
Agrarian Crisis and Depeasantisation in Punjab: Status of Small/Marginal Farmers Who Left Agriculture

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I

INTRODUCTION

Agriculture in Punjab had high growth for a long time up to early 1990s; it slowed down thereafter due to the available potential of resources and technology getting exploited closer to the possible limits, which led to increasing costs, shrinking resource base, declining productivity, profitability and incomes (Kalkat *et al.*, 2006; Singh, 2009). The Punjab peasantry especially the small/marginal farmers also had little alternative but to go for capital-intensive farming. The over-exploitation of natural resources, especially groundwater, further dragged the farm incomes towards digging deeper for submersible pumps installation (Singh, 2008). During the era of high growth, the farmers attained high living standards, which also led to their social and cultural obligations being more expensive. Little wonder, the indebtedness of the farmers, more so to the non-institutional agencies and particularly of the small/marginal farmers, whose economic base is poorer, increased faster than their repaying capacity. As a result, their distress continued to mount.

The indebtedness of the peasantry had been a serious issue since long. It was the Punjab province where Malcolm Darling brought out the classic work on rural economy in the early 1920s and reported that about four-fifth of the Punjab peasantry was under the debt to the tune of 5-6 times of their annual income. His overarching conclusion was that, "Punjab peasant is born in debt, lives in debt and dies in debt" (Darling, 1925). In 1950-52 the National Sample Survey Organization conducted a survey on rural indebtedness, which revealed that 63 to 78 per cent farmers were indebted (NSSO, 1956). The farmers' indebtedness continued, with little reprieve for some time. The institutional loans gave a good fillip during 1970s and 1980s but the decade of 1990s showed a slowdown, not only in institutional credit but also in the growth rate of agriculture (Singh, 2009). The agrarian distress reached a high climax by early 2000, when the Government of India sponsored an all-India independent NSSO study (2003), which reported that 40 per cent of the Indian farmers and 37 per

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cent of the Punjab farmers have expressed their desire to leave farming, it being not a profitable occupation (NSSO, 2005). A recent study by the Punjab State Farmers Commission and Punjab Agricultural University puts the 'bad climax' in perspective; it reported that on an average a farmer was indebted up to 64 per cent of his annual income but the farmers up to 4 hectare (ha) were indebted up to about 90 per cent of their annual income. Further, the stress level of indebtedness approaching bankruptcy, which was defined as loan being equivalent more than two years' family income, included 12.8 per cent of the farm households. And this was inversely associated with the farm size. About 19 per cent of the marginal and small farmers were under acute burden of indebtedness (Singh *et al.*, 2007).

The main consequence of agrarian distress has been that the marginal and small farmers, who find it increasingly hard to sustain on farming, are getting pushed out from agriculture. But due to lack of any skills, it is difficult to get absorbed in the industrial sector (Gill, 1994). Thus, a large chunk of 'reserve army of labour' is accumulating in the rural economy. According to unpublished official estimates about 35 lakh persons in 2006 were unemployed in the state; out of whom about 24 lakh belong to rural areas.

There is a decline in the proportion of cultivators in the total workforce of the State that have added to the unemployed or semi-employed force, which has built a pressure on an already over crowded agricultural labour market. The proportion of cultivators in the total workforce decreased from 35.4 per cent in 1981 to 31.7 per cent in 1991 and further to about 23 per cent in 2001. The decline has been more severe in the rural sector where the proportion of cultivators in the total workforce declined from 46.1 per cent in 1980-81 to 31.7 per cent in 2000-01 (Government of Punjab, 2007). The lower section of the peasantry is forced to sell or lease-out their land and many of them join the labour market. According to the law of the increasing division of the labour in society, small scale peasant agriculture must inevitably give way to large scale capitalist agriculture (Thorner *et al.*, 1966). Karl Marx said, the peasant who produces with his own means of production will either gradually be transformed into a small capitalist who also exploits the labour of others, or he will suffer the loss of his means of production and be transformed into a wage worker (Marx, 1963).

Punjab is an agriculturally developed but land scarce economy. The number of operational holdings in the state decreased from 11.17 lakh in 1990-91 to 9.97 lakh in 2000-01. The maximum decline was observed in case of small/marginal farmers; from about 5 lakh in 1991 to 3 lakh in 2001 (Government of Punjab, 2007). The plight of about 2 lakh of the small/marginal farmers who left farming is not known. This throws up a plethora of questions: Where have these farmers gone? What is their plight and status? What happened to their land? Can something be done for them? These and many other questions prompted this study. The objectives of the paper are: (1) to examine the magnitude of shift from farming to non-farming activity in the

Punjab state, (2) to assess the plight and status of the shifting families in the state and (3) to identify the factors affecting the phenomenon and suggest policy measures.

II

APPROACH OF THE STUDY

This study presents an empirical analysis of the status of farmers, particularly the small/marginal ones, who have left farming in an agriculturally developed state of Punjab during the last two and a half decades or so. There are 20 districts in the Punjab state, which are administered through 141 Development Blocks; two Blocks were randomly selected from each district. One village (cluster of villages in case the selected village was small) from each selected block was randomly selected. Thus in all, 40 villages/village clusters were randomly selected.

The preliminary census showed that the total number of families who left farming was 920 in the selected villages. Some of these families are settled in the nearby cities or other states or abroad, which made it difficult to get data from those families.¹ The data from all the available families (which were 589 out of 920) in the selected villages were collected through personal interview method on specially structured questionnaire. Out of these, 217 were marginal farmers (<1 ha), 192 were small farmers (1-2 ha), 134 were medium farmers (2-4 ha) and 46 were large farmers (> 4 ha). The main objective of this study was not to study the 'farming-economics' but 'farmers-leaving-farming', which suggests that the 'farmers at the verge' of leaving even up to 4 ha were hardly different than the ones below 2 ha. The study, therefore, concentrated more on these categories of farmers though the status of the 46 large farm households who left farming also included to some extent.²

III

PROCESS OF DEPEASANTISATION

The transformation of workforce from farming to non-farming sector is either growth-led transformation or distress-induced one. The growth-led transformation is related with the developmental factors like mechanisation of agriculture, increasing employment and income, high education level, urbanisation, development of secondary and tertiary sectors and even state intervention for generating employment opportunities. These factors are known as 'pull factors', which contribute to 'pull' the workforce from farming to more lucrative non-farm activities.

On the other hand, distress-induced transformation is based on the hardship or crisis driven factors like falling productivity, increasing costs, decreasing returns and crop failure; unemployment and underemployment; increasing indebtedness and even suicides. These factors are known as 'push factors', which push the agriculture workforce towards non-farm activities to eke out their livelihood. This study examines the dynamics of shift of farmers towards non-farming activities, and how far it is due to 'growth-led' pull factors or a 'distress-induced' one.

(1) *Magnitude of Farmers Families Who Left Farming*

There were 7520 farmers in the 40 selected villages/village clusters doing farming at the time of study. Another 920 farmers had left farming thus making a total of 8440 farmers of whom 11 per cent had left farming. Out of 920 farmers who had left farming, only 589 were still in the villages (Table 1). Based on the distribution of 589 farm holdings, it was found that the highest proportion of the small farmers operating 1–2 ha (15 per cent) followed by medium farmers operating 2–4 ha (11.3 per cent) and marginal farmers operating less than 1 ha (10.8 per cent) left farming. This makes our presumption that the farmers up to 4 ha belong to the same category as the ones operating less land particularly in so far as the issue of leaving the farming is concerned. It also portrays that the distinct category of small farmers (1–2 ha) decide a ‘bit early’ to leave farming and the marginal (< 1 ha) and the medium (2–4 ha) ones ‘keep hanging-on’ for more time; the former may be more due to ‘lack of opportunities relevant to their skills and/or aspirations, whatever these be’ and the latter may be due to still ‘somewhat better but eroding economic base’. On the whole, 12.1 per cent farmers operating up to 4 ha left farming. In contrast only 4.9 per cent of the large farmers (> 4 ha), had left farming.

TABLE 1. NUMBER OF FAMILIES WHO LEFT FARMING IN PUNJAB, SAMPLE ESTIMATES

Category (1)	Total number of farmers (2)	Farmers who left farming			
		Sample (3)	Distribution (per cent) (4)	Total (5)	Per cent (6)
Marginal (< 1ha)	3138	217	36.8	339	10.8
Small (1-2 ha)	1997	192	32.6	300	15.0
Medium (2-4 ha)	1846	134	22.8	209	11.3
Sub-total	6981	543	92.2	848	12.1
Large (> 4 ha)	1459	46	7.8	72	4.9
Total	8440	589	100.0	920	10.9

(i) *Region-Wise Shifting From Farming*

The shift from farming varied across different socio-cultural and agro-climatic regions of Punjab (Table 2). It was the highest in Doaba region where 1/6th (16 per cent) of the total families left farming and at a lower pace of 1/9th in the Malwa (11.8 per cent) and 1/19th in Majha (5.3 per cent) regions of the state. Settling abroad became more prevalent earlier in Doaba region where majority of the farmers are marginal and the highest proportion among them (25.5 per cent) left farming. A major part of the sub-mountainous region also comes from the Doaba region, and thus about 21 per cent of the farmers in this region left farming followed by South-western region (11.2 per cent) and Central region (10.2 per cent). Thus it can be concluded that 1/5th of families left farming in sub-mountainous region (where

agricultural productivity is also lower) as compared with about 1/10th in the other two regions.

TABLE 2. REGION-WISE PERCENTAGE OF FAMILIES WHO LEFT FARMING, PUNJAB

Region (1)	Sample size (2)	Marginal (n=217) (3)	Small (n=192) (4)	Medium (n=134) (5)	Large (n=46) (6)	Total (n=589) (7)
Socio-cultural Region						
Majha	72	3.2	7.9	9.6	7.4	5.3
Malwa	399	12.8	17.6	11.2	4.6	11.8
Doaba	118	25.5	12.7	13.5	6.3	16.0
Agro-climatic region						
Sub-mountainous	35	29.8	12.9	17.0	-	20.5
Central	388	8.5	14.2	11.8	6.3	10.2
South-western	166	16.0	17.5	9.7	3.4	11.2

(ii) *Period-Wise Magnitude of Families Who Left Farming*

The agriculture crisis in Punjab had taken the roots since early 1990s and the process of farming families leaving farming gathered momentum particularly after 2000 since when the proportion of farm families who left farming stands at 63.6 per cent (Table 3). This is the period of declining productivity, increasing costs and decreasing profitability in agriculture (Singh, 2009). The proportion of farm families who left farming during 1990s and before 1990 worked out to 32 and 5 per cent respectively. Almost a similar type of trend was observed in the case of marginal, small and medium farm size category.

TABLE 3. PERIOD-WISE PROPORTION OF FARMERS UP TO 4 HA WHO LEFT FARMING, PUNJAB

Period (1)	Marginal (2)	Small (3)	Medium (4)	Sub-total (5)
Before 1990	4.6	4.2	6.7	5.0
During 1990s	31.8	29.7	35.8	32.0
Since 2000	63.6	66.1	57.5	63.0
Total	100	100	100	100

(2) *Reasons of Leaving Farming*

Farming may not be a lucrative business, but the farming and ownership of land are associated with the socio-economic status of a person in the rural society in India in general and in Punjab in particular. There are multiple reasons/responses such as the declining productivity, higher input costs, low output prices, extensive farm mechanisation, fragmentation of land holdings, low net income of the farmers, etc., which forced a section of Punjab peasantry to continuously look for opportunity for leaving farming and joining even lower hierarchy of the society. Obviously these are the economic reasons (Table 4).

TABLE 4. PER CENT FARMERS STATING REASONS FOR LEAVING FARMING, PUNJAB

Reasons (1)	Marginal (n=217) (2)	Small (n=192) (3)	Medium (n=134) (4)	(multiple responses)	
				Sub-total (n=543) (5)	Large (n=46) (6)
Low income from farming	71.4	59.9	58.2	64.1	45.7
Division of land	43.3	25.5	29.1	33.5	21.7
Debt repayment	35.5	29.7	31.3	32.4	21.7
Starting new occupation/service	25.3	22.4	25.4	24.3	15.2
High land rent making costly/difficult to lease in	14.3	17.2	23.9	17.7	23.9
Land rent was equal to net returns	6.0	14.6	20.9	12.7	15.2
Money needed for social needs	12.9	8.3	11.9	11.0	8.7
Children settled in other occupation	6.0	8.9	10.4	8.1	4.3
To go abroad	6.9	8.3	8.2	7.7	10.9
Emigrated elsewhere	1.4	0.5	0.7	0.9	
Others*	12.4	24.5	28.4	20.6	26.1

*Death of main earner, old age, crop failure, high land prices, intoxicants, etc.

Low income from farming was the predominant reason for leaving farming for about 71, 60 and 58 per cent of the marginal, small and medium farmers respectively. The sub-division of land, which further erodes the viability of holdings of below 4 ha aggravated due to capital intensive highly mechanised agriculture, which was the next major reason and reported by 43, 26 and 29 per cent marginal, small and medium farmers respectively. It is also important to note that debt repayment was the reason for leaving farming as was indicated by 36, 30 and 31 per cent marginal, small and medium farmers respectively.

The high land rent, which made it costly for the smaller farmers to lease-in, or also alternatively along with low income from farming that makes their earning from land rent equal to or sometimes even more than the net returns from farming; these were also the important factors that forced the tenant and tenant-cum-farmers to leave farming. About 18 per cent and 13 per cent of the farmers operating up to 4 ha left farming due to these reasons respectively.

To maintain social status in the society farmers have to spend considerable amount of money on social functions. There were about 13, 8 and 12 per cent marginal, small and medium farmers respectively, who stated this reason for leaving farming. Small-scale agriculture being a non-profitable activity, the next generation of the farmers does not want to continue this occupation and they settle down in some other occupations. This reason of leaving farming was reported by 8 per cent of the Punjab farmers operating up to 4 ha. Another about 8 per cent of these farmers left farming to go abroad and/or emigrated to other parts of the country.

A few large farmers also left farming but the relative placing of the statements of reasons varied.³ Thus almost all the important reasons except high land rent or land rent being equal or more than the net returns were indicated by larger majority of

small and marginal farmers than the large farmers. The four main reasons of leaving farming, viz., low income from farming, division of land, debt repayment and starting new occupation, which was reported by 24 to 64 per cent farmers operating up to 4 ha, was given by only 15 to 45 per cent large farmers, i.e., these reasons were given by 40 to 60 per cent more of the smaller farmers than the large farmers. In contrast 20 to 35 per cent more of large farmers gave the high land rent as the reason for leaving farming than the smaller ones. This shows that the distress factor was more prominent for leaving farming for the farmers operating up to 4 ha. This also means the relative play of pull factors was more significant for the large farmers of whom only a few left farming.

It may be concluded that low income from farming due to low productivity and high input costs were the main reasons of leaving farming in the state. The parcelisation and fragmentation of land holdings increased the cost of production, squeezed the returns and hence brought the farmers under debt. The smaller farmers (operating up to 4 ha) were the most severely affected by these problems. However, the other main reasons like high land rent and low returns as compared to land rent and money spent for social obligations were also responsible for pushing the smaller farmers away from agriculture. Thus the 'push factor' has impacted strongly those farmers operating up to 4 ha.

(3) New Occupations of Depeasantised Farmers

The main impetus to rural non-farm employment growth generally comes from the dominant rural economic sector namely agriculture (Mellor, 1976). After leaving agriculture in distress, the small and marginal farm families generally adopt lower level of activities due to scarcity of capital and technical skills (Table 5).

About 22 per cent of the farmers operating up to 4 ha joined the labour market after leaving the farming. This proportion was the highest (28 per cent) amongst the marginal farmers followed by the small farmers (20.8 per cent) and medium ones (12.7 per cent). Further, 4.6 per cent of these people started selling their labour in the agriculture sector itself. This proportion was the highest in case of marginal farmers (6.9 per cent) followed by the small (4.1 per cent) and the medium ones (1.4 per cent). In contrast, none of the large farmers who left farming joined the labour class. Due to inadequate industrial development in the state, only 3.3 per cent of the farmers who left farming could join as factory labour.

The nature of labour work of a large chunk (13.1 per cent out of 21.7 per cent) of these people alienated from agriculture as labourers is still unspecified; they work in almost all types of activities wherever the work is available to them. This work force can be called 'on demand labour' or 'versatile labour'. Throughout the year, they are ready to work, they work as and when, they are demanded on whatever jobs are available and wherever available.

TABLE 5. OCCUPATIONAL DISTRIBUTION OF FARMERS AFTER LEAVING FARMING, PUNJAB

		(per cent)				
Activity (1)	(2)	Marginal (n=217) (3)	Small (n=192) (4)	Medium (n=134) (5)	Sub-total (n=543) (6)	Large (n=46) (7)
Labour (n=118)	(i) Agriculture	6.9	4.1	1.4	4.6	-
	(ii) Factory	3.7	4.2	1.5	3.3	-
	(iii) Construction	1.4	0.5	-	0.7	-
	(iv) Unspecified ¹	16.1	12.0	9.8	13.1	-
	Sub-Total	28.1	20.8	12.7	21.7	-
Milkmen (n=53)		10.1	8.8	10.4	9.8	6.6
	(i) Capital interest	0.5	0.5	0.7	0.6	8.7
	(ii) Land rent	1.8	13.0	15.7	9.2	28.3
Distress-rentiers (n=53)	Sub-Total	2.3	13.5	16.4	9.8	37.0
Trader/dealer (n=4)	(i) Livestock	0.9	0.5	0.7	0.7	
	(ii) Vehicle	-	0.5	1.5	0.6	
	Sub-Total	0.9	1.0	2.2	1.3	6.6
Abroad (n=37)		6.9	6.8	6.7	6.8	8.7
Service (n=127)	Government	6.9	10.9	9.7	9.0	10.9
	Private	16.1	11.5	15.7	14.4	2.2
	Sub-Total	23.0	22.4	25.4	23.4	13.0
Entrepreneur (n=144)	(i) Flour mill	2.3	2.6	1.5	2.2	-
	(ii) Operator (truck, taxi, auto, van)	6.9	7.3	3.0	6.1	2.2
	(iii) Repair shop	5.1	4.2	1.5	3.9	
	(iv) Mason ²	2.8	2.6	0.7	2.2	
	(v) Grocery shop	2.8	4.7	1.5	3.1	10.9
	(vi) Miscellaneous ³	7.4	5.2	17.2	9.0	
	Sub-Total	27.2	26.6	25.4	26.5	13.1
Others ⁴ (n=4)		1.4	-	0.7	0.7	4.4
TOTAL		100.0	100.0	100.0	100.0	100.0

Notes: 1. Some of the farmers after leaving farming worked for some other farmers but without any payment (sort of exchange labour) before becoming a regular labour class.

2. Mason includes construction work, carpenter, saw.

3. Miscellaneous include brick kiln, mini rice mill, poultry farm, printing press, cable operator, dhabha, photographer, scrap-dealer (kawaria), etc.

4. Others include vegetable vendor, construction contractor, etc.

In fact, farmers, and particularly the smaller ones, are always looking for some job, preferably in the public sector. About 23 per cent of the farmers operating up to 4 ha who left farming did so after they got a job in the public or private sector. This proportion was almost the same for the three categories of farmers of up to 4 ha which was 23.0, 25.4 and 22.4 per cent for the marginal, small and medium farmers, respectively. The absorption of marginal farmers was the highest (16.1 per cent) in the private sector followed by the medium farmers (15.7 per cent) and the small farmers (11.5 per cent). About 7 per cent of the farmers who left farming migrated to other places/countries. This proportion was the same for all the three above farm size categories. There was a sizable number (21.1 per cent) of farmers who established their own low-capital investment low-earning businesses like flour mill (2.2 per cent), repair shop (3.9 per cent), construction work (2.2 per cent) and grocery shop (3.1 per cent) among these farmers. Similarly, about 6 per cent of these people became truck,

taxi, auto or van operators/drivers. Some of these operators drive their own vehicles and earn their livelihood. This proportion was about 7 per cent for marginal and small farmers and only 3 per cent for the medium farmers. Similarly, 9 per cent of these farmers set up other ventures like brick kiln, poultry farm, printing press, cable operator, dhaba, vegetable vendors, property dealer, photographer, priest, construction contractor and other activities. Another 10 per cent of the smaller farmers became milk-vendors; some of them also kept 1-2 dairy animals of their own.

Some of the farmers operating up to 4 ha who could not earn farm incomes better than the land rent, leased out their land (i.e., left farming) but could not find any opportunity to supplement their incomes from labour-earnings. Some of them even sold the little land they had in distress. Thus these people live on the meagre land rent or on the interest from the deposits made by selling their tiny pieces of land. After leaving farming, 9.2 per cent of these farmers were living on the land rent alone and another 0.6 per cent sold off their land and lived mainly on the meager interest-earnings. This section of the farming community performs no useful economic activity and is vulnerable to indulge in bad habits and even start taking intoxicants. This class can be categorised as 'distress-rentier class'. There was a direct relationship between the proportion of persons living as distress-rentiers and their farm size. It was 2.3, 13.5 and 16.4 per cent for marginal, small and medium farmers respectively.

Again, the large farmers leave farming to do different things. All the large farmers, who left farming stating the land rent to be higher as the reason for leaving farming became the rentier class (37 per cent). And unlike their smaller counterparts, these were not the distress-rentiers. In fact 11 per cent of the large farmers who left farming became commission agents, and another 6.6 per cent traders or dealers compared with none of their smaller compatriots becoming commission agent and only 1.3 per cent becoming petty traders/dealers. None of the large farmers joined the labour class, whereas 22 per cent of the smaller ones had gone into this category. Also more of the smaller farmers joined petty private service (14.4 per cent) whereas only few large farmers (2.2 per cent) had gone there and that too on a better one.

(4) Level of Satisfaction from the New Occupation

In an agrarian society like that of Punjab, farming is tagged with some social status. Thus, it is very difficult for the farmers to leave this occupation and join lower paid jobs or lower social status jobs or other activities in the economy. Thus some people who found jobs in public sector or joined other better paid activities were satisfied from their new professions while others were less satisfied from these occupations, even if some of them were earning better than when they were in farming (Table 6).

TABLE 6. LEVEL OF SATISFACTION FROM NEW OCCUPATION AFTER LEAVING FARMING, PUNJAB

Farm category (1)	Level of satisfaction (per cent)					Want to expand (7)	Want to go to new profession (8)
	Fully (2)	Medium (3)	Less (4)	Dissatisfied (5)	No response (6)		
Marginal	21.7	31.8	16.1	30.4	-	45.2	30.0
Small	24.5	32.3	22.4	17.7	3.1	50.0	21.4
Medium	33.6	31.3	16.4	17.2	1.5	48.5	17.2
Sub-total	25.6	31.9	18.4	22.7	1.4	47.7	23.8
Large	69.6	15.2	4.3	4.3	6.5	58.7	4.3

There were about 22, 25, 34 and 70 per cent of the marginal, small, medium and large farmers respectively who were fully satisfied with their new occupation. Thus better the resource base, better the level of satisfaction from the new occupation, which was too distinctive for the large farmers. However, in terms of willingness to expand the business, it was about the same (45 to 50 per cent) among farmers operating up to 4 ha and somewhat higher at 59 per cent for large farmers.

There were 46.5, 40.1 and 33.6 per cent farmers among marginal, small and medium ones who left farming and they were only somewhat satisfied or dissatisfied with the new profession. In contrast, only 8.6 per cent of the large farmers were in this category. Still all were not envisaging change to a new profession, though the proportion was of the same order being 30, 21.4, 17.2 and 4.3 per cent respectively. This is symptomatic of the lack of opportunities available to such distress farmers among the smaller ones.

(5) Status of Land Holding After Leaving Farming

Land ownership is a social prestige issue as well as an economic base for livelihood of rural families. Thus, the smaller farmers of up to 4 ha leaving farming in distress (or for that matter any farmer leaving farming) would still like to keep their land ownership intact but this could be done in toto by 51.7 per cent farmers and partially by another 11.4 per cent families. As many as 36.2 per cent such distress farmers had totally sold their land (Table 7).

TABLE 7. PER CENT FARMERS WHO SOLD/LEASED OUT LAND AFTER LEAVING FARMING, PUNJAB

Status of land holding (1)	Marginal (n=217) (2)	Small (n=192) (3)	Medium (n=134) (4)	Sub-total (n=543) (5)	Large (n=46) (6)
Total land sold	45.2	29.2	31.3	36.2	8.7
Partially sold	4.6	14.6	17.9	11.4	21.7
No land sale	48.4	56.3	50.8	51.7	69.6
Pure tenants	1.8	0	0	0.7	0
Total	100.0	100.0	100.0	100.0	100.0

The proportion of farmers who sold total land was the highest in case of marginal farmers (45.2 per cent), followed by small and medium ones (29 to 31 per cent) and the lowest by the large ones (8.7 per cent). There were another 4.6 per cent marginal farm families who sold their land partially, whereas the percentage of small and medium farm families who partially sold their land, worked out to be 14.6 and 17.9 per cent respectively. There were few marginal families (0.7 per cent) who were found as purely tenants and did not have any land to sell.

Region-wise the retention of land (no sale) was maximum in Doaba (73 per cent), followed by Majha (66 per cent) and Malwa (43 per cent). The relatively poorer conditions of these farmers in Malwa led to the largest majority selling total land (42 per cent) as compared with 23 per cent in Doaba and 22 per cent in Majha. Again majority of the farmers who left farming in the sub-mountainous region did not sell their land (68 per cent) as compared with the Central (54 per cent) and the South-western (45 per cent) regions. The South-western region was more affected by cotton failure in the late 1990s, leading to acute agrarian crisis of indebtedness and farmer suicides (Kumar *et al.*, 2006). In this region, 41 per cent small and marginal farmers leaving farming had to sell their total land. In the Central and Sub-mountainous regions, 34 per cent and 27 per cent farmers who left farming sold their total land (Table 8).

TABLE 8. STATUS OF LAND HOLDING AFTER LEAVING FARMING, REGION-WISE, PUNJAB

(per cent farmers operating up to 4 ha reporting)

Region (1)	Sample size (2)	Total sale (3)	Partial sale (4)	No sale (5)
Socio- cultural region				
Majha	72	21.5	12.3	66.2
Malwa	399	41.8	14.8	43.4
Doaba	118	22.7	4.6	72.7
Agro- ecological region				
Sub-mountainous	35	26.5	5.9	67.6
Central	388	33.7	12.8	53.5
South-western	166	41.4	13.2	45.4

(6) *Change in Income After Leaving Farming*

Income plays a vital role in the transformation of work force in the society. The comparison of income from the previous and new occupations would show the plight of the farmers who left farming. The farmers respondents could respond correctly to the present level of income (after leaving farming) but it was rather difficult to collect this information precisely and directly for the previous income when they were still doing farming. Therefore, it was based on the farmers' perception of whether they have become better off now than when they were doing farming/or alternatively would they have been better off had they continued doing farming. While obtaining this information the farmers were broadly told or reminded about the prices of important agricultural commodities (wheat and rice) then and now. This segregated

the group of farmers who stated about the negative change in income after leaving farming. Among those who felt that they were better off now, further categorisation was asked for whether now more than double the (comparable) income than before and segregated another category. And the remaining ones were asked for to place themselves in the other three categories. Also, for this information we followed the principle of 'whenever in doubt, leave it out'. Thus this information was available for only 322 families out of the total sample of 543 families operating up to 4 ha and for 23 large farmers. It was found that the change in income showed variations from negative to an increase of more than hundred per cent. Among the marginal, small and medium farm families about 10, 30 and 33 per cent families respectively, were worse off than their previous economic level. Even 26 per cent large farmers responding were worse off now than before (Table 9).

TABLE 9. CHANGE IN INCOME AFTER LEAVING FARMING, PUNJAB

(per cent)					
Change in income (1)	Marginal (n=132) (2)	Small (n=114) (3)	Medium (n=78) (4)	Sub-total (n=132) (5)	Large (n=23) (6)
Declined	10.0	29.8	33.4	22.7	26.1
Up to 25 per cent	3.1	16.7	11.5	9.9	26.1
25-50 per cent	7.7	10.5	11.5	9.6	
50 -100 per cent	10.0	15.8	17.9	14.0	21.7
> 100 per cent	69.2	27.2	25.6	43.8	26.1

It is also significant to note that 77 per cent of the farm households operating up to 4 ha were better off after leaving farming. Interestingly, due to meager income from tiny holdings, 69 per cent of the marginal farmers after leaving farming had their income increased by more than 100 per cent. In contrast only 26 - 27 per cent small, medium and large farmers were earning comparatively more than double the (comparable) income from their new professions. However, it may also be noted that the absolute increase in income of the small, medium and large farmers, on an average, is positively associated with the farm size, which was the predominant base of their previous incomes.

The change in income after leaving farming depends upon the type of occupation and the situation in which the farmer lands in like selling land to start some new venture/enterprise or to stave off the previous distress (e.g. payment of old debt), etc. These correlates are studied hereafter.⁴

(i) *Occupation and Change in Income After Leaving Farming*

The change in income after leaving farming depends upon the type of occupation adopted by the families. Those families whose income level has gone down after leaving farming mainly belonged to the distress-rentier, labour and trader/dealer

(Table 10). The distress-rentiers were doing nothing else and 64 per cent of them lived on lower incomes now. Their probability of getting drug-addict was higher. In contrast, 63 per cent of those who joined the labour-class had better income than before. Basically, those people who joined labour market generally came from marginal farm families. The previous income level of these families was also very low. Further, only those families who joined the organised sector as factory workers could double their income from their previous income level. Even the traders/dealers, which were very menial and small scale enterprises for these farmers operating up to 4 ha came next with 29 per cent facing a decline in income although another 43 per cent had income increase of up to 50 per cent and 28 per cent having even more than double the income than before.

TABLE 10. CHANGE IN INCOME AND PROPORTION OF FAMILIES IN NEW OCCUPATION, PUNJAB

Activity (1)	<i>(per cent farmers operating up to 4 ha)</i>				Sample size (6)
	Negative (2)	Up to 50 per cent (3)	50-100 per cent (4)	> 100 per cent (5)	
Labour	36.67	36.67	26.66	-	30
Milkmen	10.0	17.5	20.0	52.5	40
Distress-rentier	63.6	18.2	-	18.2	33
Trader/Dealer	28.6	42.9	-	28.6	7
Abroad	-	7.4	7.4	85.2	27
Service	13.3	14.7	16.0	56.0	75
Entrepreneur	19.6	18.7	19.6	42.1	107
Others	-	66.7	-	33.3	3
Total	22.4	19.3	13.8	44.5	322

Notes: 1. Entrepreneurs include: Bhatta, mini rice mill, poultry farm, printing press, cable operator, dhabha, operator (truck, taxi, auto, van), vegetable vendor, property dealer, photographer, scrap-dealer (kawaria), construction contractor.

2. Labour includes; agriculture labour, construction labour, factory labour.

Contrary to the general perception that service class is always a privileged section of the society, in the present study about 13 per cent of this class also experienced negative income. Basically, these persons are placed at lower posts like driver of private vehicles and menial jobs in the private sector, etc. However, the fact still remains sound, as 56 per cent had their income increase by more than double the previous income and overall, 87 per cent had higher income than before.

Being milkmen raised the income of more than 52 per cent families to more than double the previous income and another 38 per cent also had higher income up to 100 per cent. Having a little base of their own (like 1-2 dairy animals), they do relatively better than the other (small) entrepreneurial categories to which the small/marginal farmers shift; of these only 42 per cent had more than double the previous income and about 20 per cent of them even had lower income than before. There is need to promote the self-occupation.

(ii) *Status of Land Holding After Leaving Farming and the Change in Income*

About 36 per cent of the farmers operating up to 4 ha sold their total land and left farming. Therefore, it is important to examine the relationship between land ownership and change in level of income. Table 11 reveals that majority (54.6 per cent) of the marginal farmers who sold off all their land had recorded more than double the increase in their income. This shows that if they are not better off even after leaving the farming, it is better to sell off their tiny piece of land, particularly in the case of marginal farmers even though it deprives them of whatever little asset/security they had, and that too the land, which enjoys a prestige in the rural sector. However, in the case of medium farmers of 2–4 ha, selling total land and leaving farming, for a majority (68.4 per cent) it turned out to be bad proposition as their income declined. Even in the case of 46.9 per cent small farmers, owning 1–2 ha, leaving farming led to a more distress situation. This is symptomatic of their lack entrepreneurial skills to do better or they might have been in more distress to sell their total land for other reasons (such as to repay their old debts, etc.) and hence become more poor. On the whole, 34 per cent of the smaller farmers operating up to 4 ha who sold their total land and left farming had lower income than before.

TABLE 11. CHANGE IN INCOME LEVEL OF THE FARMERS WHO SOLD TOTAL LAND, PUNJAB
(per cent farmers operating up to 4 ha)

Farm category (1)	Change in income				Sample size (6)
	Negative (2)	Up to 50 per cent (3)	50-100 per cent (4)	> 100 per cent (5)	
Marginal	14.5	14.5	16.4	54.6	55
Small	46.9	28.1	6.2	18.8	32
Medium	68.4	21.1	10.5	-	19
Sub-total	34.0	19.8	12.2	34.0	106

In contrast, almost all the categories of farmers who kept land, and rather leased out the whole of it to take up a new occupation in addition, became better off (Table 12). The income level of 85 per cent of the farmers improved due to keeping land and shifting to a new occupation. Basically by leasing out land, these people earn some income as a rent, which was more than their labour-income from farming; thus the income from their new occupation was an additionality element. It shows that these poor farming class, while leaving farming, should not sell their land, if they can afford to; but rather lease out to keep supplementary earning from the be-little land they have.

TABLE 12. CHANGE IN INCOME LEVEL OF THE FARMERS WHO LEASED OUT THEIR LAND, PUNJAB
(per cent farmers operating up to 4 ha)

Farm category (1)	Change in income				Sample size (6)
	Negative (2)	Up to 50 per cent (3)	50-100 per cent (4)	> 100 per cent (5)	
Marginal	3.8	7.6	10.1	78.5	77
Small	21.7	25.3	20.5	32.5	78
Medium	19.7	23.0	23.0	34.3	61
Sub-total	14.8	18.4	17.5	49.3	216

(iii) *Time of Leaving Farming and Change in Income*

Why do farmers keep on doing farming even when in distress is brought out in the relationship between time period of leaving farming and change in income level (Table 13). Majority of the smaller farmers operating up to 4 ha (84 per cent) who left farming after 2000, recorded increase in their income. This figure decreased as the period of leaving was more in the past. Thus as many as 53 per cent of these farmers who left farming before 1995, now have incomes lower than when they were farming; this figure was 28 and 16 per cent for farmers who left during 1995-2000 and after 2000. This is a very precarious situation for these farmers. They leave farming in distress and more of them face declines in incomes and thus again get entrapped in distress. This suggests that there should be a long-term strategy for such strata of 'agrarian-class-in-distress' which would sustain their income-improvements in the long run. There were 33, 43 and 47 per cent farmers whose income more than doubled as they left farming before 1995, during 1995 to 2000 and after 2000, respectively. This shows that the distress farmers continue as long as they can, in the wake of uncertainties of the few alternatives they can think of/or are available, which might turn out to be better afterwards.

TABLE 13. TIME PERIOD AND INCOME OF THE FARMERS AFTER LEAVING FARMING, PUNJAB

Period (1)	Change in income (per cent farmers operating up to 4 ha)				Sample size (6)
	Negative (2)	Up to 50 per cent (3)	50 – 100 per cent (4)	> 100 per cent (5)	
Before 1995	53.4	10.0	3.3	33.3	30
1995-2000	27.9	21.3	8.2	42.6	61
Since 2000	16.3	18.8	18.4	46.5	231
Total	21.7	18.5	15.2	44.6	322

Thus 77 per cent of the farmers operating up to 4 ha had increase in income after leaving farming; and about 45 per cent had even more than 100 per cent increase. Among the distress-rentiers, who do nothing after leaving farming and live on meager land rent, 64 per cent had a fall in income. In contrast 63 per cent of those who joined labour class had increase in their incomes. About 90 per cent of those who adopted dairy/milkmen had increase in income with 53 per cent having even more than 100 per cent increase. Likewise, 80 per cent self-employed and 85 per cent of those who did not sell any land also had increase in income. The income of about 53, 28 and 16 per cent farmers who left farming before 1995, during 1995-2000 and after 2000 had lower income than before thus being the ones who left in distress and again over time got entrapped in distress thereby warranting a long term strategy for such 'agrarian-class-in-distress'.

(7) Self-Occupation After Leaving Farming: Problems and Perceptions

Under the pressure of agrarian crisis, the marginal farmers in particular and the farmers up to 4 ha in general have been finding very hard to live on farming income alone. Obviously, they have been forced to be pushed out of agriculture. Some of these people settled in their own small businesses but during the establishment and functioning of self-employment enterprises they faced a number of problems; many others too wanted to start their own self employment. Therefore all the respondents earlier operating up to 4 ha were asked about the problems they faced for settling in the new professions (Table 14) and their perceptions regarding the support from the government for better settling in their new occupations (Table 15).

TABLE 14. PROBLEMS FACED IN SETTLING IN SELF-EMPLOYED VENTURES
AFTER LEAVING FARMING, PUNJAB

<i>(per cent multiple response of farmers operating up to 4 ha)</i>				
Problems (1)	Marginal (n=217) (2)	Small (n=192) (3)	Medium (n=134) (4)	Sub-total (n=543) (5)
Capital/funds	30.9	28.6	26.9	29.1
Corruption	22.1	19.3	18.7	20.2
Power	16.6	15.6	17.2	16.4
Competition from large units	13.8	13.5	13.4	13.6
Labour problem	17.8	7.3	13.4	9.0
Others*	7.8	2.1	3.7	4.8

*Technical skill, repayment of credit, medical facilities for animal, high cost of inputs, etc.

TABLE 15. PERCEPTIONS OF RESPONDENTS REGARDING SUPPORT FROM THE
GOVERNMENT, PUNJAB

<i>(per cent multiple response of farmers operating up to 4 ha)</i>				
Support (1)	Marginal (n=217) (2)	Small (n=192) (3)	Medium (n=134) (4)	Sub-total (n=543) (5)
Loan at low rate of interest	39.2	39.6	30.6	37.2
Subsidy on inputs	29.5	27.6	26.9	28.2
Control on corruption	22.6	24.3	25.4	23.1
Power supply	18.9	21.3	24.6	21.2
Technical knowledge/training	18.4	16.1	12.7	16.2
Input supply	13.8	13.5	13.4	13.6
Assured marketing	12.4	10.9	13.4	12.2
Others*	6.5	4.2	2.2	4.6

*Others include job opportunities, health insurance without premium, non-collateral loans.

The capital requirement was the most important problem reported by 29 per cent of such farmers. The next significant problem was the corruption in government offices at various stages of establishing and functioning of enterprises, which was reported by 20 per cent of the respondents. There were problems of power supply (16.4 per cent) and the competition from the large units (13.6 per cent). However, the

labour problem emerged the highest among marginal farmers (17.8 per cent) on account of very small business that too with little capital and the 'labour-to-be-engaged' being skeptical about getting their wages, rather than the small (7.3 per cent) and medium farmers (13.4 per cent). There were some other problems like technical skill, recovery of credit, medical facilities, which were also reported by about 5 per cent respondents.

The perceptions of the respondents regarding support from the government for better settling in their new occupations varied from institutional and infrastructural support and better management efficiency of the concerned government departments. From the overall point of view, 37.2 per cent families demanded loans on low rate of interest with easy repayment facilities to expand their profession. Another 28 per cent respondents demanded subsidies on inputs. The 'government should take effective steps to control corruption' was reported by 23 per cent respondents. Regular power supply was the next requirement reported by 21 per cent respondents.

Similarly, about 16 per cent respondents expressed their desire to make themselves technically sound. They asked for some special training course from any public institution, free of cost, in their respective fields. Better input supply was suggested by 14 per cent respondents and 12 per cent respondents asked for some sort of assured marketing of their output in the new profession.

IV

SUMMING UP

The process of depeasantisation in Punjab began since early 1990s and gathered momentum since 2000. More than 2 lakh small/marginal farmers have left farming due to economic distress. This study explores all the issues relevant to the process of depeasantisation. This field survey covered 40 villages, 2 from each district of the State where the census showed that 920 farmers (11 per cent) left the farming, of whom 589 were still in the villages and all of them were included in the sample. The study further showed that among the farmers earlier operating up to 4 ha, 22 per cent joined the labour market, 23 per cent joined the low paid private/government jobs and 27 per cent started some low-skill self-employed venture. And 23 per cent of those who left farming were not satisfied. There are no strategies to assist them. Those who sold land in distress to repay old debts were not better-off. 10 per cent were living on meager land rent as 'distress-rentiers' and are more prone to drug addiction. Majority of those distress farmers who left since long have again become worse-off.

Some of the large farmers also left farming but for different reasons and to different things because of their better existing economic base. They are the ones who get pulled out from farming in contrast to the small and marginal farmers who are pushed out. Only 8.7 per cent large farmers sold land in contrast to 36 per cent of their smaller counterparts. In terms of increase in income, large farmers even having a higher base income before leaving farming, did almost relatively as better as the

small and marginal farmers; the absolute gain of the large farmers can be well imagined.

As many as 70 per cent of the large farmers who left farming were fully satisfied, only 4 per cent were dissatisfied. In contrast, amongst the small/marginal farmers who left farming, only 26 per cent were fully satisfied and another 23 per cent were dissatisfied. As many as 24 per cent of the small/marginal farmers who left farming were still unsettled and wanted to change to a new profession/occupation. In contrast only 4 per cent large farmers were in this situation.

The small and marginal farmers leave farming in distress, and the longer they have left farming, more of them face decline in income and thus again get entrapped in distress. This suggests that there should be a long-term strategy for such strata of 'agrarian-class-in-distress' which would sustain their income-improvements in the long run.

The small/marginal farmers after leaving farming in distress join mostly the labour class or low-investment, low-earning, self-employment ventures for which their technical training is almost nil or rather very inadequate. The government should arrange for the training of small and marginal farmers who have (want) to leave farming either as a better alternative option or even in distress, to acquire some technical skills for the new professions, which they want to adopt and/or for the employment in industry in collaboration with industry. The training should be subsidised as they can hardly afford to pay for it.

There should be institutional support for their self-employed ventures including the institutional credit at subsidised rate of interest. The assistance, technical and monetary, for input supply and marketing of the produce is also important. Finally, there should be some priority for power connection/supply for the small units established by the small and marginal farmers. In a nutshell, the government should earnestly address the farm viability of small/marginal farmers as well as encourage and assist the non-viable ones to settle in non-farming ventures.

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NOTES

1. We tried to get the information about the present status of these families from the village people, which, however, was too scanty and for too few of them and thus devoid of any worth to report.

2. Although 2-4 ha is normally considered as medium farmers (as per National Classification), but the economic living and status of these farmers is also very precarious. Considering this, the Punjab State Farmer Commission, the sponsors of the study, "Status of farmers who left farming in Punjab", included in the terms of reference to study in detail the farmers leaving farming operating up to 4 ha (Singh *et al.*, 2007). However, the large farmers were also studied for comparison. At places in the text, for comparison purposes the two categories are large (> 4 ha) and smaller (< 4 ha) farmers, the latter including the average/sub-total of marginal, small and medium farmers.

3. For the reason that fewer large farmers left farming, for different reasons and, as will be seen later, to do different things after leaving farming, the overall average has not been the focus, nor attempted.

4. The sample size for the large farmers was too small for this post-stratification, and hence excluded from this section.

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