Tobacco Farming and Its Social Impacts on Farmers in the Rural Mardan, Pakistan

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Abstract
Despite the growing concern regarding the hazardous effects of tobacco by the international community, tobacco farming still prevails worldwide. This study was planned to explore how the rural farmers perceive the significance of tobacco farming in terms of its social impacts on the farming community in district Mardan, Khyber Pakhtunkhwa province of Pakistan. Tobacco farming was taken as an independent variable and its social impacts on the farmers were selected as the outcome variable. The social impact variable was operationalized with sub-variables as income, social status, expanding kin relationships, labor opportunity, and linkages with people of different social background. Data were collected from 144 tobacco growers through structured questionnaire and analyzed through correlation and regression models. The study concluded that tobacco farming brings about positive impacts on the social status of the farming community by increasing their income, elevates their social status, expands kin relationships, and provides labor opportunity to the farmers.

Key Words
Community, Farmers, Impact, Social, Tobacco

Introduction
Over the years, public perceptions regarding the harmful impacts of tobacco farming and tobacco uses have become an issue of serious concern. Despite the growing concern over the hazardous effects of tobacco by the international organizations such as the World Bank, World Health Organization (WHO), global demands for tobacco is still on the increase with estimation to reach high in 2015 (Van Liemt, 2002). Due to the rising global demand for tobacco leaf, tobacco farming is considered as a money-spinning activity as a result of which farming communities are encouraged to grow more tobacco plants across the globe.

Farmers are enthusiastically switching over to tobacco farming, and this trend is expected to boost up by replacing other commercial crops with tobacco because of its assured market viability, better credit opportunity for purchasing farm inputs, practical assistance, and other favorable conditions. Farmers particularly adopt tobacco farming because of its social significance which can guarantee the increase in their family annual income. They also perceive to become a part of the broader social network and to get some social recognition through active community engagement and participation surrounding the whole tobacco production process. Additionally, it has been continuously observed that farmers who have opted tobacco production comparatively having better living standard than those who cultivate other crops (Chacha, 2000).

Tobacco cultivation was now and then the main source of income for the households in Pakistan. An average profit of the household which is taken from tobacco is around 21% to 31% revenues along with with the employment opportunities (Huong et al., 2009). Tobacco farming is a labor-intensive activity; therefore it provides a decent employment opportunity for labor (Mukherjee & Benson, 2003). The tobacco industry, in search of more profits, and has been inspiring the farmers to engage themselves with planting more tobacco and claiming that it will bring incomparable affluence to farmer’s community (Campaign for Tobacco, 2001).

Tobacco plays a significant function in improving the livelihoods and social status of rural households in conditions of employment, provision of income, government revenue and supplementing the household expenses (FAO, 2003). There are numerous causes behind intensive tobacco farming, including cash earning, high profit, a guarantee of inputs, elevating the social status and active participation in the community (UBINIG, 2008). Swanson uses semi-structured
interviews to examine the state of farm diversification among tobacco growers; his interviewees repeatedly stated there was “no substitute for tobacco”. He accomplished that resistance to alternative crops was based on unrealistic expectations of return and inevitability created by the tobacco industry (Swanson, 2001; Heald, 1999).

Numbers of research studies have outlined the cost and benefits of tobacco farming (Hu & Lee, 2015; Austin, Beach, & Altman, 2008; Kibwage, Odondo, & Momanyi, 2009; WHO, 2007; Lecours et al., 2012). However, more efforts are needed to document how the lucrative value of tobacco influences the social standing of the farmers, especially among lower-income rural settlements. According to the interviews conducted, tobacco industry’s social contributions at the community level, mainly include support to schools, senior citizen care centers, and religious groups providing social welfare, firefighters and reforestation programs (Arcury & Quandt, 2006). Besides, tobacco also brings certain negative consequences to the farming community as it increases farmers’ dependency on the cash crops which results; food shortages, health hazards and environmental degradation (UBINIG, 2008). Mostly tobacco is grown in low and middle-income countries, contributing to undernourishment since arable land is used to produce a non-food item (Heald, 1999; Koester et al., 2004).

Due to its suitable climate and hardworking labor, Pakistan was the 10th largest tobacco-growing country in the world in 2011 by producing more than 100,000 tones (Burki et al., 2013). Tobacco is grown throughout the country, with more than three-quarters of the country’s tobacco growing in the Khyber Pakhtunkhwa and its production is concentrated in district Mardan and Sawabi with per acre plantation as 16369 and 39561 respectively (Government of Pakistan Statistics, 2008 & 2009). Looking to this rising trend in tobacco farming, this paper was planned to directly access tobacco farming community in the farms and to know why the farming community is so highly motivated to grow more tobacco plants despite its visible and known hazardous consequences.

Materials and Method

Because of its feasibility and utmost representativeness of tobacco farming, Pirsaddi area of district Mardan of Khyber Pakhtunkhwa was selected as a study area. Data collection was performed through a structured questionnaire based on a Likert scale with five notation, (1 for strongly disagree to 5 for strongly agree) during the period of June to August 2015. Sample selection criteria set by the researcher on the basis of cultivation of tobacco growing. Farmers cultivating 4 acres or more have been selected as subjects for this study. According to the survey, 144 farmers were found eligible to be included in the study sample. The questionnaire was translated into the local language (Pashto) in order to ensure authenticity in the data collection process as most of our respondents were not conversant with the English language. The collected data were fed into the Special Package for Social Sciences (SPSS) sheet to obtain results. Basic information of the study participants was tabulated in percentage and frequency distribution. The collected data on the study variables were analyzed through mean and standard deviation, correlation and simple linear regression.

Results and Discussion

Table-01 shows the frequency and percentage distribution of the respondents. Data reveals that the majority (N=52, 36.1%) of the respondents were from the age group of 36-40 followed by (N=32, 22.2%) in the age group of 46-50. The majority (N=80, 55.6%) respondents were illiterate while (N=28, 19.4%) respondents have the primary level of education. The respondents having six-member family size were found to be in the majority among the selected group which was (N=60, 41.7%) followed by having five family size, (N=28, 19.4%). Of the total, (N=84, 58.3%) farmers reported that their major source of income is associated with tobacco growing. Farmers having Rs. 60, 0000 income from tobacco compounded with (N=52, 36.1%) in the respondents.

Table 1. Socio-economic Characteristics of the Respondents (N=144)

| Age group | Frequency | Percentages | Cumulative Percentages |
|-----------|-----------|-------------|------------------------|
| 31-35     | 20        | 13.90       | 13.90                  |
| 36-40     | 52        | 36.10       | 50.00                  |
| 41-45     | 28        | 19.40       | 69.40                  |
| 46-50     | 32        | 22.20       | 91.60                  |
| 51-55     | 12        | 8.30        | 100                    |

| Educational status | Frequency | Percentages | Cumulative Percentages |
|-------------------|-----------|-------------|------------------------|
| Illiterate        | 80        | 55.60       | 55.60                  |
| Primary           | 28        | 19.40       | 75.00                  |
| Middle            | 12        | 8.30        | 83.30                  |
| High              | 20        | 13.90       | 97.20                  |
The data illustrate the cumulative mean and standard deviation values of all the selected variables. In order to estimate tobacco farming and its social impacts on farmers, a framework consisted of dependent (Tobacco Farming) and independent variables (impact on family income, social status, expansion of kinship ties, provision of labor and interaction with various social classes) were set to determine its values. Cumulative values (Mean=4.42, SD=1.21) for tobacco farming were obtained as higher than other variables which depict a farmer’s level of attachment with tobacco farming. Furthermore, it was reported by all farmers and somewhat strongly agree that the tobacco crop increases the income level (Mean=4.08, SD=1.09) more than the other crops. The data further suggest that tobacco farming is a potential source of elevating the social status (Mean=3.61, SD=1.38) of the farmers in the community and also increases and expand their social circle in a kin relationship (Mean=3.67, SD=1.45). Additionally, farmers expressed their agreement with the statement that the local tobacco industry provides an ample economic opportunity by engaging more labour (Mean=3.58, SD=1.79). Tobacco farming was also reported as a mean of interaction with people having different social classes and background (Mean=3.56, SD=1.40) in the sense of buying and selling, market encircle the farmers to engage with different peoples. It is inferred from the data that tobacco growing farmers live a prosperous life because of their income, social status in society and have a wide range of interaction with different class people.

### Table 2. Cumulative Mean and Standard Deviation Values of Selected Variables

| Attributes  | Tobacco Farming | Income | Social Status | Kinship | Labour | Net-working |
|-------------|-----------------|--------|---------------|---------|--------|-------------|
| Mean        | 4.42            | 4.08   | 3.61          | 3.67    | 3.58   | 3.56        |
| S. Dev      | 1.21            | 1.09   | 1.38          | 1.45    | 1.79   | 1.40        |

Table-03 presents correlations between outcome and predictor variables and depicts the strength of correlation among variables. It is revealed that family income ($r = 0.739$, $p = 0.003$), social status ($r = 0.790$, $p = 0.001$) has strong positive and significant correlation with tobacco farming. The data further indicate that social networking ($r = 0.323$, $p = 0.000$) was also found in significant correlation with tobacco farming. Likewise, expanding kinship ($r = 0.563$, $p = 0.053$) have non-significant, and labor opportunity ($r = 0.925$, $p = 0.000$) was found in strong significant correlation which suggests that tobacco farming is a strong predictor for social and economic uplift of the farmers.

### Table 3. Correlation Analysis of Tobacco Farming and Social Aspects of Farmers Lives

| Independent Variable | Pearson's R | Asymp. Std. Error | Approx. T | Sig. value |
|----------------------|-------------|-------------------|-----------|------------|
| 1. Increase family income | 0.739       | 0.195             | 3.182     | 0.003      |
| 2. Elevating social status | 0.790       | 0.165             | 2.774     | 0.001      |
| 3. Expanding kinship | 0.563       | 0.192             | 1.369     | 0.053      |
| 4. Labour opportunity | 0.925       | 0.161             | 2.001     | 0.000      |
Table 04 shows the relationship between tobacco farming and each predictor variable. The data reveal that the majority of the predictor variables such as income level, ($\beta=0.404$, $P=0.004$), social status, ($\beta=0.230$, $P=0.000$), labour opportunity for farmer, ($\beta=0.151$, $P=0.003$), and social networking ($\beta=0.215$, $P=0.001$) were found positively and significantly related while expanding kinship ($\beta=0.059$, $P=0.006$) was found in negative relationship with tobacco farming. It is deduced from the data that family income, elevation in the social status, provision of the labor and social networking among farmers is increasing with tobacco farming.

### Table 4. Regression Analysis of the Selected Social Aspects and Tobacco Farming

| S.No | Variables of the Study            | $B$  | $SE$  | $B$  | $T$  | Sig. |
|------|----------------------------------|------|-------|------|------|------|
| 1    | Increases family income          | 0.404| 0.178 | 0.426| 2.668| 0.004|
| 2    | Elevating social status          | 0.230| 0.127 | 0.263| 1.813| 0.000|
| 3    | Expanding kinship                | -0.059| 0.144 | -0.070| -0.406| 0.006|
| 4    | Labour opportunity               | 0.151| 0.108 | 0.223| 1.405| 0.003|
| 5    | Social Networking                | 0.215| 0.122 | 0.249| 1.759| 0.001|

### Discussion

Tobacco farming and its social impacts on the farmers were assessed and quantitatively analyzed in this study. According to the demographic information, majority of the respondents were from the age group of 36-40 with only 44% literacy rate. The age group of the selected farmers was as much enough as to make some apposite remarks and arrive at a firm judgment about the social impacts of tobacco farming on their lives. Of the total respondents, 58% of farmers have found to be purely dependent on tobacco farming with PKR 600000 income from its harvesting. It shows that farmers who were comparatively more associated with tobacco farming were being included for validity in the study.

Data in the table-2 indicate the views of the farmers regarding tobacco farming. The total calculated mean and standard deviation values suggest that tobacco farming brings about positive social impacts on the lives of the farmers. These notions were also found in congruence with the previous study findings that tobacco has positive effects on farmers including family income and budget increasing (FAO, 2003; World Bank, 2003). Farmers have also shown their higher degree of agreement (Table-02) that tobacco farming potentially determines the social status, expansions of kinship ties and their general interaction within their locality. It is inferred that tobacco farming involves more financial investment on the part of the growers which bring them in a positive interaction with different people such as tobacco company officials, agriculture board members, manager and supervisor, relation with market seller and buyer. Findings of this study are in congruence with the results calculated by (Huong et al., 2009) that tobacco farming engages farmers more actively during the season and provide them more opportunities for exposure and public relations in the community. Based on these perceived benefits, tobacco farming has become a public norm among the rural farming communities of district Mardan in Pakistan.

Tobacco farming was reported as a lucrative and profitable business by the respondents. Besides, its direct financial effect and economic benefits to the farmers, it also inducts more locals into the labor market for the whole season from the sowing season till marketing. As tobacco farming and its associated activities such as sowing, harvesting, baking, and packing involve some technical skills on the parts of the labors which dispense a prestigious position to the labor in the season. In a similar study, Murkherjee and Benson (2003) have pointed out that tobacco is a direct and indirect source for labor accommodation. Most labors in the tobacco industry are negotiating and fixing their wages with full autonomy and choices and in that situation, tobacco becomes a mean for labor capitalism. The social and economic importance of tobacco is often measured by its intensive labor, wider community engagement, social networking, and family income. It has also been observed on the farm that farmers have some special emotional attachment with tobacco plants. According to a report by WHO (2007), farmers have reported that tobacco has comparatively higher production ratio than the other marketable crops such as passion fruit, watermelon, and vegetables like soybeans and peppers in a single production rotation.

Results obtained through linear regression test determine the nature of association and relationships between predictor and outcome variables. Data in (table -04) shows almost positive relations among variables. It is concluded that as the level of tobacco farming increases, it elevates the social status and expands the circle of social interaction of the farmers within the community. Similarly, in a rural farming community, a farmer with comparatively higher status was found to be more engaged in tobacco farming because of his sociability and commitment in social relationships. Likewise, tobacco farming and relationships with different social classes and background have also reciprocal relations as a farmer having a wide circle of relationship with lots of public exposure will likely to be
more engaged in tobacco farming. These social outcomes are evident in the reason because rural farmers have no better livelihood options than growing and cultivating more tobacco plants.

Looking at the results of this study and the study conducted by (Khan, Sohail & Maan, 2016), the uses of tobacco products have been discouraged and restricted in the public places in Pakistan but no changes have been witnessed in the public response towards tobacco uses and farming. This is because of the poor implementation of tobacco control laws both at the public places as well as in the farm. Intensive engagement in tobacco farming is still unregulated and the farmers have not been restricted to cultivate tobacco within the certain legal framework. Moreover, political will on the part of government have largely contributed to the establishment of the subculture of tobacco growing among the rural communities. Lack of proper guidance and awareness on the part of rural farmers regarding the hazardous impacts of tobacco farming and uses on health and environment is one of the critical factors behind intensive tobacco farming. It is pertinent to direct the agricultural department to provide technical assistance and guidance to the farmers regarding crop rotation, crop management and trained them on how to effectively use their farms.

Conclusions
It is concluded from this study that due to its social impacts, tobacco growing is like a pearl hunt for the rural farming community in the study area. From the perspective of rural farmers, tobacco farming is celebrated during the year for its positive economic utility and social impacts. In the economic sphere, it provides comparatively a higher income opportunity to the farmers and has also proved as guaranteed employment to the working folk in the area. Besides, tobacco farming was reported by the farmers as a potential source for elevating their social status and also determines their social standing in the locality. Moreover, it also provides tenants the opportunity to come across people of different social classes. Such diversified relations further boost up their confidence for more profitable business activities. It is inferred that tobacco farming is a profitable business in terms of its social as well as economic significance. Therefore, it is recommended to the policymakers to make plans to engage farmers in growing other profitable and edible crops to ensure sustainable livelihood agriculture in the region.
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