

Impact of Farmers' Suicides on Social and Economic Conditions of Victim Households

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Abstract

The deplorable condition has emerged for the suicide victims' households due to the loss of the burdened family member committed suicide by various socio-economic reasons. Size of own land holding, operational land holding dairy farming has been adversely affected; Victims family sold their lands to sustain their livelihood. Numbers of victims' farmers' family become landless.

Keywords: Farmer, Suicides, paired t-test, landholding

Critical situation has emerged in Punjab agriculture economy. Farmers are unable to get the unremunerated price of field crops, pulses and commercial crop due to imbalance demand and supply as well as lack of storage facilities for seasonal crops. In highly developed state where the per capita income is more than ₹ 80000 in 2013-14 (statistical abstract of Punjab 2014) at current prices. Newspaper and National Crime Record Bureaus (NCRB) reported that farmers are committing suicides. In the year 2015, cotton damaged by whitefly pest (diseases attack) and not covers even the cost of cultivation by farmers. An agrarian crisis has also become accentuated due to the absence of an effort on the part of the government to establish any worthwhile link between the rising cost of production of a commercial agriculture system and the crisis characterising the agricultural sector. In a sense, with growing intensification of agriculture, the farm sector in the country has now become relatively more mechanized, the cost of inputs has risen faster in comparison to that of prices of agricultural commodities. The annual trend growth rate of per hectare return, over variable costs, from wheat and paddy (combined) was -2.18% during the 1990s. In the case of cotton, it was -14.24% per

annum during the same period (Ghuman, R.S. 2001). In the meanwhile, it is not unimportant to observe that the increased role of traders and middleman through privatization, has led to the exploitation of the farmers. Numbers of studies reveal the reasons behind the farmer's suicides (Parthasarthy, G. and Shameem, 1998). Present study is discussing the impact of farmer's suicides on socio-economic condition of the victim's household.

Meanwhile, how have these suicides impacted the social and economic conditions of the suicide committing farming households in Punjab? Is an important question that merits serious probe? Accordingly, this study seeks to locate plausible answer to this question. To be more precise, our endeavour aims to focus at various characteristics of the sample households such as their social and economic characteristics, their ownership and operational land holding status, and comparative analysis of the pre-suicide and post- suicide period of the victim household. In addition, guided by the consideration of bringing the phenomenon of farm's suicides into bold relief, study is also aim to discuss some important aspects of the income and expenditure of the victim household before and after the suicide.

Data and Methodology

Present study is based on primary survey of Punjab state. The relevant information generated to this end during the course of our field survey across 22 villages located in the Sangrur, Bathinda, Mansa, Moga and Firozpur districts of Punjab is reported *First*, out of 100 suicide victims in sample, 29.0 of the victims' belonged to Sangrur, 24% each from Bathinda and Moga, 20.0% from Mansa and 3.0% from Firozpur district of the State. Since the suicide victims for the present study have been selected on the basis of proportionate sampling technique, it implies that there has been high incidence of farmers' suicides in Sangrur, Bathinda and Moga districts of the state which together account for more than three-fourth (i.e. 77.0%) of the total suicides that have taken place in Punjab. Secondly, districts such as Mansa and Firozpur together account for 23.0% of the total suicides in our sample. Out of this, Mansa alone accounts for 20.0 of the suicide victims. This suggests that between these two, roughly 7 times more suicides have occurred in Mansa than in Firozpur. Study is basically an empirical one in that it is based on primary data for purposes of seeking plausible explanations for various issues meant to be investigated in it.

To this end, the insights gained on the basis of tabular- cum- diagramatic analysis have been further investigated by means of more rigorous statistical techniques such as averages and percentages, differentials, Paired t-test. The present study has endeavoured to investigate the economic and social conditions of sample farming households of Punjab before and after the suicides. In contrasting situations such as these, the usefulness of the paired t-test has received wide recognition by a fairly large number of researchers. The paired t-test is based on the pair wise differences in the values of the matched observations of two samples, $d_i = y_{2i} - y_{1i}$. The difference of matched pairs is treated as a variable; the logic of the paired t-test and one sample t-test is identical. The present study uses the following formula for this purpose.

$$t_{\bar{d}} = \frac{\bar{d}}{SE(\bar{d})}$$

where, $\bar{d} = \frac{\sum_{i=1}^n d_i}{n}$ and $SE(\bar{d}) =$ —

The null hypothesis is that the population mean of individual differences of paired observations is 0 (zero unless explicitly specified) i.e., $H_0: \mu_d = 0$. If the null hypothesis is rejected, there must be a significant difference (effect) between two samples (pre- and post- outcomes).

Results and Discussion

As observed earlier, our main focus now shifts to stipulation of debt before and after the farm suicides. It has come to be extensively observed in literature on farmers' suicides in India in general and Punjab in particular that most of suicides occur owing to the indebtedness of the peasantry (Sidhu, R.S. Sukhpal Singh and A.S. Bhuller, 2011; Singh Amarjeet, 2011). Is it really so? In order to provide a plausible explanation to this question, we gathered information on various aspects of indebtedness of farmers' households in the sample villages of the study. More precisely, our objective was to know the number of indebted farming households and the extent of their indebtedness on per household and per acre bases before and after the suicides?

The farmer social-economic standing in the Indian countryside principally depends on their landholding size is a well-acknowledged fact whose importance cannot be discounted by any stretch of imagination even now. In view of this widely held view, an important question that assumes significance is that how has the occurrence of farmers' suicides in Punjab impacted the land holding status? This question can be answered appropriately by discussing the various aspects of land holding status such as the suicide victims' land ownership status, operational land holdings status, leased-in and leased-out status before- and after suicides.

Debt Stipulation of Victim Households Before and after Suicides

The information in Table 1 shows that the majority of the farmers are trapped in debt. For instance, while as many as 93% of the farmers were in debt in Punjab before suicide; post- suicide, the proportion of such farmers was as high as 75%. By implication what it means is that the incidence of indebtedness among Punjab farming households was high both in the pre- and post-suicide scenarios. To be more precise, what we wish to assert is that although the

state farmers disposed of a part of their land holding to rid themselves of indebtedness driven distress, but only about 25% of them succeeded in doing so as roughly three-fourth of them continued to reel under indebtedness in the state.

Table 1: Pattern of Free from Debt of Victim Family before and after Suicide in Punjab. (Numbers)

District	Free from debt (B.S)	Free from debt (A.S)	Total Farmers
Sangrur	1	9	29
Bathinda	3	4	24
Moga	2	7	24
Mansa	1	4	20
Firozpur	0	1	3
Total	7	25	100

B.S: Before Suicide; A.S: After Suicide; Source: Field Survey 2011

To bring out the worrisome economic conditions of the farmers, Table 2 presents details of the farmers' debt per acre of operated area both before and after the suicide. What needs to be underlined is that post-suicide, the total amount of loan per acre of operated area (₹ 40787.99) is roughly 20.91% lower compared with pre-suicide period (₹ 49318.23 per acre), both from institutional and non-institutional sources put together in Punjab. An interesting pattern seems to emerge across districts. For instance, while the gross land holdings seem to have declined in Moga district of the state, but the amount of debt on per acre basis seems to have increased to ₹ 57428.21 in the post suicide period from ₹ 54226.41 before the suicide. This increase in

debt is possibly due to use of more capital intensive machinery (particularly tractors) by the sample households.

As against this, In case of the district Mansa average debt per acre of operated area registered a decline of 90.0% (i.e. from ₹ 54226 in the pre-suicide period to ₹ 28543 in the post-suicide period. It is not unimportant to mention that land is gradually slipping away from the hands of the farmers, but still, the debt continues to be very high on per acre of operated basis. To put the record straight, although the farmers are reported to have sold their land for reducing the burden of debt on household, but, still the outstanding amount stands to be ₹ 40787.99 per acre basis. Table shows that debt of ₹ 235100 per family in case of victim family before suicide and ₹ 137170 after suicide in an overall sense. Further, in case of a district, it can be seen from the Table 2 that the debt stand per family before suicide is ₹ 199827.6 in Sangrur district in the case of victim family and is ₹ 120931 after suicide. It has been observed that debt per household ₹ 225208 in Bathinda, ₹ 239500 in Moga, ₹ 272100 in Mansa and ₹ 373333 per household in Firozpur before suicides. And figures after suicides show a debt of ₹ 116250, ₹ 191666, ₹ 107750 and ₹ 221666 per household in the districts Bathinda, Moga, Mansa and Firozpur respectively.

Dairy Farming of Victim Family Before and After the Suicide

Now it is important to attention that the dairy farming which has come to be considered as one of

Table 2: Pattern of Debt Distribution Sample of Before and After Suicide Period in Punjab, 1995-2011. (Land holding in acre and debt in ₹)

District	Before Suicides				After Suicides			
	Gross Land Holding	Total Debt	Debt Per Household	Average debt per acre	Gross Land Holding	Total Debt	Debt Per Household	Average debt per acre
Sangrur	113.5	5795000	51057	199827	74.8	3507000	46885	120931
Bathinda	139	5405000	38885	225208	96.1	2790000	29032	116250
Moga	106	5748000	54226	239500	80.1	4600000	57428	191666
Mansa	104.2	5442000	52226	272100	75.5	2155000	28543	107750
Firozpur	14	1120000	80000	373333	9.8	665000	67887	221666
Total	476.7	23510000	49318	235100	336.3	13717000	40788	137170

Source: Field Survey, 2011; B.S= Before Suicide; AF=After Suicide

the important sources of farmers' income in Punjab and enables them to meet their daily consumption requirements. Meanwhile, it is not unimportant to observe that dairy farming is one of the most preferable supplementary sources of income and employment for the farmers in Punjab. In the Table 3, in overall, it has observed that buffalos and cows declined from 294 to 179 and 17 to 4 respectively. In addition, it is observed that the average number of cattle per household declined roughly from 3 to 2 due to loss of main male members of the household after suicide. Moreover, study found that the number of cattle have declined from 71 to 45, 80 to 38, 91 to 42, 60 to 50 and 9 to 8 in the districts Sangrur, Bathinda, Moga, Mansa and Firozpur respectively.

Table indicate that average cattle per household, has declined from 2.45 to 1.55 in Sangrur, 3.33 to 1.58 in Bathinda, 3.79 to 1.75 in Moga. Another interesting point that deserved to be noted from the said Table is that most of the farmers in our sample preferred buffaloes than cows due to multiplicity of factors such as lack of dairy education, the likelihood of buffaloes being more productive than cows due to the latter's becoming more prone to heat and diseases than the former and also the cows needing more open fenced area than buffaloes. And in the district Moga victim household sold approximately half of the buffaloes' and at the same time cows had declined from 10 to 1. It is not unimportant to mention that in Moga district, it was found that the total numbers as well as the average cattle per family were more compared to the other districts, before suicide in the sample household.

Overall, our findings suggest that the size of the operational land holdings, owned landholding, leased-in land, number of buffaloes, tractors and other economic assets of income of the victim families have registered a decline in the post-suicide period than in the pre-suicide period. It can therefore be safely maintained that the socio-economic conditions of the victim households have tended to worsen to become relatively more deplorable after the suicide than before it.

In Table 4, it has been observed that changing the pattern of own land holding size after suicides, study found that the marginal land holding have increased from 34 to 45. At the same time, for the small and medium farmers it has decreased from 39 to 27, 10 to 3 respectively. It can be seen from Table 4 that in an overall sense small and marginal farmers, those owning up to 5.0 acres, continue to account a preponderant majority of the suicide victims both before and after the suicide, while they accounted for 73.0% of the total before suicide, their proportion has now become about 72.0%. On the other hand, 9% of the farmers have become landless; their land had been grabbed by the household economic crisis. In the other words they had sold their land to meet their debt repayment and domestic needs. If we look across the various districts of Punjab, it has been that observed the marginal land holding increased from 6 to 12, 10 to 13, 5 to 6 and 0 to 1 in Bathinda, Moga, Mansa and Firozpur respectively. If we look at the small land holding category, it can be inferred from the Table 5 that it has been decreased from 10 to 8, 9 to 4, 8 to 6, 10 to 8 and 2 to 1 in Sangrur, Bathinda, Moga, Mansa and Firozpur

Table 3: Pattern of Buffalos and Cows Distribution of Sample before Suicide and After Suicide

District	Buffaloes B.S (A)	Cows B.S (B)	Total cattle (A+B)	Buffaloes A.S (C)	Cows A.S (D)	Total Cattle (C+D)	Number of Household (F)	Average Cattle per Household (B.S) (A+B)/F	Average Cattle per Household (A.S) (C+D)/F
Sangrur	68	3	71	44	1	45	29	2.45	1.55
Bathinda	78	2	80	38	0	38	24	3.33	1.58
Moga	81	10	91	41	1	42	24	3.79	1.75
Mansa	59	1	60	49	1	50	20	3.00	2.50
Firozpur	8	1	9	7	1	8	3	3.00	2.67
Total	294	17	311	179	4	183	100	3.11	1.83

Source: Field Survey; B.S: Before Suicide; A.S: After Suicide

Table 4: Pattern of Distribution of Land Ownership by Holding -Size of Suicide Victim Households (Before and After Suicide)

District		Landless	0.0-2.5	2.5- 5.0	5.0-10.0	Above 10.0	Total Farmers
Sangrur	B.S	0 (0.00)	13 (44.83)	10 (34.48)	4 (13.79)	2 (6.90)	29 (100)
	A.S	5 (17.25)	13 (44.83)	8 (27.57)	2 (6.90)	1 (3.45)	29 (100)
Bathinda	B.S	0 (0.00)	6 (25.00)	9 (37.50)	4 (16.67)	5 (20.83)	24 (100)
	A.S	1 (4.17)	12 (50.00)	4 (16.66)	6 (25.00)	1 (4.17)	24 (100)
Moga	B.S	0 (0.00)	10 (41.67)	8 (33.33)	5 (20.83)	1 (4.17)	24 (100)
	A.S	1 (4.17)	13 (54.17)	6 (25.00)	3 (12.05)	1 (4.17)	24 (100)
Mansa	B.S	0 (0.00)	5 (25.00)	10 (50.00)	3 (15.00)	2 (10.00)	20 (100)
	A.S	2 (10.00)	6 (30.00)	8 (40.00)	4 (20.00)	0 (0.00)	20 (100)
Firozpur	B.S	0 (0.00)	0 (0.00)	2 (66.66)	1 (33.33)	0 (0.00)	3 (100)
	A.S	0 (0.00)	1 (33.33)	1 (33.33)	1 (33.33)	0 (0.00)	3 (100)
Overall	B.S	0	34	39	17	10	100
	A.S	9	45	27	16	3	100

Source: Field Survey; B.S: Before Suicide; A.S: After Suicide.

Notes : Figures in brackets give percentage to total.

respectively due to distribution of land within family and as some of the land was sold for the sake of deplorable household economic conditions. These findings suggest that earlier the application of Green Revolution capital intensive technology and later the process of economic liberalization have unleashed a process of growing marginalization of the peasantry in the state.

Table 5: Pattern of Own Land Holding In Acres before and After Suicides of Distribution of Sampled Suicide Victims in Punjab, during 1995-2011

District	No. of Household	Gross Land Holding (B. S)	Gross Land Holding (A.S)
Sangrur	29	113.50	74.80
Bathinda	24	139.00	96.10
Moga	24	106.00	80.10
Mansa	20	104.20	75.50
Ferozepur	3	14.00	9.80
Total	100	476.70	336.30

Source: Field Survey, 2011

Furthermore, table 5 reveals the gross land holding size in acres before and after suicide of victims' household. In an overall sense, we have observed that the gross land holding before suicide was 476.70 acres, but, the present scenario is something

different, the total land holding accounts to 336.30 acres. It has been found that roughly 140 acres of land, which was sold by victim households, were due to their helplessness to fulfil their household needs, social obligation and debt repayment. In various districts of Punjab, it has been observed that the land ownership of landholding declined from 113.50 acres to 74.80 acres, 139.00 acres to 96.10 acres, 106.00 acres to 80.10 acres, 104.20 acres to 75.50 acres and 14.00 acres to 9.80 acres in Sangrur, Bathinda, Moga, Mansa and Firozpur after suicides respectively.

It has been observed 50% farmers sold their land due to household economic crisis, out of 50 farmers, 9 farmers belonged to marginal category, 21 to small farmers, 11 to semi-medium and 9 farmers were related to medium category in the case of victim family as given in the Table 6. It is also clear from the Table that 140.4 acres of the land was sold by all the categories of farmers, and if we look across the categories, we can notice that 10 acres of land were sold by the marginal farmers, 39 acres by small farmers, 41 acres by semi-medium and 54 acres by medium farmers. So, we have noticed from the study that it is not only the marginal and small farmers who had sold their land, rather semi-medium and medium farmers are also betrothed.

Table 7 reveals that in an overall sense the total operational land holdings were 649.33 acres before

Table 6: Pattern of Land Sold out in Acres by Different Category of Victim Family

District	0.1-2.5	Sold out land In Acre	2.5- 5.0	Sold out land In Acre	5.0- 10.0	Sold out land In Acre	10.0- 25.0	Sold out land In Acre	Total No. of Farmers	Total
Sangrur	2	4	7	9.5	2	5.7	2	19.5	13	38.7
Bathinda	1	0.2	5	8.4	3	15.3	4	19	13	42.9
Moga	4	4.4	4	10	3	10.5	1	1	12	25.9
Mansa	2	1.2	4	7	3	9	2	11.5	11	28.7
Firozpur			1	4.2					1	4.2
Total	9	10	21	39	11	41	9	54	50	140.4

Source: Field Survey

suicide and 337.60 acres after the suicide. If we look across the districts, we have observed a decline from 155.63 acres to 41.0 acres, 170.00 acres to 105.60 acres, 155.50 acres to 109.70 acres, 147.20 acres to 71.50 acres and 21 acres to 9.81 acres in Sangrur, Bathinda, Moga, Mansa and Firozpur respectively due to loss of the male member of the family. Nevertheless, the victim farmers were already living under debt and sustaining their life with awful condition, but after the suicide, the operational land holdings declined and thereby, farmer's standard of living and economic conditions were degraded and thus is getting pitiable day by day ever after the suicide by victims in new economic era.

Table 7: Operational Land Holding of Victim Family Before and After Suicide, 1995 to 2011. (Acre)

District	Before Suicides	After suicides
Sangrur	155.63	41.0
Bathinda	170.00	105.60
Moga	155.50	109.70
Mansa	147.20	71.50
Firozpur	21.00	9.81
Total	649.33	337.60

Owned +leased in-leased out+ Mortgage in – Mortgage out= operational Land Holding

Source: Field Survey

It has come to be observed in some academic circles that driven by vast socio-economic deprivation and for want of alternate sources of employment and earnings, the small and marginal farmers lease-in land to supplement their household incomes. The underlined objective is to increase the size

of the operational holding. In order to examine this important issue we gathered the relevant information on the amount of land leased-in by the sampled suicide victims both in the pre- and post- suicide situations. We have observed that 41% victim farmers engaged leased-in for increasing the size of operational land holding or for more earning from Table 8 in Punjab, farmers are paying amount ranging from ₹ 28000 to ₹ 35000 per acre to leased-in land. It has also found through the survey that where there is availability of irrigation facilities such as, electric motors, tube wells, the rent for the above said per acre to be ₹ 35000 stands. The amount is paid most of the time with the help of bank and money lender by tenant farmers before the cultivation of land. These hapless farmers used to take lease-in land for better earning and healthier future, but, at the same time, the final results were totally different, due to pest attack, higher input cost, and due to crop failure and low productivity yield of per acre, as a result these farmers debt burden kept on increasing than before and they were unable to pay the debt of the various sources like money lenders, commission agents and banks, due to low earning from leased-in land and even sometime in negative returns. What we have noticed after suicide, due to the loss of the main member of the family, victim household were unable to get leased-in land. It has been observed that only 24 farmers engaged in leased-in land after suicide. As we have observed overall leases-in land holding decreased from 196 acres to 106 acres. In the case of Firozpur district not even a single farmer was found, who was engaged in leased-in land after the suicides.

Table 8: Pattern of Number of Farmers Land Leased-In and out Holding of Sample Household of Suicide Victim Before and After Suicide in Punjab

Particulars		Sangrur	Bathinda	Moga	Mansa	Firozpur	Total
Before Suicides	No. of Farmers Land Leased in	8	10	13	9	1	41
	Land Leased-in acres	56.6	33.0	63.1	36.1	7.0	196.1
	No. of Farmers Leased out	1	0	0	0	0	1
	Leased-out in acres	1.5	0.0	0.0	0.0	0.0	1.5
After Suicides	No. of Farmers Land Leased in	4	7	7	8	0	26
	Land Leased-in acres	15.5	19.0	45.6	26.0	0.0	106.1
	No. of Farmers Leased out	10	3	9	4	0	26
	Leased-out in acres	26.5	3.0	29.7	18.5	0.0	77.7

Source: Field Survey, 2011

Table 8 reveals that only one farmer leased-out one and half acres of his land, but the post-suicide period number has increased this from 1 to 26 households and land- in acres from 1.50 acres to 77.70 acres due to the loss of the main male member of the family in an overall sense. Those households that were engaged in land leased-in before suicide were forced to lease-out land in post- suicide period due to lack of economic resources as well as manpower. If we look across the district Sangrur, the number of famers land leased-out has increased from 1 to 10, further, in the district Moga, nobody used to leased-out their land before suicide, but after suicide 9 victim households have leased-out their lands.

Although sharing of crops, leasing-in or purchase of land are the various options open to the farmers for increasing the size of their operational land holdings yet the option of buying land by the small and marginal farmers solely through their meagre agricultural income in the face of steep rise in land prices owing to the entry of the corporate sector in more recent times seems to have already become practically foreclosed. As a result of this, the marginal and small farmers have been involved in the leasing-in of the land for the purpose of increasing the size of their operational land holding, because they had no other opportunity and so, wanted to extend the same profession through occupying leased-in land, but after the suicide of the victim farmers, the number of farmers' household land which was leased-in has declined. Table 8 bears ample testimony to such an assertion. It suggests that while 41% farming households reported leasing-in land before suicide; the corresponding

proportion of such households was only 26 (per cent) after the suicide. Across districts, we found the number of households reporting leased-in land declined from 8 to 4 in Sangrur, from 10 to 7 in Bathinda, from 13 to 7 in Moga, from 9 to 8 in Mansa and 1 to none in Firozpur.

Impact of Farmers' Suicides on Sample Households

For the purpose of lending credence to our findings in the present study, we have carried out Paired t-test in respect of the various variables included in the study. It is hypothesised that the farmers' suicide doesn't impact the socio-economic characteristics of the sampled households in Punjab. The results on this count are reported in Table 9. These results, *inter alia*, suggest:

First, as suggested by highest t-value (-7.839), farmers' suicides have exerted the most detrimental impact on area under fodder crops. After the occurrence of the suicide, the significant loss of livestock, particularly buffaloes (t-value being -5.995) due to the loss of male family members has been instrumental in reducing the area under fodder crops.

Second, the size of the operational land holding has also declined significantly in the post-suicide period in comparison to the pre-suicide period. This has mainly occurred due to significant decline in owned as well as leased-in landholding and increase in the amount of leased-out land. Furthermore, even though a likewise pattern is visible in respect of area under wheat, paddy and cotton (the three principal crops grown in Punjab), yet between these three, greater impact has been discernible in the case of wheat and cotton than in that of paddy. In the case

Table 9: The Impact of Farmers' Suicides on Socio-economic Characteristics of Victim Households in Punjab

Variable	t-statistic	Degrees of Freedom	P- Value
NRI (No.)	1.682	99	.096
Amount of remittances (₹)	1.000	51	.322
Owned landholding Size (Acres)	-6.377	99	.000
Leased -in land (Acres)	-2.083	99	.040
Leased-out land (Acres)	4.226	99	.000
Operational landholding Size(Acres)	-2.430	99	.017
Unoperated landholding (Acres)	3.710	99	.000
Irrigated land (Acres)	-4.672	99	.000
Area under Wheat (Acres)	-4.926	99	.000
Area under Paddy (Acres)	-1.738	99	.085
Area under Cotton (Acres)	-4.478	99	.000
Area under Fodder (Acres)	-7.839	99	.000
Area Sold or/and mortgaged- out (Acres)	2.784	93	.007
Amount of Debt (₹)	-2.554	99	.012
Buffaloes (No.)	-5.995	99	.000

Source: Author's Calculations

of paddy, the t-value is found to be statistically insignificant at 5% level of significance.

Third, it is not impertinent to note in the context of above findings, irrigated land has also witnessed a significant decline during the post-suicide period as compared to the pre-suicide period. The behavioural pattern of this variable is not surprising in that with decline in the area under cultivation of the afore-mentioned three crops, irrigated area has also declined significantly alongside.

Fourth, the increase in the sold or mortgaged land signals towards a significant decline in the amount of indebtedness in the post-suicide period than in the pre-suicide period.

Conclusion

In sum, this study depicts the impact of farmers' suicides on the social and economic conditions of the suicide committing farming households in Punjab. It puts together the information regarding the indebtedness of the suicides victim households, mirrors the characteristics of livestock rearing of the suicides victim households, the changing household economy in terms of income before and after the suicides, and finally presents the results of the model as used in this study. Farmers leased-in land

for increasing their operational land holding. All in all, this study reaffirms that the phenomenon of farmers' suicides in Punjab is a social and economic phenomenon in that it is attributable to a multitude of social and economic factors, impacts their social economic conditions importantly and has diverse set of social and economic overtones. It draws our attention to the fact that social and economic conditions of the farmers committing suicides have become deplorable in terms of their ownership and operational land holding status, income and expenditure levels.

Punjabi land has a potential for growing vegetables, horticulture, pulses and field crops with ensured irrigation facilities. At the same time, demand supply gap, lack of storages facilities, low prices for farmers and higher prices for consumer has created the imbalance circumstance for the Punjab economy. For the policy implication, Government should take initiative to establish the processing unit in each district as per area and provide the ensured price for particular crop to framers. At the same time state government should induce the young entrepreneur to invest in different agriculture projects with grant as well as accelerator programme organised by state university. In the short term measure the state

government should provide the widow pension, free higher education for children, job for one member to victim's household. The agricultural price policy impacting the Punjab farmers, therefore, needs to be restructured and revamped in a manner so that the farmers become sufficiently incentivized to increase the volume of agricultural production in consonance with the present and potential needs of a growing economy such as ours.

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