

Sources of Information in Adoption of Sustainable Agricultural Practices as Perceived by Farmers in Sindh Province of Pakistan

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Abstract: Agriculture is the backbone of Pakistan's economy in terms of providing food and employment and foreign exchange earnings. It contributes 21.9 percent to the gross domestic product (GDP). The importance of sustainable agriculture practices for the farmers to a large extent depends upon the effective sources of information. It is believed that farmers do not often make visit to the research stations, however, they obtained required knowledge from different sources like mass media, fertilizer agency, fellow farmers, radio, television, extension personnel and contact farmers. It is imperative to communicate sustainable agriculture practices to the farmers through various sources of information. This study used a descriptive research methodology the universe of study consisted of six districts of Sindh province comprising Larkana, Naushehro Feroze, Shaheed Benazirabad, Sanghar, Mirpurkhas and Badin. A sample of 180 farmers was randomly selected for the study. A well structured interview schedule was used to collect information from the small farmers on their personal and socio-economic characteristics and sources of information. The study found that about 36.11% of the respondents were youth having age group (26-35 years), while 66.67% of the respondents were married, however a large percentage (44.44%) maintained a range of small farmers having land 13-25 acres of land and 66.67% of the respondents having their primary education. In addition 66.67% of the respondents having farming experience between 6 to 10 years. The results of the study showed that the most frequently used sources of information about Sustainable Agriculture were Television Broadcast, Neighboring Farmer, Fertilizer and Herbicide Dealer and Seed Dealer, while slightly over half the farmers reported using information about Sustainable Agriculture from Public Extension Agent, Private Extension Agent, Research Workers, Farm Magazine and Publications, Local Newspapers, Relatives and Extension Materials. On the basis of the results and conclusion drawn from the study it is recommended that Government should establish farmers radio and television station for dissemination of the agricultural programs for sustainable agriculture in Sindh province. Sustainable agriculture programs should be broadcast through television and radio programs. Neighbor farmers and fertilizer herbicide dealers should be educated for sustainable agriculture practices.

Keywords: Sustainable Agriculture, Sources of Information, Farmers.

INTRODUCTION

Agriculture is the backbone of Pakistan's economy in terms of providing food and employment and foreign exchange earnings. The importance of agriculture is obvious from the fact that more than 70 percent of Pakistan's population lives in rural area and agriculture is their main source of revenue. It contributes 21.9 percent to the gross domestic product (GDP), [1] provides 45 percent of labor force and employ more than 70 percent population directly or indirectly in agriculture. The sustainability of agriculture, rarely considered a national concern a few decades ago, is now an important policy issue. For years now, visionaries, scholars, policy makers and intellectuals

have expressed the rationale for a sustainable agriculture. They have inspired the public to realize that modern agriculture is not moving down a sustainable path, and outlined what might be done to guide it there. Sustainable agriculture has many definitions: [2] defines sustainability in agriculture as "the ability of an agro-ecosystem to maintain productivity when subjected to a major disturbing force" over time. According to Wise [3], sufficient conditions to achieving sustainable agricultural development include correct economic valuations, appropriate legal and social framework, and environmental accounting or monitoring. Environmentally sustainable agriculture movement is very strong in most of the developed countries but it is a new concept in Pakistan. The importance of sustainable agriculture practices for the farmers to a large extent depends upon the effective sources of information. It is believed that farmers do not often make visit to the research stations, however,

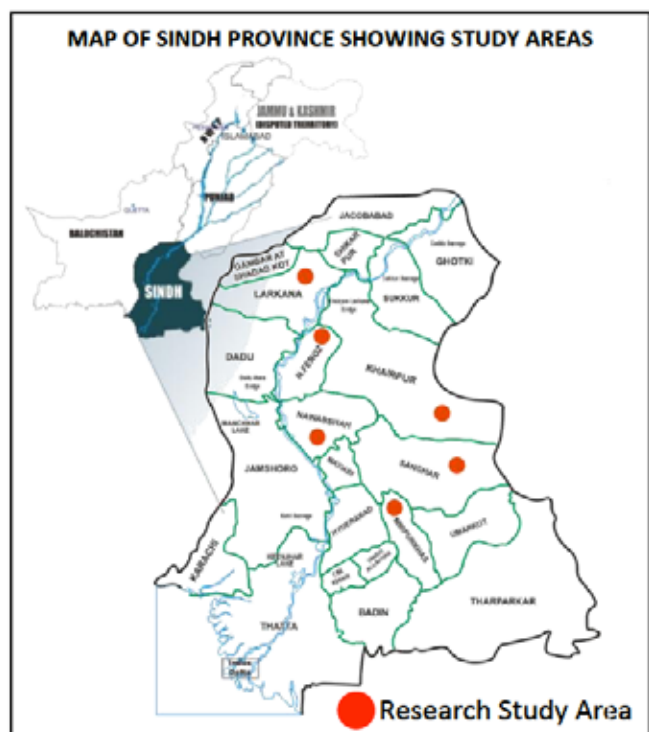
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they obtained required knowledge from different sources like mass media, fertilizer agency, fellow farmers, radio, television, extension personnel and contact farmers. It is imperative to communicate sustainable agriculture practices to the farmers through various sources of information.

Hence this study was conducted to investigate the farmers' perception of the information sources for dissemination of sustainable agriculture practices. The purpose of this study was to examine the farmers perception regarding various sources of information. Specially, the study identified the socio economic and demographic characteristics of the respondents and perception of the farmers on the sources of information

MATERIAL AND METHODS

This study used a descriptive research methodology. The universe of study consisted of six districts of Sindh province comprising Larkana, Naushehro Feroze, Shaheed Benazirabad, Sanghar, Mirpurkhas and Badin. Thirty farmers were selected from each district through multistage sampling techniques. Thus making a sample of 180 farmers was randomly selected for the study. A well structured interview schedule was used to collect information from the small farmers on their personal and socio-economic characteristics and sources of information. Statistical techniques like mean scores and percentages were used to analyze the data.



RESULTS AND DISCUSSION

Table 1: Socio-Demographic Characteristics of the Respondents (N = 180)

Socio-demographic characteristics	Frequency	%
Age		
< 25 years	35	19.44
26-35	65	36.11
36-45	45	25.00
46-55	25	13.89
56 years and above	10	5.56
Marital Status		
Single	60	33.33
Married	120	66.67
Land Holding		
1-5	30	16.67
6-12	60	33.33
13-25	80	44.44
> 26	10	5.56
Level of education		
Illiterate	50	27.78
Primary education	120	66.67
Secondary school education	10	5.56
Farming experience		
≤ 5 years	20	11.11
6-10 years	120	66.67
> 11 years	40	22.22

Table 1 show that about 36.11% of the respondents were youth having age group (26-35 years), while 25% of the respondents were in the age group having 36-45 years. The finding also showed that 66.67% of the respondents were married; a large percentage (44.44%) maintained a range of small farmers having land 13-25 acres of land. The level of education of the respondents showed that 66.67% of the respondents having their primary education, while 27.78% were illiterate. In addition, the findings showed that 66.67% of the respondents having farming experience between 6 to 10 years, however 22.22% farmers having their experience more than 11 years.

The farmers were asked how often they used several potential sources of information about Sustainable Agriculture. The mean scores reported in Table 2 were computed from responses reported on a

Table 2: Sources of Information for Sustainable Agriculture Practices as Perceived by Farmers (N=180)

Sources of information	Mean	Std. Error	LSD Ranking
Radio and Television	2.94	0.037	a
Seed Dealers	2.89	0.024	a
Fertilizer and Pesticide Dealers	2.84	0.037	a
Neighboring Farmers	2.83	0.035	a
Relatives	1.97	0.013	bc
Public Extension Agents	1.96	0.061	c
Local Newspapers	1.96	0.025	c
Farm Magazine and Publications	1.54	0.058	d
Progressive Farmer	1.47	0.037	de
NGO's / CBO's Worker	1.43	0.047	e
Farmer Field School	1.41	0.047	ef
Contact Farmers	1.29	0.04	f
Mobile Phones	1.26	0.034	g
Private Extension Agent	1.04	0.015	h
Internet / Computers	1.04	0.014	h

F =40.186 P=0.000 MSE=0.41; LSD 5% = 0.13.
Scale: 1= Not at all, 2 = sometimes, 3 = always.

3-Point likert-scale, ranging from 1 = not at all, = sometimes and 3 = always for each of the potential sources of information. The most frequently used sources of information about Sustainable Agriculture were Television Broadcast, Neighboring Farmer, Fertilizer and Herbicide Dealer and Seed Dealer, while slightly over half the farmers reported using information about Sustainable Agriculture from Public Extension Agent, Private Extension Agent, Research Workers, Farm Magazine and Publications, Local Newspapers, Relatives and Extension Materials. Private Extension Agent, Contact Farmer, Progressive Farmer, NGO's / CBO's Worker, Farmer Field School, Internet / Computers, Books and Manuals, Middle Man, Cooperative Society, Informal Saving Groups, Religious Organization and Electronic Devices (Mobile, Fax etc) were never used by farmers.

CONCLUSION

The study found that about 36.11% of the respondents were youth having age group (26-35 years), while 66.67% of the respondents were married, however a large percentage (44.44%) maintained a range of small farmers having land 13-25 acres of land and 66.67% of the respondents having their primary education. In addition 66.67% of the respondents having farming experience between 6 to 10 years. The results of the study showed that the most frequently

used sources of information about Sustainable Agriculture were Television Broadcast, Neighboring Farmer, Fertilizer and Herbicide Dealer and Seed Dealer, while slightly over half the farmers reported using information about Sustainable Agriculture from Public Extension Agent, Private Extension Agent, Research Workers, Farm Magazine and Publications, Local Newspapers, Relatives and Extension Materials.

RECOMMENDATIONS

On the basis of the results and conclusion drawn from the study following recommendations and policy implication are extracted:

- Government should establish farmer radio and television station for dissemination of the agricultural programs for sustainable agriculture in Sindh province.
- Sustainable agriculture programs should be broadcast through television and radio programs.
- Neighbor farmers and fertilizer herbicide dealers should be educated for sustainable agriculture practices.
- Awareness should be created among farming community through newspaper so they receive agriculture information through print media.

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