/pretesting of interview schedule: For the collection of data from the respondents, a comprehensive interview schedule was developed covering all the objectives of the said study. The interview schedule was pretested on 20 farmers other than the research sample. As a result of pretesting necessary changes were made to make it more effective.

Interviewing the respondents: The researcher visited the respondents individually and conducted interview at their home as well as on farms. The interview schedule was prepared in English language but during the interview all the questions were asked in local languages (Urdu and Punjabi) for the convenience of the respondents and ensuring proper communication in order to get required information with maximum possible accuracy.

Analysis of Data: After collection the data was analyzed by the computer software SPSS (Statistical Package for Social Sciences). Interpretation of data was made by using descriptive statistics such as frequencies, means, percentage and standard deviation. In order to assess the information gap the average mean of various aspects of agriculture were subtracted from total mean value (5.00).

To specify the importance extent of factors affecting viewers' information seeking attitude, average mean of likert scale was derived.

Likert Scale: 1, 2, 3, 4, 5

Aggregate: $1+2+3+4+5=15$ $15/5=3$

Average Mean of likert scale=3

The attained mean of factors affecting were compared with the average mean of likert scale. Mean value greater than 3 were ranked as important factors while mean value greater than 4 were ranked as most important factors. Rests of the factors were assumed as less important factors.

RESULTS AND DISCUSSION

Prominent age group was 41-50 years (32.5%) while the lowest percentage of the respondents (17.5%) belonged to the age category of ≤ 30 . Whereas 28.3% of the farmers were in the age group of 31-40 years and 21.7% of the farmers belonged to the age group of 51 and above. The findings of this study are similar to those of

Rehman (2011) and Samad (2005) reporting that most of the respondents fall in the category of 41-50 years.

Table 1. Distribution of respondents according to their demographic characteristics.

Demographics attributes		f	%	
Age	≤ 30	21	17.5	
	31 - 40	34	28.3	
	41 - 50	39	32.5	
	≥ 51	26	21.7	
Education	Illiterate	15	12.5	
	Primary	10	8.3	
	Middle	35	29.2	
	Matriculation	36	30.0	
	Intermediate	17	14.2	
Graduate	Graduate	7	5.8	
	Size of land	≤ 5	41	34.2
		6 - 10	36	30.0
		11 - 15	28	23.3
≥ 16		15	12.5	
Tenancy status	Owner	91	75.8	
	Owner cum tenant	28	23.3	
	Tenant	1	0.8	

The data depicted in the Table 4.2 further reflect that overwhelming majority (87.5%) of the selected respondents was having formal education of variant levels. In this formal educated respondents percentage 30% were educated up to matriculation followed by 29.2% and 14.2% respondents having education up to middle level and intermediate level respectively. Only 5.8% respondents were graduates. About 12.5% respondents were found who never attended the school and rates as illiterate. This lesser percentage of illiterate respondents shows the increasing interest of people towards education and good enough literacy level of study area.

Regarding land holding 64.2% respondents were found small farmers having land holding lesser than 12.5 acres (5ha). Almost one fourth respondents were having lands between 10-15 acres followed by the 12.5% respondents having land size of more than 16 acres. Generally this scenario indicates lesser existence of medium or large farmers. The major reason behind these small landholdings could be the extended commercialization and urbanization in the city as Lahore is industrial area. Tenancy status of the farmers was good enough as majority (75.8%) of respondents was owner of their landholdings and only 0.8% respondents were found

tenants. Maximum percentage of owners indicates the interest and dependence of respondents upon their produce. These results verify the research work of (Abubakar *et al.*, 2009; Rehman 2011; and Samad 2005). Table 2. Distribution of respondents according their status of TV ownership and Access.

TV ownership and access	Frequency	Percentage
TV Ownership		
Yes	70	58.3
No	50	41.7
Access to TV		
Yes	13	10.8
No	37	30.8
N.A*	70	58.3
Type of Network		
Cable TV	64	53.3
Antenna or Dish	19	15.8
N.A**	37	30.8

*The respondents who had their own TV; * Those who do not have TV and do not want to access TV.

The data depicted in Table 2 show that more than half of respondents owned TV sets in their homes. Identified status represents the easy and feasible information source regarding agriculture for the farmers. Rest of the farmers was not having TV sets on their homes or farms. Because most of them reside on “deras” and they were not interested in owning TV sets. Similar findings were reported by Chhachar *et al.* (2012) as maximum number of respondents was those who had their own television sets. Further farmers not having TV sets were revealed about their access to TV and results indicate that one tenth (10.8%) respondents were having access to TV through different means while remaining were having no access. Further, farmers were also having different networks such as cable for the more number of channels. Data indicate that more than half (53.3%) respondents were having cable TV.

Table 3 is representation of farmers status about the information acquisition regarding crops. Farmers were getting information almost about all the necessary steps of crops cultivation but at variant level. In this regard the average mean (2.51) indicates the information acquisition of low to medium level. According the information regarding single practice weather related information got the maximum mean value of 4.19 greater than any other practice. Plant protection was the only practice getting mean value of 3.03. Rest of all the

parameters information dissemination was not good enough as none of the mean crossed the medium level. Similarly Khan *et al.* (2010) reported the poor broadcasting and poor awareness of farmers form the electronic media. Agro forestry, crop varieties and land preparation are the important steps but got the lowest mean values of 1.89, 1.85 and 1.82 respectively representing the lower information acquisitions. Several programs are broadcasted on TV for the information delivery to the farmers. Short messages are broadcasted after intervals which are most effective. Now a days climate change has become a major problem toward productivity which needs special attention. In this perspective farmers reported the effective broadcasting of short messages especially relevant to climate change. Therefore weather related information acquisition remained on top.

Table 3. Agricultural information related to crops obtained through TV

Type of Agricultural Information	Mean	SD
Weather updates	4.19	1.06
Plant protection	3.03	0.88
Post harvest techniques	2.79	1.20
Fertilizer application	2.62	0.81
Irrigation	2.53	0.92
Sowing methods	2.54	0.87
Agri. Loan schemes	2.54	1.12
Harvesting	2.48	1.12
Farm machinery	2.27	0.98
Time of sowing	2.15	0.74
Agro forestry	1.89	0.81
Crop varieties	1.85	0.82
Land preparation	1.82	0.73

Average Mean: 2.51; Average SD: 0.92

Source: Field Survey 2012.

Table 4 depicts information acquisition regarding livestock. Agriculture is not only the cultivation of crops; it also included the rearing if animals and in rural areas livestock is considered important to rear at their homes or farms. Livestock is also the profitable business in rural areas and assumed as significant income generating source. Therefore along with information regarding crops, livestock is also broadcasted. Farmers perceive this information on TV for their animals' management and better net return. Average mean (2.65) of information acquisition regarding livestock also fall in between very low and medium. Information

regarding livestock marketing was the only aspect attaining mean value of 3.23 indicating medium to high information level. Rest of all the aspects information was below mark, dwindling on very low to medium level.

Table 4. Extent of agri. information related to livestock obtained through TV.

Information Regarding Livestock	Mean	SD
Marketing	3.23	0.75
Breeding techniques	2.83	0.83
Vaccination	2.63	0.84
Disease management	2.48	0.70
Breed selection	2.45	0.96
Feed and fodder	2.31	1.01

Average Mean: 2.65; Average SD: 0.84

Source: Field Survey 2012.

Table 5. Agricultural information related to poultry farming obtained through TV

Information Regarding Poultry	Mean	SD
Marketing	3.08	1.08
Vaccination	2.88	0.93
Feeding	2.52	0.82
Breed selection	2.45	0.74

Average Mean: 2.73; Average SD: 0.89

Source: Field Survey 2012.

Like livestock, poultry farming is also another income generating source for the farmers as depicted in Table 5. Especially in rural areas women perform this function of rearing poultry birds. This not only generates the income but also helps in food security in the form of backyard poultry farming particularly (Khursheed, 2013). Like livestock, in poultry marketing aspect remained at high with mean value of 3.08. Average mean of all poultry related aspects attained mean value of 2.73 closer to the medium level acquisition. Couple of years ago because of severe

Table 7. Assessment of information acquisition gap.

Information acquisition about various aspects	Existing Information	Information Gap
Information related to crops	2.51	2.49
Information related to Livestock	2.65	2.35
Information related to Poultry	2.73	2.27
Information related to other agricultural enterprises	2.28	2.72

Note: figures rated as existing information are the average mean values.

Information acquisition gap was assessed by subtracting the averages means of various aspects from the total mean value (5.00) as data depicted in Table 7. Finding indicate that information related to other agricultural enterprises showed the dominant gap by

diseases attack poultry business was declined but at current it emerging again as a profitable business. Emerging trend was also observed during research observation among the farmers as they were following backyard poultry in household sheds. As marketing is important factor due to fluctuating rates of poultry and this is also the major reason for more information acquisition related to marketing of poultry.

TV is multifunctional medium as it is used as entertainment and infotainment as well. So, information disseminated on TV is also multipurpose. Farmers were enquired about the information seeking regarding the other agriculture enterprises such as apiculture, fish farming and sericulture and data in this regards are depicted in Table 6. No doubt these enterprises are not affordable for every farmer. Some of the farmers who were educated and financially sound were adopting these enterprises and they were also the seeker of information in this regard. Apiculture got the maximum mean value and was ranked 1st followed by the fish farming and sericulture which got the mean values of (2.29 and 2.17) respectively. Fish farming and sericulture are much expensive and times consuming therefore, farmers were less inclined toward these enterprises. Average mean value (2.28) representing the information acquisition closer to low level.

Table 6. Agri. information related to other agriculture enterprises obtained through TV.

Other Agricultural Enterprises	Mean	SD
Apiculture	2.39	0.83
Fish farming	2.29	0.46
Sericulture	2.17	0.89

Average Mean: 2.28; Average SD: 0.72

Source: Field Survey 2012.

attaining mean value of 2.72 followed by the information related to crops having mean value of 2.49. Information related to livestock and poultry showed gap by mean values of 2.35 and 2.27 respectively. It is obvious that gaps are created by some hindering

factors of various type which not only creates the gap but also diminish the interest level of viewers. To explore these factors farmers were inquired and the data in this perspective is narrated in Table 8.

Table 8. Factors that adversely affect TV as an agricultural information source.

Factors Affecting TV	Mean	SD
Load shedding	4.92**	0.39
Lack of time	3.99*	0.97
Lack of interest	3.95*	0.95
No access to TV	3.10*	1.55
Inappropriate timings	3.19*	1.00
Poverty	2.61	1.21
Poor quality transmission	2.37	1.50
Inadequate information	2.62	1.47
Use of difficult language	2.38	1.54
Religious belief	1.96	1.41

*Important factors ** Most important factors

Loads heeding appeared as the most important factor creating the information gap attaining highest mean value (4.92) among the all factors. It's well known fact that Pakistan is indulged severely in energy crisis that needs more time to be overcome. Increasing population, unemployment, poverty and limited resources keep the individual fail to meet the desired livelihood. In this regard, individual impel to work on farm and off farm to earn more. This off farm employment also created time difference therefore farmers most of the time remains unable to watch the agricultural program broadcasted on TV. These findings are similar to those of Muhammad *et al.* (2004) and Khan *et al.* (2010) where they reported that majority of the farmers was unaware of regular agricultural telecasts.

Lack of time appeared as important factor affecting the information seeking. Lack of interest of farmers was also appeared as important factor. During informal discussion farmers revealed that load shedding, irrelevant programs and time difference are responsible for our reduced interest in watching TV. Inappropriate timing was also rated as important effecting factor by mean value of 3.19. Sound percentage of farmers was not owned TV while some were not having access at all to the TV. Respondents of that type rated the access to TV as important problems hindering the information acquisition.

Poverty, poor quality transmission of programs, inadequate information and use of technical language that farmers can understand were the other factor

hampering the farmers' interest toward information seeking.

CONCLUSION AND RECOMMENDATIONS

Study confines that rural communities require all type of information timely with accurate contents. Unfortunately, it's not being accomplished in the rural areas. Role of TV is identified well but information acquisition is identified of medium level which is not good enough for development. Farmers were getting information about all the agricultural relevant aspects but to medium level. Several reasons just like load shedding, lack of interest of farmers followed by time shortage and irrelevant contents of the programs broadcasted. Following suggestions are made on the basis of findings

Load shedding is the major problem therefore; it is a dire need to overcome the energy crisis by government. Moreover, public cooperation is needed especially in energy conservation through effective use. In this regard, awareness campaign also should be broadcasted on TV. Relevant agricultural programs should be broadcasted timely to boost the interest of farmer. Proper timing should be scheduled by the broadcasting agencies. Most of agricultural programs should be broadcasted at evening when farmers come back to the home so that they could watch it. Agricultural programs with the comic characters should be broadcasted so that farmers could entertain and gain effective information as well. Programs for the capacity building of farmers should be broadcasted which will boost farmers interest and confidence toward farming

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