

Working of Commodity Specialized Extension Approach Followed by Sugar Mills in Faisalabad–Pakistan

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ABSTRACT

Agriculture sector not only fulfill the human food and animal feed requirements of the country but also provides raw material to its agro-based industry. In the foreign trade, it is agriculture, which dominates through exports of raw commodities like rice, cotton and fruits; semi processed and processed products like cotton yarn, cloth, carpets and leather products. To improve agricultural production through effective dissemination of agricultural technology, various extension approaches have been tried from time to time including commodity specialized approach. Data were collected through 120 respondents randomly selected from 10 villages of Chak Jhumra tehsil of Faisalabad. Data were collected with the help of pre-tested interview schedule. The results showed that a large majority (85.0 & 88.3%) of the respondents planted sugarcane during spring and autumn seasons on an area up to 5 acres. One plough with rotavator or disc plough was known to 100.0% of the respondents and it was adopted by 96.7% of them. CP-77-400 and COJ-84 were known to 85.0 and 75.0% of the respondents and in same sequence were adopted by 71.7 and 43.3% of the respondents respectively.

Key Words: Sugar mills; Commodity; Sugarcane; EFS

INTRODUCTION

Agriculture occupies an eminent place in the entire economic structure of Pakistan. Its contribution to GDP is more than 24%. It provides employment to more than 48.4% of country's work force. This sector not only fulfills the human food and animal feed requirements of the country but also provides raw material to its agro-based industries. Moreover, about 67.5% of country's population living in rural areas is directly or indirectly involved in agriculture and makes its living from this profession. In the foreign trade, it is agriculture, which dominates through exports of raw commodities like rice, cotton and fruits; semi processed and processed products like cotton yarn, cloth, carpets and leather products (Government of Pakistan, 2003). This is despite the fact that crop yields in Pakistan are generally low as compared to the yields of many other developing and developed countries. Moreover the average yields of the major crops are low than their potential yields. For example, during the year 2002-03, the average yield per hectare of wheat, rice, sugarcane and cotton was 2384, 2012, 47927 and 621 kgs/hectare (Government of Pakistan, 2003) as compared to the yield potentials of these crops being 6425, 6850, 183000 and 2527 kgs/hectare, respectively (Government of Pakistan, 1988). Current yields of these crops at the existing level of technology reveal considerable gap between the potential and actual yield obtained at the farm level. This situation indicates that yield per hectare can be increased 3-4 times with the adoption of available technology (Ahmad, 1994). This low yield can be attributed to many factors. Amongst them the lack of technical

knowledge about production technologies of the major crops could be an important one. The available technology can be transferred through an effective extension approach, because agriculture extension is one of the means available to help alleviate poverty and improve food security. It promotes the transfer and exchange of information that can be converted into functional knowledge, which is instrumental in helping to develop enterprises that promote productivity and generate income in the present climate of exchange. Agricultural extension is a unique service, which helps to provide small farmers and the rural poor living in remote areas an access to the latest technology; while it can also provide these populations with services to increase their productivity (World Bank, 2003).

For effective dissemination of agricultural technology, in public sector, various extension approaches have been tried from time to time like general extension approach, Training and Visit (T&V) extension approach and decentralization of agricultural reforms, the T & V approach continued as the only extension approach in public sector till, 1999. This approach was under heavy criticism, like too rigid, top down oriented, not responsive to farmers' needs, much expensive, ineffective in communicating with the farmers and is unable to meet the challenges of changing circumstances (Byerlee, 1988; Antholt, 1990). Keeping in view these drawbacks in 1999, Government of Pakistan introduced a new system named Decentralization of Agricultural Reforms on August 14, 2001 (Dogar & Dogar, 2003).

Besides the public sector extension some other extension approaches are also working for guiding the

farmers regarding improved agricultural technology. Amongst them are the participatory extension approach and commodity specialized extension approach like extension work being done by the sugar mills, pesticide agencies, Pakistan Oil Seed Development Board (PODB), Tobacco Development Board, National Fertilizer Company (NFC) and Fauji Fertilizer Company (FFC).

Sugarcane is an important cash crop and is grown almost in every part of the Punjab province, rather all over the country. The total area under sugarcane cultivation in Pakistan was 1086000 hectares with an average yield of 47927 kgs/hectare; whereas, the potential yield was 183000 kgs/hectare (Government of Pakistan, 2003). This indicates that there is a big gap between the average and potential yield, which needs to be abridged. Many efforts are being made to minimize this gap, both by government and the private sectors. In private sectors, especially the sugar mills are educating the farmers regarding the adoption of improved sugarcane production practices. These sugar mills employ their own extension field staff for this purpose.

The district Faisalabad is well known for sugarcane cultivation. During the year 1998, area under sugarcane was 276,300 acres and production was 6,002,000 kgs with an average yield of 582.00 kgs/acres (Government of Pakistan, 2000). Many sugar mills are playing an important role in the dissemination of agricultural technologies for increasing sugarcane production. In Faisalabad, sugar mills are striving hard for the enhancement of sugarcane production by educating the farmers regarding improved sugarcane production technologies. Therefore, the present study had been designed to investigate into the working of commodity specialized extension approach followed by sugar mills in Faisalabad district.

METHODOLOGY

The present study was conducted in district Faisalabad. Faisalabad district comprises five tehsils, namely Chak Jhumra, Faisalabad, Jaranwala, Samundari and Tandlianwala. Tehsil Chak Jhumra was selected as the study area keeping in view that there are two sugar mills (Crescent Sugar Mills & Fauji Sugar Mills) working for educating the farmers regarding the improved agricultural technologies regarding sugarcane production. Commodity organization is working in 55 villages out of 67 villages in the tehsil. Out of these 55 villages, 10 villages were selected randomly. Than twelve sugarcane growers from each selected village were taken at random. Thus a total of 120 respondents were taken as study sample. The data collected with the help of a pre-tested interview schedule. The data were analyzed with the help of SPSS for interpretation.

RESULTS AND DISCUSSION

The data (Table I) reveals that a large majority (85.0%) of the respondents planted sugarcane during spring

season on an area up to 5 acres followed by (13.3%) respondents, who planted sugarcane on an area of > 5-10 acres. Only a fraction of respondents (1.7%) planted sugarcane on >10 acres. Similarly a large majority (88.3%) of the respondents cultivated sugarcane during autumn season on an area of up to 5 acres. Almost an equal number 5.0 and 6.7% of the respondents cultivated sugarcane during autumn season on >5-10 acres and >10 acres of land respectively. The present research findings more or less coincide with those of Idrees (2000), who found that 85.0, 12.5 and 0.8% of the respondents cultivated sugarcane crop on 0-5, 5-10 and 10-15 acres, respectively.

The data presented in Table II shows that 2-3 ploughing using chisel plough were known to less than half of the respondents (40.0%) and were adopted by 16.6% of the respondents. All the respondents were aware of and adopted 3-4 ploughing with cultivator followed by planking. However, only 3.3% of the respondents were aware of and none of the respondents had adopted one deep ploughing with subsoiler after 3-4 years. The above results are in line with those of Javed (2000), who found that 100.0% of the

Table I. Distribution of the respondents according to the area under sugarcane

Area (Acre)	Spring		Autumn	
	No.	%	No.	%
Up to 5	102	85.0	106	88.3
> 5 to 10	16	13.3	6	5.0
> 10	2	1.7	8	6.7
Total	120	100.0	120	100.0

Table II. Distribution of the respondents according to their awareness and adoption of the recommendations regarding land preparation practices

Land Preparation	Awareness		Adoption	
	No.	%	No.	%
2-3 ploughings using chisel plough	48	40.0	20	16.6
3-4 ploughings with cultivator followed by planking	120	100.0	120	100.0
1 deep ploughing with subsoiler after 3 or 4 years	3.3	-	-	-

Table III. Distribution of the respondents according to their awareness and adoption of the recommendations regarding varieties of sugarcane used by them during current season

Varieties	Awareness		Adoption	
	No.	%	No.	%
CP-77-400	102	85.0	86	71.7
CP-72-2086	6	5.0	2	1.7
CP-43-33	4	3.3	4	3.3
CPF-237	58	48.3	46	38.3
HSF-240	34	28.3	28	23.3
SPF-213	8	6.7	8	6.7
SPSG-26	26	21.7	8	6.7
L-118	50	41.7	6	5.0
COJ-84	90	75.0	52	43.3

Table IV. Distribution of the respondents according to their acquaintance with EFS of Sugar Mills

Extension Field Staff	Only by name		Only by face		Both by name and face		Neither by name nor by face	
	No.	%	No.	%	No.	%	No.	%
Field Assistants	-	-	45	37.5	67	55.8	8	6.7
Field Officers	-	-	18	15.0	31	25.8	71	59.2
Cane Development Officers	-	-	-	-	-	-	120	100.0
Cane Manager	-	-	18	15.0	12	10.0	90	75.0
Cane Advisor	-	-	-	-	9	7.5	111	92.5

respondents were aware of and had adopted 6-8 ploughing with cultivator and 3-4 planking, respectively.

The varieties like CP-77-400 and COJ-84 were known to 85.0 and 75.0% of the respondents and had adopted by 71.7 and 43.3% of the respondents respectively as clear from Table III. The least known and adopted recommended sugarcane varieties were CP-72-2086 and CP-43-33 as reported by 5.0 and 3.3% and 1.7 and 3.3% of the respondents respectively. The above results negate the findings of Idrees (2000) who concluded that 45.8, 29.2 and 27.5% of the respondents knew CP-77-400, CP-72-2086 and CP-43-33, respectively. However, their adoption level was lower than the present research results, which show that 25.8, 3.3 and 1.7% of the respondents adopted CP-77-400, CP-72-2086 and CP-43-33, respectively.

The data in Table IV depicts that Field Assistants were known only by face, both by name and face and neither by name nor by face to 37.5, 55.8 and 6.7% of the respondents, respectively. Majority (59.2%) of the respondents knew Field Officers neither by name nor by face. However, 15.0 and 25.8% of the respondents knew the Field Officers only by face and both by name and face, respectively. A large majority (75.0%) of the respondents reported that they knew Cane Manager neither by name nor by face and only 15.0 and 10.0%, of the respondents reported that they knew Cane Manager only by face and both by name and face, respectively. Similarly an overwhelming majority (92.5%) of the respondents knew the Cane Advisor neither by name nor by face. Only 7.5% of the respondents knew the Cane Advisor both by name and face. However, Cane Development Officer was known neither by name nor by face to 100.0% of the respondents. The non-acquaintance of Cane Development Officer by none of the respondents neither by name nor by face is due to the reason that there is no post of Cane Development Officer in Fauji Sugar Mills but post available in Crescent Sugar Mills. Now there is no zoning in the sugarcane growing area therefore none of the Sugar Mill takes interest in development work.

CONCLUSIONS

From above discussion, it is clear that EFS of Sugar Mills are not showing much more interest in dissemination of information regarding the improved practices of sugarcane mainly due to no zoning. Therefore it is recommended that zoning may be revived by the Government for the enhancement of sugarcane production.

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