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THE ROLE OF PRIVATE TOBACCO COMPANIES IN PROMOTION OF TOBACCO CROP AT MALAKAND DIVISION, PAKISTAN

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Abstract

Tobacco is one of the main cash crops of Pakistan. Certainly, the growers cultivate this crop for economic stability. Therefore, this research is conducted to study the role of private tobacco companies in promotion of tobacco crop at Malakand division of Khyber Pakhtunkhwa province. Multi-stage sampling technique applied for selection of the sample. Thus, total 135 tobacco growers were selected for this study by the appropriate methods. Meanwhile, the results reveal that maximum 82.96, 72.59, 85.18 and 65.18% tobacco growers were young and middle age (up to 50 years), educated up to bachelor degree, well-experience of farming practices up to 20-30 years and small size up to 2.5 acres respectively. Moreover, mostly 85.18, 85.18, 75.55 and 68.14% tobacco growers had provided facilities related seeds, nursery establishment, fertilizers and pesticides application respectively by private tobacco companies. Further, the response of tobacco growers recorded that seed facilities were excellent and good. While other remaining facilities (nursery establishment, fertilizer and pesticides applications, sticks, farm yard manure, wood, transportation, baskets and bags and heating pipes) were poor and fair. Additionally, maximum 98.51% tobacco growers reported that they achieved related and required information by communication tools pamphlets and posters. Beside these communication tools, almost all tobacco growers informed that mobile is a suitable communication tool for sharing new information. The present study concludes that majority tobacco growers were facing mainly issues related quality seed, fertilizers, and pesticides application and nursery establishment. Meanwhile, it is recommended that private tobacco companies and other concern organization had better provide the latest information, and appropriate facilities and services to tobacco growers related seeds, fertilizers and pesticides application, and nursery development by extension methods and approaches like field demonstration, field trip, model farm service and farmer field school.

Key words: Electronic tools, extension tools and methods, nursery establishment, pamphlets, pesticides application, posters,

INTRODUCTION

Tobacco plant can be expressed as a wicked weed. Anyway, human beings have been utilizing this golden leaf crop since the 15th century. It was noticed the first time on October 11, 1492, when Christopher Columbus sighted the home of awareness

(Muhammad, 1975). This crop is cultivated in Pakistan since 1960 and consider one of the main cash crops of Pakistan. In the year 1961, It is recorded that tobacco crop was cultivated on about 39 thousand hectares in Pakistan while this figure has boosted up to 51 thousand hectares approximately in 2007. Moreover, it is noticed during this period that one-

hectare tobacco cultivated produces approximately 2.47 tons production in Pakistan. Further, 1% application of suitable fertilizers increases tobacco production up to 0.05 tons in Pakistan (Hussain *et al.*, 2010). According to Government of Pakistan (2015) report, tobacco crop is planted on about 0.25 % of total irrigated land of Pakistan. In Pakistan, approximately 75,000 tobacco growers cultivate tobacco crop in the entire country where the environment is favorable for its cultivation. Out of these 75,000 tobacco growers, 45,000 growers were reported from Khyber Pakhtunkhwa province, Pakistan (GoP, 2015). Furthermore, most (95%) growers planted Flue Cured Virginia (FCV) variety which is observed a commercial variety of tobacco crop (GoP, 2015). The maximum area of Khyber Pakhtunkhwa province is suitable for tobacco cultivation. Therefore, in the year 2012-13, this crop was cultivated on 31764 hectares and production was 83470 tons with average yield was 2.829 tons/ha in Khyber Pakhtunkhwa province. Whereas, in years 2011-12 the cultivated area of tobacco crop was 32610 hectares, production was 78210 tons and average yield was 2.408 tons ha⁻¹. It is cleared from the government of Khyber Pakhtunkhwa (2014) report that tobacco yield has increased in the year 2012-13. The environment of the mostly area of Khyber province is suitable for tobacco crop. Beside the favour of the environment, other resources like irrigation, suitable soil, and financial stability encourage growers to cultivate this crop. The first time, tobacco planted in Khyber Pakhtunkhwa province at an agricultural research station, Tarnab, Peshawar in the year 1920 on experimental base. Meanwhile, the germination of tobacco crop recorded successfully this province in the first plantation due to a favorable environment, irrigation, and other required resources. Moreover, yield per hectare of this crop is observed up to optimum level compared with international yield per hectare in this Province. But, due to lack of modern facilities and new technical knowledge on curing further obstructed its production per hectare. (GoP, 2013). Private tobacco industries perform a critical role in the economic development by adding economy in Pakistan as a text payable and provide jobs opportunities to local communities. Keeping in view these points, now the government of Pakistan is showing interest to produce good quality of tobacco leaf for export purposes. For this purpose, Pakistan Tobacco Board is performing a collaboration research and other activities with private tobacco

companies to not only improve tobacco leaf but also increase production per hectare (Pakistan Tobacco Companies Limited, 2012).

Therefore, the present study was design to assess the role of private companies in tobacco crop in the study area, to identify major facilities provided by private tobacco companies in the study area and formulate suggestions and recommendations for policy makers.

RESEARCH METHODOLOGY

Methodology section of this study consists of a selection of universe of study, sample selection technique, data collection tools, and analysis of primary data.

Universe of the Study: The environment of Khyber Pakhtunkhwa Province is suitable for tobacco cultivation. Therefore, 73% tobacco cultivate is practiced in Khyber Pakhtunkhwa province in Pakistan. In Khyber Pakhtunkhwa Province, Malakand division is suitable for tobacco cultivation because of its suitable environment and presence of enough wood and irrigation.

Sample Section Technique: Malakand district (A subdivision of a province) is purposively selected for this study. A multi-stage sampling technique used for selection of sample size. In this sampling technique, a small unit is selected from a large one. Therefore, in the first stage of selection technique Dargai tehsil (sub-division of a district) selected by previous from the Malakand division. After selection of tehsil, fifteen villages of tobacco growers were randomly selected from tehsil Dargai. Finally, 135 tobacco growers were selected from these fifteen villages through same mentioned technique.

Primary data Collection Tool: A well designed and pre-tested questionnaire was prepared to collect primary information from 135 tobacco growers. An interview schedule arranged for tobacco growers in convenient and suitable places like *masjid* (mosque), *hujra* (community center), farmer field or farmer home. Moreover, secondary data interpreted collect for incorporated from recommended published and unpublished resources.

Analysis of Primary data: After collection of primary data, this information was put into computer

programme Excel and SPSS. Meanwhile, a descriptive statistic such as frequency, percentage, mean and standard deviation apply on primary data. On the basis of weighted ranked score identify the response of tobacco growers.

RESULTS

Data regarding age of tobacco growers are presented in Table 1. It is clear from the results of Table 1 that maximum (47%) tobacco growers were young up to 35 years. Followed by (43%) were middle age up to (35 to 50 years). While old age (more than 50 years) were observed (10%) in the study area. A research study of Qamar *et al.* (2006) reported that only (5%) of farmers were below 20 years of age, 50% of tobacco growers were between 20 and 40 years of age. While remaining (45%) were present in 40 years. Naqvi *et al.* (2013) research study expressed that 52.4 and 35.5% tobacco growers were age limit 20-30 and 31-40 years.

Table 2 reported education status of tobacco growers in the study area. The results of Table 2 indicated that only (27.40%) tobacco growers were illiterate. While remaining overwhelming majority (72.60%) tobacco growers were literate. Furthermore, out of these (72.60%) tobacco growers, 26.66, 24.44, 14.81, 4.44 and 2.22% were middle school certificate holder, primary school certificate holder, metric school certificate, college certificate and bachelor degree respectively. A research study of Qamar *et al.* (2006) indicates that (20%) tobacco growers were illiterate and (80%) were literate. Among literate, primary level was 23%, middle was 17%, high level was 13%, inter-level was 09%, bachelor level was 08% and 10% were master degree holders. Naqvi *et al.* (2013) research reports indicated that 37.6 and 42.1% tobacco growers were bachelor and master degree holder in Pakistan.

Table 3 presented size of cultivated land of tobacco growers. It is cleared from Table 3 that maximum (65.18%) tobacco growers were small tobacco growers up to 2.5 acres. Followed by 19.25 and 12.59% were considered average (2.5 to 3.5 acres) and medium (3.6 to 4.5 acres). While remaining (2.96%) tobacco growers were reported large growers up to (above 4.5 acres). Due to a cultivated area, these (2.97%) growers considered large size of landholders. A research study of Hazel *et al.* (2007) revealed that a

few tobacco growers reported that less than 2 hectares are considered as small growers in Pakistan.

Table 4 showed a distribution of tobacco growers by tobacco cultivating experience. The results of Table 4 indicated that maximum (97.80%) tobacco growers were cultivating tobacco from 20 to 30 years. Followed by (13.70%) tobacco growers reported cultivating experience up to 30 years and only 1.5% growers and 10 to 20 years. These 1.5% only growers disclosed that they were cultivating tobacco up to 50 years. Kotile and Martin (1998) research study revealed that farmers were availing excellent results in agriculture productivity if farmers experience more than 11-20 years.

Role of Private Companies in Tabaco Cultivation:

Table 5 indicated a list of facilities provided by private tobacco companies to tobacco growers. It is recorded that maximum 85.20, 75.60, and 68.10% tobacco growers got information about nursery preparation, fertilizers application, and pesticides application respectively from private tobacco companies. While remaining 48.10, 14.80, 14.80, 27.40 and 27.40% tobacco growers informed about sticks application, Seeds quality and application quantity, farm yard manure, and wood for heating and transportation facilities to local market and private tobacco companies respectively. Additionally, almost all tobacco growers reported that they did not get basket and bags and heating pipes facilities and services from private tobacco companies. Table 6 expressed response of tobacco growers about facilities provided by private tobacco companies. Results of Table 6 enclosed that maximum 54.10 and 45.20% tobacco growers reported good and excellent response about seeds facilities. Similarly, 52.60 and 47.40% tobacco growers responded poor and excellent about nursery development facility. Additionally, a few (3 and 6.70%) tobacco growers showed farm yard manure facility were poor and fair in the study area. Moreover, 27.40% and 46.70% tobacco growers informed that fertilizers application facility provided by private companies were fair and satisfy in the study area. Table 7 indicated the average response of tobacco growers regarding facilities provided by private tobacco companies. Out of total responses i.e poor, fair, satisfy, good and excellent, means difference 4.44 and standard deviation 0.513 indicated that seed facility provided by private companies is good to

excellent. Whereas, nursery establishment, pesticide application, and fertilizer application enclosed fair to satisfy due to mean difference 2.42, 2.09 and 2.01 and standard deviation 1.50, 2.02 and 2.01 respectively. Moreover, other facilities of private tobacco companies i.e. stick, farm yard manure, wood for heating, transportation, baskets and bags and heating pipes response poor to fair.

Agricultural Extension Services: Table 8 indicated a source of information provided by Private tobacco companies to growers. It is clear that maximum (98.50%) tobacco growers reported that they got information through pamphlets and posters. Followed by 47.60% tobacco growers got information through Books. Most probably these books will be written in simple national language Urdu. Additionally, each of 27.40% tobacco growers achieved information by newspaper and journals. Certainly, these newspaper and journal will be written in a local language or sample easy language. Table 9 showed the response of tobacco growers regarding sources of information provides by private tobacco companies. Table 9 results enclosed that majority (51.90%) and (46.70%) tobacco growers reported that mobile tool is a good resource of

information. Certainly, the mobile tool will connect with the internet. Followed by 45.20% tobacco growers recorded that each pamphlet and posters were excellent sources of information dissemination. In addition, 45.20% tobacco growers reported that books were a good source of information. Probably, this book was written in local or sample language. Ariyo *et al.* (2013) research showed that communication tools i.e. radio, television, telephone, the internet and newspaper/bulletin depends on farmer's resources. Therefore, maximum (60.19%) farmers reported radio as a main source for agricultural information. Moreover, majority (90.7%) tobacco growers reported that mass media establish a strong effective role in the dissemination of agricultural technologies among farmer community. Table 10 expressed rank of responses of tobacco growers. It is indicated from results of Table 10 that average mean 3.87, 3.37 and 1.88 of tobacco growers enclose their response about pamphlets, posters and books were poor to fair. Whereas, a remaining average mean of tobacco growers showed that response toward newspaper, journals, mobile tool and radio were poor or somehow move from poor to fair.

Table 1. Distribution of Tobacco growers by age in year (n = 135)

Age (years)	Frequency	Percentage
Young (up to 35)	63	47
Middle (> 35 to 50)	59	43
Old (> 50)	13	10

Source: Field Survey 2016

Table 2. Distribution of tobacco growers by level of education (n = 135)

Level of Education	Frequency	Percentage
Illiterate	37	27.40
Primary	33	24.44
Middle	36	26.66
Metric	20	14.81
Intermediate	6	4.44
Bachelor	3	2.22

Source: Field Survey 2016

Table 3. Distribution of tobacco growers by level of land size (acre) used for tobacco (n = 135)

Size of Land (acres)	Frequency	Percentage
Small (Up to 2.5)	88	65.18
Average (2.5 to 3.5)	26	19.25
Medium (3.6 to 4.5)	17	12.59
Large (Above 4.5)	4	2.96

Source: Field Survey 2016

Tobacco Cultivation Experience (years)	Frequency	Percentage
> 10 to 20	18	13
>20 to 30	115	97.8
>40 to 50	2	1.5

Source: Field Survey 2016

Facilities	Yes	No
Seeds	20 (14.80)	115 (85.20)
Nursery	115 (85.20)	20 (14.80)
Farm yard manure	20 (14.80)	115 (85.20)
Baskets and bags	--	135 (100)
Pesticide	92 (68.10)	43 (31.90)
Fertilizer	102 (75.60)	33 (24.40)
Sticks	65 (48.10)	70 (51.90)
Heating pipes	--	135 (100)
Woods (for heating)	37 (27.40)	98 (72.60)
Transportation	37 (27.40)	98 (72.60)

Source: Field Survey, 2016 Note: Number in brackets represents percentage.

Response about Facilities	Poor	Fair	Satisfy	Good	Excellent
Seeds	--	--	1 (0.7)	73 (54.1)	61 (45.2)
Nursery	71 (52.6)	--	--	64 (47.4)	--
Farm yard manure	4 (3.0)	9 (6.7)	7 (5.2)	--	--
Baskets and bags	--	--	---	--	--
Pesticide	35 (25.9)	7 (5.2)	5 (3.7)	7 (5.2)	38 (28.1)
Fertilizer	--	37 (27.4)	63 (46.7)	2 (1.5)	--
Sticks	1 (0.7)	1 (0.7)	60 (44.4)	3 (2.2)	--
Heating pipes	--	--	--	--	--
Woods (for heating)	37 (27.4)	--	--	--	--
Transportation	37 (27.4)	--	--	--	--

Source: Field Survey 2016 Note: Number in brackets represents percentages

Facilities	Weighted Score	Mean	S. D	Ranked Order
Seeds	600	4.44	.513	1 st
Nursery	327	2.42	1.504	2 nd
Pesticide	282	2.09	2.082	3 rd
Fertilizer	271	2.01	1.231	4 th
Sticks	195	1.44	1.524	5 th
Farm yard manure	43	.32	.816	6 th
Woods (for heating)	37	.27	.448	7 th
Transportation	37	.55	.895	7 th
Baskets and bags	0	0.00	0.000	8 th
Heating pipes	0	0.00	0.000	8 th

Source: Field Survey 2016

Table 8 Distribution of tobacco growers by getting information through various sources provided by private tobacco companies (n = 135)

Source of Information	Yes		No	
	F	%	F	%
Print Sources				
Books	64	47.4	71	52.6
Pamphlets	133	98.5	2	1.5
Posters	133	98.5	2	1.5
News papers	37	27.4	98	72.6
Magazines	--	--	135	100
Journals	37	27.4	98	72.6
Electronic Sources				
T.V	--	--	135	100
Radio	37	27.4	98	72.6
Mobile	135	100	--	--
Telephone	--	--	135	100
Internet	--	--	135	100
Helpline	--	--	135	100

Source: Field Survey 2016

Table 9 Distribution of response of tobacco growers about source of information of private tobacco companies (n=135)

Sources of information	Poor		Fair		Satisfy		Good		Excellent	
	F	%	F	%	F	%	F	%	F	%
Print Sources										
Books	--	--	--	--	2	1.5	62	45.9	--	--
Pamphlets	--	--	--	--	70	51.9	2	1.5	61	45.2
Posters	--	--	69	51.1	--	--	3	2.2	61	45.2
News papers	37	27.4	--	--	--	--	--	--	--	--
Journals	37	27.4	--	--	--	--	--	--	--	--
Electronic Sources										
Radio	37	27.4	--	--	--	--	--	--	--	--
Mobile	--	--	1	0.7	1	0.7	63	46.7	70	51.9

Source: Field Survey 2016

Table 10 Tobacco growers Ranked about source of information provided by private tobacco companies (n=135)

Source of Information	Weighted Score	Mean	SD	Ranked Order
Print Sources				
Pamphlets	523	3.87	1.096	1 st
Posters	455	3.37	1.534	2 nd
Books	254	1.88	1.993	3 rd
News papers	37	.55	.895	4 th
Journals	37	.27	.448	4 th
Electronic Source				
Mobile	607	4.50	.558	1 st
Radio	37	.27	.448	2 nd

Source: Field Survey 2016

DISCUSSION

The present research is conducted in year 2016 to study the role of private tobacco companies in promotion of tobacco crop. So, this research revealed that mostly 70.37, 72.59 and 65.18% tobacco growers were young and middle age up to (35-50 years), educated up to Bachelor, and small size up to 2.5 acres respectively. A research study of Qamer *et al.* (2006) revealed that 80% tobacco growers were educated. Similarly, Naqvi *et al.* (2013) reported in a research study that mostly tobacco growers were age limit up to 20-40 years. Most probably, these small size land growers eliminate a small area for cash crop from major crops. Additionally, (85.18%) grower reports that they were well experienced and cultivated tobacco crop from 20-30 years. Meanwhile, the research of Kotile and Martin (1998) enclosed that tobacco growers were well-experience up to 11-20 years. The role of private tobacco companies is a need of present situation to promote cash crops generally and tobacco especially in Pakistan. It is enclosed in present research study 85.18, 75.55 and 48.14% reported that they achieved facilities from private tobacco companies regarding nursery establishment, fertilizers suggestion and provide a few fertilizers like Urea and DAP and stick respectively. Further, tobacco growers reported that above mentioned facilities provided by private tobacco companies were poor and fair. Similarly, 68.14% tobacco growers got pesticide facilities from private tobacco growers and out of these (68.14%) tobacco growers, (28.14%) showed that their facilities regarding pesticides were excellent. While, 54.07 and 45.18% tobacco growers inform that seed facilities were excellent and good. Certainly, tobacco growers got these seed facilities from other organizations like seed dealers, Pakistan Tobacco Companies or research organization from own resources instead of private tobacco companies. Source or media performed a significant role in the dissemination of information among growers. Present research study reveals that each of 98.51% tobacco growers informs by pamphlets and posters. While almost all tobacco growers enclose mobile as a source of information. Beside these source of information, radio is reported by (27.40%) tobacco growers for information dissemination. In addition, each (45.18%) tobacco growers reported that pamphlets and posters were excellent sources of information and (45.92%) tobacco growers, out of total (47.40%) indicates that

books were a good source for information. Similarly, in electronic media, the mobile tool is reveal by (51.85%) tobacco growers as an excellent source of information. Additionally, Ariyo *et al.* (2013) reported in a research that communication tools i.e. radio, television, telephone, and newspaper/bulletin were main source of information promotion from sender to receiver.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that maximum growers were educated, young and well-experienced growers cultivate tobacco crop. Certainly, they were energetic and commercial tobacco growers. Most probably, a small size of land growers would eliminate a piece of land from total to cultivate tobacco area. Moreover, private tobacco companies perform a significant role in the enhancement of tobacco crop and provide various facilities i.e. seeds, nursery establishment, fertilizers, Farmyard manure, baskets and bags, pesticides, sticks, heating pipes, woods and transportation to tobacco growers. In these facilities nursery establishment, pesticides and sticks reported by most growers. Certainly, these facilities should the requirement for lot tobacco growers. In addition, statistical results revealed that seeds facility were directed from good to excellent and other facilities like nursery establishment, pesticides, and fertilizers were reported fair to satisfy. Media is very important for dissemination of information to tobacco growers. Therefore, almost all tobacco growers got concern information by pamphlets, posters, and books. Surely, these printed media would present in the easy and simple language. Similarly, in electronic media all tobacco growers applied mobile tool for information. Most probably, educated growers would knowledge about the operation of this latest communication tool. It is recommended on the basis of conclusions that private tobacco companies provide and concern organizations provide information to less experience, illiterate and old growers by special techniques like model farm services, field demonstration, farmer field school and field visit. Moreover, old growers should transfer land to young and educated growers. Similarly, besides other facilities, private tobacco companies, and concern organizations would provide facilities about farm yard manure, seeds, baskets and bags, sticks, heating pipes, woods and transportation through a suitable and expectable source of

information. In addition, private tobacco growers and concern organizations should communicate educated tobacco growers by printed media (newspapers, magazines, and journals) in easy and understandable language. In the electronic media, T.V and internet tools should strengthen and operate programs related tobacco crop. Further, telephone and helpline services would provide to tobacco growers for their issues directly with specialists.

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