ECONOMIC VIABILITY OF SMALL LANDHOLDERS IN CAPITALIST FARMING MODEL OF PUNJAB

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Abstract **-** The resource poor small farmers (up to 2 ha) in Punjab, that form about one-third of the total landholdings in the state are facing various challenges as farming is not generating economic viability for this section as compared to the other farmers (more than 2 ha). As per a field survey 2016-17, the percentage of non-viable small farmers was about 56 per cent and that of other farmers was about 18 per cent. The cash crunch pushes them towards indebtedness. Despite aggressive measures to extend the reach of institutional credit, about 20 per cent of their loans are still sourced from non-institutional sources. Of the various state support schemes and subsidies for the welfare of this section, they are able to appropriate only about 7 per cent of the power, and about 9 per cent each of the total fertilizer and canal irrigation subsidies, and the rest goes to benefit other farmers. Moreover, this section is not able to enjoy much of the MSP state bill as they have a smaller marketable surplus in comparison to their larger counterparts. There is a need for extensive rationalized support policies which would uplift this most needy section of the farming community. Cooperative farming, cheap credit, debt waiver, creation of alternate rural employment, etc. go a long way in improving their economic well-being.

Keywords: **Small farmers, indebtedness, income and expenditure, agrarian crisis.**

Introduction

Punjab state is acknowledged across the Indian subcontinent for its excellence and progress in the agricultural sector after the advent of green revolution during mid-1960s. The state not only accomplished economic growth and development but enabled the country attain food self-sufficiency during a period when food bill formed an exorbitant portion of foreign trade. The state's role in the national agriculture is still significant, with having just 1.53 per cent geographical area of the country; it contributes 46.4 per cent of wheat and 27.3 per cent of rice to the central pool of foodgrains (2015-16). The green revolution brought prosperity for the farmers of the state, but the benefits did not percolate to the resource-poor segment of the peasantry, small farmers. The period of 1970s and 1980s was the golden period for the agricultural economy when the productivity of important crops grew significantly, the income of farmers improved and agricultural employment increased. The growth rate of agriculture sector of Punjab was 6.63 per cent per annum in the first decade of green revolution which declined to 4.74 per cent per annum between mid-1970s to mid-1980s. It further decelerated to 3.87 per cent during mid-1980s (Sidhu, 2002). During the period 1997-98 to 2001-02 the Punjab agriculture grew at a rate of 1.90 per cent per annum, which was less than the overall average growth (3.84%) of Punjab economy. It is estimated that agricultural production must increase at least at the rate of 2.2 per cent per annum to sustain the population increases (Nasurdeen and Balakrishan, 1996). [1]

The current state of the agrarian economy highlights deceleration in the growth of agricultural productivity. Therefore, the state agricultural sector must be developed to have a more balanced and progressive economy.

The small farmers (up to 2 hectares) constitute one-third (34.19 per cent) of total farm landholdings with average size of landholding to be 1.03 hectare (ha) in the state (2010-11). According to a study, landholders up to four hectares in Punjab find it increasingly difficult to maintain their living from the farming activity alone (Singh *et al*., 2007). Capitalistic mode of production in agriculture is generating profitability for those farmers who can afford heavy capital investment and have risk bearing capacity. The smaller farmers are the ones that are facing the brunt of growing investment requirements in agriculture. The general notion is that with technological changes in agriculture, the trend of income distribution is widening the gap between the rich and the poor (Noor and Rao, 1987). These resource-poor and state support deprived farmers end up in a vicious cycle of wretchedness and destitution. To add to the woes, this section is constrained with surplus family labour, under nutrition or malnutrition and the possession of un-economic size of farm holdings (Pandey and Kaushal, 1980). This section faces unprecedented indebtedness, especially non-institutional debt, which is the root cause of their economic distress. 'Punjab peasant is born in debt, lives in debt and dies in debt' (Darling, 1925). Despite substantial improvement in distribution of credit through institutional sources, indebtedness among the farmer households is found to be widespread (Vaidyanathan, 2006). Due to poor land base, these farmers do not have much option to experiment with their source of generation of income from farming and hence take up alternate source of livelihood. Originating from the economic limitations, this section faces numerous problems at the social front as well.

According to the National Sample Survey Organisation (NSSO) as much as 40 per cent of the Indian farmers and 37 per cent of the Punjab farmers have expressed their desire to leave farming, for it was turning to be a non-profitable occupation (NSSO,

2005). An average farmer in Punjab was indebted up to 64 per cent of his annual income but the farmers up to four hectares were indebted to the tune of 90 per cent of their annual income. Astonishingly, about 19 per cent of the small farm households were approaching the stage of bankruptcy (Singh et al, 2007). Though various schemes are designed and initiated from time to time in order to support the ailing agricultural sector, the smaller farmers often lay deprived of the benefits. Schemes like free power, minimum support price, subsidies for various farming inputs, incentives for agricultural technology upgradation, etc. have failed to effectively generate welfare for this downtrodden section. The present study makes and attempt to highlight the plight of the small farmers of Punjab state in the ongoing agrarian crisis of the economy.

Sampling Design

The data for the present study was collected from a field survey conducted by the department of Economics and Sociology, Punjab Agricultural University, for the year 2016-17. The study was undertaken in all the districts (22) of the state. 44 blocks were selected by choosing two blocks from each district. Further, 88 villages were taken from these selected blocks. A sample of 15 farmers were taken from each chosen village thereby, a total of 1320 farmer household were surveyed through personal interview method.

Table 1: Distribution of number of operational holdings in Punjab, 2010-11

Farm size categories	No. (*lakh*)	Percentage
Small farmers (Up to 2 ha)	3.59	34.09
Other farmers (More than 2 ha)	6.94	65.91
Total	10.53	100.00

Source: Statistical Abstract of Punjab, 2016-17

The total number of operational holdings of small farmers, with operational holdings up to 2 ha, taken for the study, was 3.59 lakhs which were about 34 per cent of the total operational holdings in the state. The number of other farmers, with operational holdings more than 2 ha, was 6.94 lakhs which was about 66 per cent of the total land holdings in the state (Table 1).

Table 2: Income of farming households in Punjab

(Rs/household)

Farm category (ha)	Sample (No.)	Gross crop income	Crop expenditure	Net crop income (a)	Net dairy income (b)	Net farm income (a+b)	Net non-farm income	Total income
Small farmers	72	198808	56400	142409	63820	206229	10254	216483
Other farmers	172	1050290	269042	781248	75042	856290	38648	894938
Total	244	799033	204583	594450	71731	666181	33270	699451

Source: Singh et al. (2016)

The farm income level of smaller farmers in comparison to other farmers in the state will help give a descriptive comparative picture regarding their economic wellbeing. It can be seen from the Table 2 that the net income per household from crop farming of the farmers with farming as their mainstay was Rs 142409 for smaller farmers while that for the larger farmers was Rs 781248 which was almost 5 times more. In order to survive on agricultural income, the smaller farmers took up dairying more than their larger counterparts as the difference in the income generation from dairying was lesser (the difference between the income from dairying of smaller and other farmers was about 1.17 times). This clearly indicates that while farming was the mainstay of income of all the sampled farmers, the smaller farmers could not generate similar income as the other farmers did which could be attributed to absence of economies of scale, resource deprivation, lack of access to markets and support from the government.

In the absence of farm income being able to generate sufficient income for the small farm households, they depend upon non-farm income like small enterprises, meagre jobs/ labour in the rural or urban sectors, etc. The small farmer households were able to generate about Rs 10254/household from non-farm sources while the per household income of the other farmers was about Rs 38648 from the non-farm sources. This clearly indicates that resources play a significant role in the generation of income even from the non-farm sources. According to the NSSO 2013, income of agricultural households from non-farm sources was 47.86 per cent at all India level while that of Punjab was merely 9.47 per cent. In order to improve the viability of the agricultural households, enhancing the income generation from the non-farm sector is crucial.

Table 3: **Economic surplus of farm household in Punjab**

(Rs/household)

Farm category (ha)	Total income	Domestic expenditure	Economic surplus
Small farmers	216483	187632	28851
Other farmers	894938	253559	641379
Total	699451	234105	465346

Source: Singh et al. (2016)

The economic surplus as seen in (table 3) is the surplus post adjustment of both farm and domestic expenditure. The small farm households were able to generate Rs 28851 per household which is about 22 times lower than the surplus generated by other farmers. On an average it was about 16 times lower than the average economic surplus generated by farm household in Punjab. The disparity in income, low or no support in easing out cost of living for the smaller farmers, expensive education and health system are the main culprits which result in creating a large gap between the poor and affluent.

Table 4: Economic viability of farm household in Punjab, 2015-16

(Rs/household)

Farm category (ha)	Sample (no.)	Debt	Interest payment	10 % of principal amount	Net surplus income*	Debt income ratio	% Non-viable
Small farmers	466	207451	29050	20745	-20944	7.19	55.6
Other farmers	854	645814	91731	64581	485067	1.01	18.1
Total	1320	491058	69580	49106	346660	1.06	27.04

*Net surplus income = Economic surplus -Interest payment-10 % of Principal amount

The extremity in the debt income ratio of the two groups of the study presents concerns about the economic distress and the bleak future economic progress of small farmers. The average debt of the small farmers was to the tune of Rs 207451 while that of the other farmer was Rs 645814 (Table 4). Though the debt of the other farmers is higher but so is their capacity to repay. As we dwell into the issue of indebtedness it becomes clearer that the small farmers end up generating a negative income as post the payment of interest on debt and only a part of their total debt (10% of the total debt) their incomes become negative (Rs 20944). Further, it can be seen that 55.6 per cent of the smaller farmers are non-viable as compared to only 18.1 per cent of their larger counterparts. Non-viability is judged if the net surplus income after making allocations for the interest payment and part payment of the principal is negative.

Table 5: Source-wise amount of debt on farmers in Punjab, 2016-17

(Rs/household)

Category	Institutional loan	Non-institutional loan	Total
Small farmers	165789 (79.92)	41662 (20.08)	207451 (100)
Others farmers	555714 (86.05)	90101 (13.95)	645814 (100)
Total	418058 (85.13)	73000 (14.87)	491058 (100)

The story of small farmer indebtedness becomes clearer if we can present the facts of the root cause of the problem. One of the main causes of the vicious cycle of indebtedness is the dependence on non-institutional sources of finance. Though these sources of finance are easily available and accessible anytime and for any purpose, but their exploitative terms silently push the farmers into a debt trap. Despite the extensive institutional network being created over a period, the dependence of the farmer on the non-institutional financing network highlights a lag. The study (Table 5, 6 and 7) presents that about 20 per cent of the small farmers and about 14 per cent of the other farmers were still dependant on the non-institutional sources. Though government commercial banks and cooperative societies contributed a larger proportion of the institutional loans for small farmers, the regional rural and private banks need to improve their accessibility and availability of loans for this sector which requires government initiatives and directions.

Table 6: Sources of institutional debt of farmers in Punjab, 2016-17

(Rs/household)

Category	Govt. commercial banks	Cooperatives bank/society	Regional Rural Banks	Private banks	Total
Small farmers	76165 (45.94)	51623 (31.14)	13659 (8.24)	24341 (14.68)	165789 (100)
Other farmers	309039 (55.61)	99324 (17.87)	35970 (6.47)	111382 (20.04)	555714 (100)
Total	226827 (54.26)	82484 (19.73)	28093 (6.72)	80654 (19.29)	418058 (100)

Among the non-institutional source of finance, commission agents were the main source of lending for both the small and other farmers. There is a need for strong measures to dilute their role which requires gigantic and vital efforts from the government to improve agricultural marketing and institutional lending for agricultural purposes (Singh, 2014).

Table 7: Sources of non-institutional debt of farmers in Punjab, 2016-17

(Rs/household)

Category	Commission agent	Landlords	Shopkeepers	Relatives/ Friends	Total
Small farmers	29077 (69.79)	1696 (4.07)	2338 (5.61)	8551 (20.53)	41662 (100)
Other farmers	74732 (82.94)	3232 (3.59)	3987 (4.43)	8150 (9.04)	90101 (100)
Total	58614 (80.29)	2689 (3.68)	3405 (4.66)	8292 (11.36)	73000 (100)

The table 8 presents a further worrisome picture that expresses not only gap between the poor and rich farmers but also the hope for their future economic progress; raises eye brows regarding the efforts being made for their economic upliftment by Punjab state. It can be clearly seen that of the total power subsidy bill of Rs 5977, the small farmers have a share of only 7 percent while the rest is enjoyed by other farmers (Table 8). The reach of the fertilizer and canal irrigation is no better as the actual needy, resource-poor and deserving farmers share just about 9 per cent each of the total subsidy bill respectively, and the rest goes to benefit those who do not require much financial assistance. This clearly presents the flaws in implementation and loopholes of the developmental policies of the state.

Table 8: Share in farm subsidies of small farmers in Punjab, 2016-17

(Rs crore)

Type of subsidy	Total subsidy	Small farmers		Other farmers	
		Share in subsidy	%	Share in subsidy	%
Power	5977	418	7.00	5559	93.00
Fertilizers	5600	522	9.30	5078	90.70
Canal Irrigation	1000	90	9.00	910	91.00
Total	12577	1030	8.20	11547	91.80

The low level of economic surplus from farming, growing APC, and bleak future of growth in agriculture is forcing farmers to reconsider their decision to continue with farming. A field survey by department of Economics and Sociology, PAU revealed that on the whole 14.39 per cent of the farmers left farming; of the total small farmers, 21.40 per cent left farming in the state since 1991 (Singh et al., 2007).

Table 9: **Number of Families who Left Farming in Punjab since 1991**

Category	Total number of the farm families in sampled villages	% of farmers who left farming
Small farmers	1103	21.40
Other farmers	899	5.78
Total	2002	14.39

Source : Singh K et al. (2007)

Conclusion

The Punjab agricultural economy, one of the benchmarks for agricultural development across the country, is facing various challenges. Though the green revolution turned around the economy, but about 5 decades later the agricultural sector seems to be reaching its potential in the absence of significant changes in the methods, modes and technology for farming. In this era, where capital investment has become crucial for generating acknowledgeable returns, it is the small farmers (up to 2 ha) that are facing the financial crunch and undergoing distress. The present study is an attempt to highlight the viability issues of small farmers in the capital intensive model of farming during liberalised phase of economy. It was found that small farmers in Punjab form about one-third of the total farm landholdings. The per farm earnings of the small farmers was almost five times lower than other farmers (more than 2 ha). The economic surplus per farm of the small farmers was found to be about Rs 29000 while that of other farmers was about Rs 641000. Due to disparity in income, low or no support in easing out cost of living for the smaller farmers, expensive education and health system further create a larger gap between the haves and have nots. The study highlights that about 55 per cent of the smaller farmers were non-viable while the percentage of non-viable other farmers was about 18 per cent. Despite the aggressive attempts to spread network of institutional credit, about 15 per cent of the total farm households in Punjab depend upon the non-institutional sources for loans, of which commission agents formed a larger proportion. Another aspect which requires attention is the fact that the financial assistance schemes that had been framed to provide support to the peasantry, especially the smaller farmers, the larger farmers are making the most of it, and hence the exchequers' money is being utilized to benefit the farmers who do not need the assistance. Of the heavy subsidy bill of power (Rs 5977 crore), fertilizer (5600 crore) and canal irrigation (Rs 1000 crore), the small farmers have an access to only 7 per cent, 9.30 per cent and 9.00 per cent respectively; the rest being enjoyed by the other farmers. Moreover, the policy of MSP is also benefiting other farmers as the small farmers have a very low share of the total marketable surplus of both paddy and wheat crop. The growing inequality, non-viability and survival challenges involved in small farming is forcing many farmers to quit farming and find alternate source of income. Of the total farmers (14.39 per cent) who have left farming the small farmers formed about 21 per cent, further

highlighting their worrisome condition. There is a serious need to mull over the situation of resource-poor small farmers. According to the NSSO 2013, income of agricultural households from non-farm sources was 47.86 per cent at all India level while that of Punjab was merely 9.47 per cent. In order to improve the viability of the agricultural households, enhancing the income generation from the non-farm sector is crucial. Rational distribution of subsidies in order to benefit the deserving, and utilisation of the surplus budget for initiating other schemes for supporting the small farmers would go a long way in improving the financial health of small farmers. The government is encouraging the larger farmers to give-up subsidies so that these could be utilized for small farmers is an appreciable step but there is a need to limit or curb the subsidies for larger farmers. Encouraging cooperative farming would direct small farmers towards farming with good returns. Subsidising education and health facilities for small farmers would also improve the situation of small farm households. Though, the government has public education and health institutions which provide services at subsidised rates but these institutions are not efficiently run hence, the poor farmers have to avail expensive private services. The government need to play a pivotal role in improving the wellbeing of the needy section of the farming community, only then it will be possible to achieve comprehensive development.

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