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Causes and consequences of social conflicts among rural families in Punjab, Pakistan

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This study was conducted in three tehsils, Gujranwala, Nowshera Virkan and Wazirabad of district Gujranwala. The major objective of the study was to explore the causes and consequences of the different conflicts faced by the rural people. A total 384 respondents were chosen at random. Data were collected through face-to-face interview technique on a structured, validated and reliable interview schedule from randomly selected 384 respondents. Collected data were analyzed with the help of Statistical Package for Social Sciences (SPSS). Findings indicated that, conflicts between two groups; conflicts over access to power, feeling of self-superiority, dispute over access to agricultural resources, mutual farming, disturbance in family relationship and theft of farm produce were the major causes of the conflicts as perceived by respondents. The conflicts had adverse impacts on the availability of labor, inputs, and farm assets and more importantly on adoption of innovations among farmers in particular. In result, decrease in farm production and income of farmers was more likely. Multiple linear regression analysis confirmed that, age, education, income level, land size and farming experience of respondents had statistically significant relationship ($P<0.05$) with the effects of conflicts. This implies that by strengthening the socio-economic profile of the rural people the severity of the conflicts can be minimized. This study urges the development and execution of conflict resolution strategies in the study area through the synergistic institutional coordination. It was recommended that extension staff can minimize the threat of conflicts by educating the farming community and they should conduct the seminar and training sessions for the local stakeholders who are the active part of conflicts resolution.
Keywords: Conflicts, resolution, regression, causes, consequences, effects.

INTRODUCTION

Conflict occurs when there are discordant goals, cognitions or certain emotions between the individuals or the groups that lead to incompatible interaction (Paul and Anantharaman, 2003). A conflict covers all the level in different situations and societies. Across the societies, all people often experience conflict in their routine lives.

In rural settings, conflicts occur more often. These conflicts mainly occur and concerning with the access to resources and powers. Usually, water and land related conflicts are found occurring more often especially in rural settings. Land and water, both are natural resource and equally important for the farming. According to Deogratis (2013), land is a fixed socio-economic asset; it helps in production of major and minor crops. Whereas, the land conflicts are regarded as the misuse, restriction and rivalry on property rights (Wehrmann, 2008). Land is much needed for the industrial purpose and expansion of society. Although, rapid urbanization invokes the conflicts. Water is key resource for farming and simultaneously equally important for industry. The shortage of water can adversely impact the individual and every aspect of life, food and water security (Tian *et al.,* 2020). Access to mismanagement of water resource has become a mounting challenge likely to exaggerate water conflicts in societies (Viesi *et al.,* 2020). Water conflicts emerge between the groups with the competing claims about the water use and its allocation (Kameri-Mbote *et al.,* 2007). Conflicts on natural resources such as water and land diminish the situation further by hampering the developmental efforts. Ian (2006) and St-Pierre (2006) reported that conflicts on natural resources, food insecurity and poverty were inter-linked. The internal conflicts end up with bringing a decline to farm productivity and adversely impact the income of farmers. Certainly, awareness and understanding about the causes and consequences of the conflicts helps farmers to create sustainable opportunities (Bijani *et al.,* 2015).

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Around the world water scarcity has become a challenging issue. Pakistan is one of the developing countries which are at brisk of water scarcity and to some extent land diminishing as well. The country is known as agrarian because of its hefty reliance on agriculture sector for the national economy and provision of employment and livelihood support to the people. Agriculture added 18.5% to the national Gross Domestic Product (GDP) and provided employment to 38.5% of the total population of the country (Government of Pakistan, 2019). Total population of the country, almost half is directly or indirectly dependent upon the agriculture sector for many reasons like food security and employment opportunities. However, in order to meet the food needs of the ever-growing population of Pakistan, natural resources like land and water are under huge pressure. For instance, around 70% of agricultural land was converted to urbanization in Hyderabad district of Sindh (Peerzado *et al.*, 2019). Waseem *et al.* (2019) found that a total of 114, 630 hectares of agricultural land in Lahore was urbanized, causing significant decrease in crop production during 1986-2008. The construction of reservoir on economically and ecological convenient area resulted in to decrease in crop production and posed adverse impacts on livelihoods of the people (Husnain *et al.*, 2010; Nauman, 2003). Physical and socio-economic factors were the prominent driver of agricultural land transformation to urbanization (Farah *et al.*, 2019). Pertinent to this transformation and decrease in agricultural land conflicts started to emerge in the society as endorsed by Kugelman (2013) where he concluded that the transformation of agriculture land to colonies produced adverse social consequences.

Apart from the land and water conflicts in Pakistan, various other conflicts are reported with inverse outcomes. A dispute over water theft and feud over land grabbing and acquisition costed farmers their lives. Unfortunately, these conflicts and their critical consequences are not empirically explored in the country so far. This is much needed to explore and study those conflicts which could create an alarming conditions in the future Mustafa (2013) stressed the emergent need of exploration of socio-economic conflicts and geopolitical and religious causes of the conflicts.

This study aimed at exploring the conflicts, their causes and the consequences. This study deems much important as the existing literature only found emphasized on land and water related conflicts in country. It is augmented that, in wake of land and water conflicts, the general conflicts emerge and their impact could be more devastating as compared to land and water conflicts. In this regard, this study is important in many ways. First, this will bridge the research gap, that none of the study in Pakistan found focusing on conflicts as a whole. Secondly, the findings will create a new direction of research especially when conflicts are studied.

Theories of the conflicts explain the different factors which are responsible for causes of conflicts and it's elaborating the problems that may create in conflict situation. Conflict has no proper and specific definition but it can be elaborate on the basis of the interest, social background, believes, values, uncertainties and feeling, benefits and requirements, arrogances, achievement, association and linkage (Hwedie and Rankopo, 2012). Conflicts are the main part of human connections or association and rarely completely resolved or abolished but they can be managed by using negotiation, mediation, conciliation or arbitration modalities or approaches to resolve the conflicts (Dagne, 2013). The realistic theory of conflict describes the behavior of human nature in results of conflicts among individual which is heredity phenomenon of human. According to the theory selfish, nature of individual leads to pursue his own benefits by ignoring the rights of other individuals and create competitive process among different actors who seek to have all available resources. Such attributes leads to the erratic behavior, prosperities and can impel conflict, violent obstruction and subsequently warmth up the international relationships. John Dollard in 1939 presented the biological theory; according to him conflict is innate in all communal interaction, and among all animals including the human being. It also urges that human are also animals, although advanced species of animals, and fight naturally for the access of things that is beneficially for their survivals. According to the human need theory, every individual in the society has its basic need which they seek to fulfill that may affect by the other community members, basic human needs comprising social, psychology, physical and spiritual needs.

The findings from existing literature provide the foundations for the conceptual frameworks of this study with the outcome variable being tested. The framework illustrates the association among the background variables (age, education, marital status, source of family income, family type, house type, size of land holding and farming experience), intervening variables and dependent variables. Education, family income, size of land holding, farming experience may influence the degree of conflicts and its effects on farm families and farm activities in rural areas than other factors.

***Need for the study*:** Lack of participation by the local residents for development project is leading to tension and conflicts (violence) in the region. Due to the provocative and manipulative behavior governmental and political leaders impose their decision forcefully. Therefore, different methods and techniques can be used to prevent conflicts by creating change in attitude, thoughts and relationships. The deeper analysis of the conflict situation may potentially subsidize in its actual avoidance. Such conflicts among the farming community affect the farm activity and farm production that ultimately cause the poverty in such area. So there is need to explore and address such issues positively by the active participation of different stakeholders.

***Hypotheses*:** Socio-economic attributes of the respondents have a significant association with the effects of conflicts on farm activities.

METERIALS AND METHODS

***Study area and sample selection*:** This study was conducted in District Gujranwala, one of the prominent districts of total 36 districts in Punjab. District Gujranwala, consists of total four tehsils (sub-districts). The secondary data were used in the selection of the study area. According to baseline survey, the project entitled "societal role in conflicts resolution among farm families" it was come to know social conflicts among farming community is more in district Gujranwala as compared to the other districts in Punjab. Therefore, multi stage sampling technique was used to selection of the respondents. On a first stage, three tehsils out of total four were selected at random. The selected tehsils were Gujranwala, Nowshera Virkan and Wazirabad. On second stage, four rural union councils were selected from each selected tehsil, thereby selecting total 12 Union councils from three tehsils. On third stage, two villages were selected random from each selected union council from three tehsils, thereby selecting total 24 villages from three tehsils. On fourth stage, 16 farmers were selected through random sampling technique from the selected 24 villages. Thus, total 384 farmers were selected to serve as a "respondent" for this study. The numbers of farmers have some major or minor conflicts at farm level in Punjab therefore random selection was done to explore the research questions. Random sampling ensures that results obtained from sample should approximate what would have been obtained if the entire population had been measured (Shadish *et al.,* 2002). Random selection was mostly used as the representative part of the study area.

***Data collection procedure*:** An Interview schedule was used as the data collections instrument for this study. The interview schedule was prepared well inline to the objectives of the study, Scholarly articles, books and various reports were critically reviewed to prepare the interview schedule contents. The interview schedule has quantitative questions and five-point Likert scale was used to record the responses of respondents. The likert scale used was, 1=very low, 2=low, 3=medium, 4=high, 5=very high. The interview schedule was further validated by the consultation with the subject experts, and pre-testing on 20 farmers. The reliability analysis of the likert scale question remained 0.86, indicating a satisfactory outcome to proceed with the data collection. Data were collected through face-to-face interview technique. The interview schedule comprised of mainly four sections (i) demographic profile of the respondents (ii) causes of conflicts (iii) effects of the conflicts and (iv) relationship between the demographic attributes and the perceived effects of the conflicts.

***Data analysis*:** Collected data were analyzed with the help of Statistical Package for Social Sciences (SPSS). The study was quantitative in nature, thus descriptive statistics such as frequency, percentage, mean and standard deviation were applied to the data. F-test was applied to compare the means in three tehsils. Moreover, regression analysis was applied to the data to explore the relationship between demographic profile of the farmers and the perceived effects. Socio-economic attributes such as age, education, size of land, experience, marital status, income and family system were independent variables and perceived effects of the conflicts was depended. It is assumed that socio-economic attributes and perceived effects have significant relationship. With the increase in socio-economic characteristics of the respondents, the magnitude of conflicts can reduce.

The regression model applied is appended below;

$$Y= \beta_0+ \beta_1X_1+ \beta_2X_2+ \beta_3X_3+ \beta_4X_4 + \beta_5X_5+ \beta_6X6+ \beta_7X7+ \beta_8X_8+e$$

Where; Y= dependent variable (perceived effects of the conflicts); X=independent variables (demographic attributes of the farmers); X_1= Age of the farmers (years); X_2= Educational level of farmers; X_3= Marital status; X_4= Size of family; X_5= Family system; X_6= Annual income; X_7= Land size; X_8= Farming experience

RESULTS

This section is further divided into four major sections (i) demographic profile of the respondents (ii) causes of the conflicts (iii) effects of the different conflicts and (iv) relationship between the demographic attributes of the respondents and holistic effects of the conflicts.

***Demographic attributes of the respondents*:** In this section, the detailed socio-economic profile of the respondents is explained. The major demographic included age of respondents, educational level, marital status, family size, family system, annual income, land size and farming experience of the respondents. It was obligatory to explore the demographic condition of farmers, because it could have an association with the causes and effects of the different conflicts. The detailed data is given in Table 1.

Table 1 revealed that less than half (41.9%) of the respondents were in the age category up to 35 years while more than one-third (39.3%) were belong to adults group range from 36-50 years while less than one-fifth (18.8) of the respondents were belonging to old age category and they were above 50 years of their age. More than one-tenth (11.7%) respondents were illiterate. About one- third (29.2%) respondents were matriculation while more than one-fifth (27.1%) of the respondents had middle level education according to the years of schooling. Less than one-fourth (22.7%) were graduate or post graduate level of education while only 9.4% were up to primary level education. Simple majority (68.5%) of the respondents were married while about

one-third (31.5%) of the respondents were unmarried. More than half (51.6%) respondents were 6-10 members in their house while about one-third (31.3%) of the respondents having 11-15 members in their family and lived together in a single house. More than one-tenth (15.1%) respondents were 1-5 members in their family and only 2.1% were above 15 members in their houses. more than half (56.3%) of the respondents were in joint family system where all the family members lived with their blood relatives and they have a single house hold head who ties all the family members with the family norms and cultural values while less than half (43.8%) of the respondents were living in nuclear family system. less than half (42.7%) of the respondents had 11-15 lacs annual income level that they earned from different sources in a year. More than one-fourth (27.6%) of the respondents had 6-10 lacs annual income that they earn throughout the year. About one-fifth (20.1%) had 15-20 lacs annual income level. Less than half (45.3%) of the respondents were belonging to middle farmers who have 12.5-25 acres of land holding on the basis of their classification.

Table 1. Demographic attributes of the sampled farmers

Socio-economic attributes		Frequency	Percentage
Age	Up to 35	161	41.9
	>35-50	151	39.3
	>50	72	18.8
Education	Illiterate	45	11.7
	Up to primary	36	9.4
	Middle	104	27.1
	Matric	112	29.2
	Graduation or post-graduation	87	22.7
Marital status	Married	263	68.5
	Unmarried	121	31.5
Size of family	1-5	58	15.1
	6-10	198	51.6
	11-15	120	31.3
	Above 15	8	2.1
Family system	Joint family system	216	56.3
	Separate family system	168	43.8
Annual income	1- 5 lacs	37	9.6
	6 – 10 lacs	106	27.6
	11-15 lacs	164	42.7
	15-20 lacs	77	20.1
Land size	Small farmer (< 12.5)	118	30.7
	Medium farmer (12.5-25)	174	45.3
	Large framer (> 25)	92	24.0
Farming experience	1-10	166	43.2
	11-20	169	44.0
	Above 20	49	12.8

About one-third (30.7%) of the respondents were small farmers who had less than twelve acres of land while more than one-fifth (24%) of the respondents were belong to progressive or large farming community and they had more than twenty five acres of land. Less than half (44.01%) of the respondents have 11-20 years of experience in farming according to the distribution of the farmers on the basis of their farming experience and 43.2% of the respondents have 1-10 years of farming experience according to range of experience. More than one-tenth (12.8%) had above 20 years of farming experience. It means that majority of the farmers have 11-20 years experiences to cultivate different crops.

***Causes of social conflicts at farm level*:** In this section of this study, various factors becoming the cause of the conflicts were explored on five point-likert scale. It was assumed that, number of factors would be creating conflicts of varied impact on the farmers. The causes could be differently perceived and vary from person to person. Omotara (2016) highlighted some prominent causes of the conflicts. He summarized that, improper land utilization, failure to respect farm boundaries, contesting the inheritance of land, abandonment of rules and sharing of resources were key causes of conflicts. Taking the direction, farmers were asked to report different causes of the conflicts. The data in this regard are given in Table 2.

Table 2 indicates that in tehsil Gujranwala, theft of farm produce (X=3.36), mutual farming (X=3.27), rivalry between the groups (x=3.27), harsh behavior (X=3.26), dispute regarding labor utilization (x=3.20), self-superiority on caste basis (x=3.16), honor killing (x=3.08) and sexual harassment of women (x=3.06) were the prominent causes of social conflicts. In tehsil Nowshera Virkan, theft of farm producer (x=3.45), disturbance in farm family's relationship (x=3.23), mutual farming (x=3.21), disputes over access to agri. resources (x=3.17), harsh behavior (x=3.09), contradictions between two rival politician groups (x=3.07) and conflicts over access to power (x=3.06) were the key factors contributing to social conflicts on farm level while in tehsil Wazirabad, honor killing (x=3.08) and harsh behavior (x=3.08) were the key contributing factors towards social conflicts.

The F-test indicates that, there was a statistically significant variance regarding contradictions between two rival politician groups ($P<0.05$), conflicts over access to power ($P<0.05$), feeling of self- superiority on caste basis ($P<0.05$), dispute regarding labor utilization ($P<0.05$), disputes over access to agri. resources ($P<0.05$), mutual farming ($P<0.05$), disturbance in farm family's relationship ($P<0.05$) and theft of farm producer ($P<0.05$) among three tehsils. This implies that these reasons behind the social conflicts had variance in three different tehsils. For instance, contradiction and rivalries was higher in tehsil Gujranwala (x=3.27) as compared to Nowshera Virkan (x=3.07) and Wazirabad (x=2.81). Conflicts over access to power were high in Nowshera Virkan (x=3.06) as compared to Gujranwala and Wazirabad. Self-superiority on caste basis (x=3.16), harsh behavior (x=3.26), dispute regarding labor utilization (x=3.20), mutual farming (x=3.27) was higher in tehsil Gujranwala as compared to

Table 2. Tehsil wise respondents' opinion about causes of social conflicts at farm level

Social conflicts at farm level	Gujranwala	Nowshera Virkan	Wazirabad	F-value
	Mean±SD	Mean±SD	Mean ± SD	
Firing up the standing crops by opponents	2.17±1.043	2.02±1.015	2.01±0.874	1.092
Religious rivalry	2.40±0.797	2.25±1.004	2.21±0.780	1.669
Contradictions between two rival politician groups	3.27±1.097	3.07±1.036	2.81±0.821	6.721**
Sexual harassment of women	3.06±0.858	2.95±0.802	2.83±0.754	2.711
Honor killing	3.08±0.919	3.18±0.926	3.08±0.809	0.560
Conflicts over access to power	2.98±0.808	3.06±0.954	2.77±0.808	4.044*
Feeling of self- superiority on caste basis	3.16±1.048	2.99±0.926	2.81±0.771	4.651*
Harsh behavior	3.26±0.958	3.09±0.914	3.08±0.809	1.645
Dispute regarding labor utilization	3.20±1.137	3.05±0.983	2.71±0.765	8.387**
Disputes over access to agri. resources	3.13±0.980	3.17±0.987	2.79±0.839	6.782**
Mutual farming	3.27±1.055	3.21±0.919	2.84±0.885	7.840**
Disturbance in farm family's relationship	3.05±1.034	3.23±0.932	2.88±0.671	4.752**
Theft of farm producer (crops/fruits/fodder/ vegetable)	3.36±1.033	3.45±0.849	2.79±0.902	18.778**

Nowshera Virkan and Wazirabad tehsil. This could be said that, the social conflicts were more existing in Gujranwala and least in Wazirabad tehsil. For Gujranwala, this contribution to the social conflicts could be vulnerable to farmers, their welfare, income level, social connection and overall socio-economic development. Contrary to the situation in Gujranwala, the conflicts were lower in Wazirabad.

Findings further indicate that social conflicts such as firing up the standing crops by opponents, religious rivalry, and sexual harassment of women, honor killing and harsh behavior had non-significant statistical relationship. This infers that these conflicts were same in the three tehsils.

In focus group discussion respondents described those social conflicts mostly start with mistrust and ego based because every person in the society has different thoughts and ideology to deal with his matters. Sometimes people show aggressive behavior to opponent parties in result of revenge that lead to conflicts; even it may leads to the next generation. While it was also observed that social conflicts at farm level affect the social relationship with other community members that may create violence in the rural community.

One of the old and household head respondents said that

"Conflicts are natural and inevitable part of human life. Different goals, interests and chasing are the basic reasons of conflicts in human being. Through the progression of time people needed to wrestle every day with conflict. Conflicts are regularly connected with ideas identified with antagonistic interests, misconception, contention, sensibly beyond reconciliation interest, and objectives, contradicting strains, administrative changes, and game behavior. Mentalities may have different backgrounds, impact, and give fountains of arguments; it is an equivalent words for neither struggle, nor these components an adequate prerequisite for conflicts. It implies clashes that incorporate all types of arrangements and differences".

***Effects of conflicts on farm activities*:** In this section, the effects of conflicts on the farm activities of the respondents are explained. The conflicts could have serious impacts on the farm activities. According to Farooq *et al.* (2009), conflicts had adverse impacts on farm activities. They identified that, farmers adopted migration due to conflicts and some staying the conflict area were entirely dependent on subsistence farming while having very limited access to inputs and the market. This displacement of rural people imposed indirect negative impacts on the socio-economic conditions of the people (Fazal, 2009). Farmers were asked to report the perceived conflicts on five point-likert scale. For clarity, the perceived conflicts were compared through F-test in three tehsils. Data is given in Table 3 in this regard.

Table 3 indicates the potential effects of the conflicts on the farm activities led by the farmers. Findings indicates that, there was a statistically significant different regarding labor unavailability ($P<0.05$), non-availability of inputs at proper time ($P<0.05$), loss of farm assets ($P<0.05$) and adoption of innovations ($P<0.05$). This explains that effect of conflicts had variance among three tehsils. The effects had increasing or decreasing trend with the increase or decrease of conflicts. Each conflict could have different effects in respective tehsil. Labour unavailability was higher in Wazirabad ($x=3.96$) due to conflicts as compared to Nowshera Virkan and Gujranwala. Non-availability of inputs was perceived higher in Nowshera virkan ($x=3.41$) followed by Gujranwala and Wazirabad. Loss of farm assets due to conflicts was higher in Nowshera Virkan followed by the Wazirabad and Gujranwala tehsil.

Moreover, conflicts had impact on adoption of innovations as well. Tehsil Nowshera Virkan reported that more impacts on adoption of innovations ($x=3.38$) as compared to tehsil Gujranwala and Wazirabad. This affirms that due to conflicts the process of adoption of innovations and farm production and overall income of the farm was adversely affected.

Table 3. Tehsil wise respondents' opinion about holistic effects of conflict on farm activities

Holistic effects of conflict on farm activities	Gujranwala		Nowshera Virkan		Wazirabad		P-value
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
Labour unavailability	3.38	0.948	3.61	0.806	3.96	0.424	0.000**
Inappropriate farm practices	3.10	0.719	3.18	0.645	3.02	0.406	0.120^{NS}
Low input purchase	3.17	0.906	3.19	0.962	3.30	0.864	0.490^{NS}
unavailability of inputs at proper time	3.30	0.944	3.41	0.779	3.13	0.680	0.020*
Infrequent time for farm activities	3.16	0.954	3.43	0.800	3.22	0.803	0.033^{NS}
Low yield, poor marketing and loss of income	3.26	0.756	3.36	0.791	3.34	0.667	0.517^{NS}
Loss of farm assets	3.27	0.902	3.32	0.783	3.16	0.740	0.288**
Adoption of innovation	3.23	0.871	3.38	0.774	3.22	0.501	0.159**

Eventually, the cost of production increased and overall productivity decreased in result of social conflicts.

In focus group discussion respondents told that once the court cases start the farmers may lose attention to the other routine life activities. It affects the social life and inter-family relationship in farming community. In some serious cases it may cause mental stress and people may migrate to the other areas to minimizing the threat of being murder. It badly affects the education and marriage of their children especially it cause obstacles for the marriage of their family members. People who involved in serious conflicts don not believe in mediation in their own family conflicts from outside. The result may be violence escalate into conflict which generates total breakdown in law and order. People displaced from their homes and they become vulnerable due to conflicts and insecurity in their respective countries or in nearby area that are otherwise not part of the conflict overwhelmed with refugee situations and are not able to cope with their needs. At the end of the day, they may have to grant asylum to these displaced individuals. Families and victims are grief for their loss or anxious to know about the where about of their loved ones. The drastic change in the structure of a once peaceful society is forever affected by traumas of war, grief and violence. There is a reduction in population as most people seek for asylum in a more peaceful environment.

***Association between the socio-economic attributes and effects of conflicts-a multi linear regression analysis*:** This section meant to explore the association between socio-economic attributes of the farmers and the perceived effects of the conflicts. Omotara (2016) indicated that conflicts had a negative influence of the socio-economic activities of the rural people. In another study, Audu (2013) didn't find any association between the socio-economic attributes of the farmers and the conflicts. Generally, this was assumed that socio-economic attributes and the conflicts had adverse effects on relationship. This association was tested through the multi-linear regression analysis, while taking the conflicts as dependent variables and socio-economic attributes as an independent variable. The data in Tabulated in Table 4.

Multiple regression analysis was carried out to investigate the relationship of socio-economic attributes of the farmers with holistic effects of conflict on farm activities as shown in the Table 4, to check the overall significance of the model R^2, adjusted R^2 and F-test is used. The respective values of R^2,

Table 4. Relationship between socio-economic attributes of the farmers with holistic effects of conflict on farm activities

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.347	0.192		17.451	0.000**
Age	-0.197	0.042	-0.257	-4.669	0.000**
Year of schooling	-0.130	0.023	-0.287	-5.651	0.000**
Marital status	-0.069	0.067	-0.056	-1.033	0.302^{NS}
Family size in number	0.053	0.041	0.062	1.277	0.202^{NS}
Family system	-0.054	0.053	-0.047	-1.029	0.304^{NS}
Income (yearly)	-0.084	0.035	-0.131	-2.384	0.018*
Size of land holding (acre)	-0.093	0.041	-0.120	-2.254	0.025*
Farming experience in year	-0.072	0.023	-0.162	-3.133	0.002**

a. Dependent Variable: Holistic effects of conflict on farm activities

$R^2 = 0.226$

Adjusted $R^2 = 0.210$

F-value = 13.70

P-value = 0.000**

adjusted R^2 and F-test were calculated as 0.226, 0.210 and 13.70. The value of R^2 indicated, almost 23% of the total variation in the holistic effects of conflict on farm activities as explained by the 8 explanatory variables included in the model such as age, education, marital status, family size, family systems, income, land size and farming experience. As the primary data was used in the analysis, the estimated value is very high, and the overall model is considered as reliable. In order to check the reliability of model F-test was also used. The calculated F-value of 13.70 is statistically significant at less than one percent level of significance; this too indicated that all the independent variables included in the model are explaining the dependent variable.

The dependent variable in this regression model is 'holistic effects of conflict on farm activities and the continuous independent variables are age, years of schooling, marital status, family size, family system, income, size of land holdings and farming experience. Beta values show that 5 explanatory variables such as age, years of schooling, income, size of land holdings and farming experience had negative and significant relation with holistic effects of conflict on farm activities. This means, young age, educated, high income and large farmers had less vulnerability of effects of conflict on their farm activities.

Age of the farmers had statistically significant but negative relationship with the holistic effects (β=- 0.197: P<0.05). The coefficient indicates that, young age farmers would be receiving almost 19% less effects of conflicts as compared to those who have grown old.

Educational level of the respondents had statistically significant but negative relationship with the holistic effects (β=- 0.130: P<0.05). This significant relationship confirms the reduction of 13% effects of conflicts with the unit rise of educational level. Income level of the respondents had statistically significant but negative relationship with the holistic effects (β=- 0.084: P<0.05). This significant relationship confirms the reduction of 8% effects of conflicts with the unit rise of income level.

Size of land holdings of the respondents had statistically significant but negative relationship with the holistic effects (β=- 0.093: P<0.05). This significant relationship confirms the reduction of 13% effects of conflicts with the unit rise of size of land holding. Farming experience of the respondents had statistically significant but negative relationship with the holistic effects (β=- 0.072: P<0.05). This significant relationship confirms the reduction of 7% effects of conflicts with the unit rise in farming experience of the farmers. So, the hypotheses "socio-economic attributes of the respondents have a significant association with the effects of conflicts on farm activities" is partially accepted.

DISCUSSION

The present study was conducted first time to identify the different social causes of conflicts among farming community and its horrible consequences on farm families as well as on farm activities. Furthermore, the relationships among demographic attributes and farm activities were also identified the impact of socio-economic factors to control the consequences. As the results of the study concluded that the causes of social conflict findings are the same as to those of Mwamfupe (2015) as he found that contradiction within stakeholders was one of the reasons of conflicts. Findings are in agreement with those of Moore (2005) as he found that inter-community conflicts spur with the shrinkage of natural resources. Natural resources have started to be compromised, particularly land and water. Pertinent to the utilization of these resources the conflicts are increasing alarmingly. Mielke and Schetter (2007) endorsed that natural resources are lessening and expediting the family conflicts. In a recent study, Bijani *et al.* (2020) found a devastating water conflicts among the rural community in Iran and the key reasons behind was water scarcity and drought. In a wish to access more resources, the conflicts emerged laying behind a significant adverse impact on the socio-economic and agri. environmental avenues. Couples of research studies such as Moore (2005), Urdal and Hoelscher (2012) have also found that, inadequate education, and insufficient income and poverty persistence spurred the conflicts in rural areas. Reuveny (2007) augmented that poverty and discriminated access to the resources were significantly associated with the emergence of conflicts.

Zwain (2011) found out that many African countries are experiencing violent conflict because of the competition for access, control and use of land resources.

As the social conflicts has holistic effects on the farm activities as well as farm families the study results were similar to those whose findings are similar to those of Deininger (2003) and Brück *et al*. (2019) as they found that conflicts persuaded the reduction in the fixed assets and reduced the overall investment. Several other research studies, Blattman and Miguel (2010), Ibáñez and Moya (2010) and Justino (2011) concluded that conflicts had negative impacts on the capitals and assets of the public and brought ultimate decrease to their productivity. Findings are similar to those of Usman *et al.* (2019) as he found that conflicts had prominent inverse impacts on the farmer production and distribution of income of the farmers. Haider *et al.* (2017) arbitrated that farmers witness a significant difference in their income from tomato crop after the emergence of conflicts. All these factors, united to decrease the income of farmers by compromising the production (Abadie and Gardeazabal 2003; Dastgir *et al.* 2018; Justino and Verwimp 2006) and negatively affecting the economic performance of crops (Murdoch and Sandler 2002; Abadie

and Gardeazabal 2003; Justino and Verwimp 2013). Deininger (2003) and Justino (2011) found an increase in transaction costs and contraction in supply chain of crops. The findings of currents study further indicated that, inappropriate farm practices, low input purchase, infrequent time for farm activities and low yield and poor marketing were statistically non-significant indicating that these impacts were the same across the three tehsils.

The demographic attributes also influence the effects of conflicts on farm activities because it helps to overcome the consequences of conflicts. Findings are more or less similar to those of Chamo *et al.* (2020) as they found that marital status, size of household, age, and experience has significant relationship with the conflicts. Findings are contrary to those of Chamo *et al.* (2020) as they found positive association between the age of respondents and occurrence of conflicts. They opined that, older the farmers grew in years; the frequency of conflicts will be lower. Findings are in disagreement to those of Chukwu and Umeh (2015) as they found that with the increase in farm size, farmers were more involved in conflicts occurring. Chamo *et al.* (2020) also found a positive association between the size of land holdings and the occurrence of conflicts.

***Conclusion*:** This study aimed at exploring the causes and consequences of conflicts in three tehsils of the district Gujranwala. This study found that, contradiction between two groups; conflicts over access to power, feeling of self-superiority, dispute over access to agricultural resources, mutual farming, disturbance in family relationship and theft of farm produce were the key causes behind occurrence of the conflicts in study areas. Conflicts had adverse impacts on availability of labour, inputs, farm assets and more importantly on adoption of innovation. In wake of conflicts, the key aspects of farming like labour, inputs, farm assets and adoption of innovation could be resulting into poor income generation and pushing farm into poor productivity. This accentuates that; conflicts had serious adverse impacts on farm, income and overall productivity of the farm, if not handled and mitigated through adequate strategies. The causes and consequences of the conflicts were different in three tehsils i.e. Gujranwala, Nowshera Virkan and Wazirabad. This means one tehsil was receiving more effects than the other; however the nature of conflicts and consequences almost remains the same. This study urges more socio-economic development in the study areas in order to confront the social conflicts. Regression analysis confirmed that socio-economic characteristics have significant association with the perceived effects of the conflicts. This implies that with the improvement in socio-economic conditions of the farmers the impacts of conflicts can be overcomes. Therefore, creating awareness among rural people and implementing judicial proceedings against the conflict initiators could augment people to avoid conflicts. The introduction of concept, "conflict resolving farmers groups" led by the farmers (educated growers in particular, Numerdar, political groups are more active in reflationary process by the active willingness from both parties) could help resolving the conflicts. Developments of conflict resolution strategies are indispensable.

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