

## 9. The Agriculturist in Punjab

As emphasised in the chapter on livelihoods, agriculture in Punjab is facing a crisis. The human components of the state's labour force—the agriculturist, the peasant, and the labourer—who are bearing the brunt of the crisis, are the focus of this chapter. The status and condition of the agricultural labourer and the small farmer are discussed in detail here.

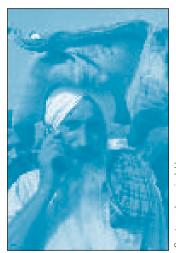
#### **Agricultural Labourers**

Agricultural labour is a heterogeneous category. There are those who are 'self-employed' and those who are 'hired.' The former are workers who work on their own family farms, while the latter category includes a variety of contract labourers such as casual labourers and attached labourers. Attached labourers include annual farm servants, permanent farm servants, naukar, siri<sup>1</sup>, etc. In this sector, employer-labour relations, duration of contract, frequency of payment and nature and degree of attachment deserve special attention. The duration of contract may be daily, monthly, seasonal or annual. The basis of payment could be hourly, daily or through other mechanisms such as time-wage, piece rate and/ or share of product.

Within the broad definition of hired labour, the category of 'daily labourer' is synonymous with 'casual labourer' and forms the largest category

of hired labour. Typically, daily labourers are contracted on a daily basis and paid at the end of the same day. On the other hand, farm servants, also known as naukars/ siris, are those whose contract lasts normally for about a year or more and who receive payment in instalments spread over the year. Payment may be fixed in cash or kind, or both, accompanied by daily perquisites such as meals. Yearly perquisites such as clothes during festivals and train fare (while travelling to native places) are sometimes also given. Wages differ according to tasks, gender and age. It is important to note that the siris are a category of workers who meet the definition of sharecroppers and thus receive a share of the crops as their wages.

There are also bonded labourers, who work within an organised system of bondage. A 'bonded labourer'<sup>2</sup> is one who is subjected to forced or compulsory labour. The most typical form of bondage is 'debt' bondage. Labourers are forced to work with the same employer till



The Punjabi farmer

<sup>&</sup>lt;sup>1</sup> They are farm labourers who work on contract.

<sup>&</sup>lt;sup>2</sup> The system of bonded labour in Punjab today is not of the severe variety found in many other parts of India. However these forms do exist in parts of the state.

they are able to repay a debt or advance that the employer may have given them. This debt could be with or without interest. They usually receive nominal or no wages and may or may not receive meals. Bonded labourers are usually paid wages lower than the market rates or at most, the absolute minimum wage.<sup>3</sup>

#### **Trends in Agricultural Labour in Punjab**

Historically, the number of agricultural labourers in Punjab has always been small. In 1901 the proportion of agricultural labourers compared to the entire body of agricultural workers was 8.1 percent. Even after Independence the proportion of agricultural labourers remained very small. It was only after the 1960s that there was a phenomenal rise in the number of agricultural labourers. Intercensus data from 1961 to 1991 shows that while the percentage of agricultural labourers compared to total main workers for the entire country increased from 16.70 percent to 26.15 percent, in Punjab it increased from 9.65 percent to 23.31 percent during the same period. The proportion of cultivators to total main workers during the same period declined from 52.80 percent to 38.75 percent for India. In Punjab, cultivators as compared to main workers declined from 46.24 percent<sup>4</sup> to 31.44 percent.

In 1991, cultivators constituted 42.81 percent and agricultural labourers constituted 30.75 percent of main rural workers in Punjab. The state also has a very low participation of female agricultural labourers. This is different from the rest of India. In Punjab, males constituted 93.78 percent of agricultural labourers, while females formed a meagre 6.22 percent.

A significant proportion of Punjab's agricultural labour force consists of migrant labour from eastern Uttar Pradesh and Bihar. In fact, one-third of the total agricultural labour in Punjab is made up of migrants from other parts of India. The share of migrant labour increases considerably during the peak agricultural season. According to some estimates there were 4.29 lakh migrant labourers in Punjab in 1983-84, and it is believed that this number stands in the range of one and a half million today.<sup>5</sup>

The three major categories of rural labourers are agricultural labourers, brick kiln labourers and construction workers. In Punjab, of the total rural labour population, 88.42 percent are agricultural labourers, 10.80 percent are brick kiln labourers and 0.78 percent are construction labourers.

#### **Scheduled Caste Labourers**

A large share of the agricultural labour population consists of Scheduled Castes, along with other backward castes. According to the Census of 1991, main workers constituted 29.6 percent of the total population of Scheduled Castes. Among major occupational categories of Scheduled Castes, agricultural labourers constituted 60 percent of all main and marginal workers and cultivators constituted 4.8 percent of total main workers, a decline from 6.6 percent in 1991. This distribution varies among specific Scheduled Caste communities as indicated in Table 9.1.

In 1985, only 4.5 percent (49,000) of the operational holdings were in the hands of Scheduled Castes, showing how completely marginalised these communities are from access to land. The total

<sup>&</sup>lt;sup>3</sup> Another distinctive feature of bonded labourers is rendering of customary labour service. Allotment of land and allotment of homestead are practices associated with the institution of 'bonded labour'. At times, the bonded person's entire family is also bonded in an extremely coercive relationship that restricts not just the freedom of labour of the person but of his entire family, which is then forced to work till the debt is repaid.

<sup>&</sup>lt;sup>4</sup> These figures are derived from Economic Tables of the Census of India, 1961, 1971, 1981 and 1991.

<sup>&</sup>lt;sup>5</sup> These estimates are drawn from number of studies undertaken to study migrant labour in Punjab. For details, please see the chapter on Migrant Labour in this report.

Table 9.1: Occupational Distribution of Scheduled Castes, 1991			
Name of Scheduled Caste	Agricultural labourers amongst all main and marginal workers (%)	Share of agricultural labourers of each community amongst all agriculture main workers in Punjab(%)	Share of cultivators amongst total Populations (%)
All Scheduled Castes	60.6	73.5	4.8
Ad Dharmi	50.2	8.9	5.7
Balmiki	53.2	7.3	3.3
Bauria, Bawaria	77.6	1.4	12.3
Bazigar	65.4	2.1	5.9
Raigar, Ramdasi, Ravidasi	54.2	16.7	5.5
Dhanak	36.8	0.5	2.3
Dumna, Mahasha, Doom	52.6	1.6	4.2
Kabirpanthi, Julaha	32.0	0.4	6.1
Mazhabi	78.1	30.9	4.0
Megh	42.7	0.9	4.0
Sansi, Bhedkut, Manesh	64.5	1.0	5.8

Source: Derived from Tables on Scheduled Castes from Census of India 1991, available on CD-ROM, Registrar General of India, New Delhi.

operated area under their control was only 2.02 percent (83,000 hectares) of the total operated area in the state. Even where they possessed land, these were mainly marginal and small holdings.

In 1984, casual labourers formed a significant proportion of the Scheduled Caste agricultural work force. The participation of female labour from these caste groups was almost negligible. These labouring communities came almost exclusively from the Mazhabi caste. Since these communities remained unemployed for a considerable part of the year, they became indebted, both to formal and informal sources. Loans contracted from informal sources like landowners and money lenders were accompanied by high rates of interest.

#### **Profile of Workers in Different Regions**

In the Doaba region, local labourers do not get more than 100 days of employment in a year. The massive influx of migrant labour to this region has further reduced this short period of employment. In fact, migrants have begun to replace local labourers in peak agricultural operations, especially as attached labourers. Although paddy is a labour-intensive crop, the local labourer has still not been able to get more employment. This is because agricultural practices in this region have made it less labour-intensive as compared to other areas of Punjab. Besides that, the *siri* system is traditionally, not as deeply rooted in Doaba as in the Majha and Malwa regions. Mechanisation of wheat and paddy harvesting operations through combine harvesters has also decreased employment opportunities both for local and migrant labour.

A large acreage of land in the Doaba is used for potato farming. Potatoes are grown both in winter and summer, and potato farming is highly labour-intensive. A large number of cases of child labour have been found among the massive labour force working in potato farming. Approximately 35 percent of the total workers are below the age of 15 years. The other workers are mainly in the age group of 21 to 40 years. This is also the only crop in which a large number of workers are women. Approximately 69 percent of the labour force

#### **Box 9.1: Migration to Other Countries**

Over the last few years, large numbers of agricultural labourers have been migrating abroad. Many of them have lived up to seven or eight years in countries like Libya and Kuwait. In the process of migrating, these labourers have been exploited by middlemen and employers at their final destinations. These labourers, mostly belonging to Scheduled Castes and Backward Castes, are completely illiterate and take the help of professional recruiting agents to manage their trip abroad. They take loans from local agriculturists, moneylenders and local shopkeepers at rates as high

as 120 percent. They are often paid the same wage that they would earn in Punjab and therefore are forced to return within three years. There have, however, been a few cases where a labourer was able to pay back the loan that he had taken. On the whole, migration abroad for better incomes has not really alleviated the conditions of these highly oppressed sections, unlike in the case of the land-owning Jat peasants, who have been able to enhance their economic status considerably by migrating abroad.

consists of women. Wage rates for women and children are far below the minimum wages fixed by the state. Child labourers get approximately Rs. 10 per day, women are paid Rs. 30-35 per day and men get wages of Rs. 35 to Rs. 45 per day.<sup>6</sup>

The agricultural labourers working on potato farms in the district of Jalandhar are drawn mainly from the districts of Kapurthala, Amritsar and Jalandhar. Most of them belong to the Balmiki caste, but there are some who belong to the Ad Dharmi, Ramdasia and Kabirpanthi caste communities. There are also some Christians. Rai Sikhs form the majority of other backward classes working as agricultural labourers.

Potato farming also involves maintaining cold storage facilities. A large number of *palledars*<sup>7</sup> are employed in these facilities through the year. A significant proportion of *palledars* are locals, particularly from the Balmiki and Gujjar castes as well as large numbers of migrant labour from Uttar Pradesh and Bihar. Most of these labourers are hired through middlemen and are kept in conditions that resemble the living conditions of bonded labour.

In the industrialised districts of Amritsar and Ludhiana<sup>8</sup>, male and female labour participation is higher in Amritsar as compared to Ludhiana. The average number of days of employment available to casual agricultural labourers in both districts is 120 days in a year. Employment is available mainly during the peak period of wheat harvesting, paddy transplantation and paddy harvesting.

Most labourers here are deeply indebted to landowners and moneylenders. The number of permanent labourers or farm servants is much higher in Amritsar than in Ludhiana. They are paid either in cash or with a share of the crop that ranges from one-fifth to one-twelfth of the total produce. In Ludhiana, farm servants who receive a share in the crop also receive one and half times more wages than those paid in cash. However, in Amritsar, there is not much difference in the wages paid to the two types of annual farm servants. Farm servants also contract additional loans from their employers at an interest rate of 36 percent per annum. If they leave their employment without completing the full term of service, they are forced to return the entire amount. Their working

<sup>&</sup>lt;sup>6</sup> Based on a study by Prof. Gopal Iyer and field work undertaken in six districts of Punjab by the HDR team.

<sup>&</sup>lt;sup>7</sup> Palledars are hired labourers hired, primarily for physical labour.

<sup>&</sup>lt;sup>8</sup> This section draws upon a study by Sukhbir Gill (1985) on agrarian relations in Amritsar and Ludhiana.

#### Box 9.2: Condition of Labourers in Malwa

- Malwa is the prime agricultural belt of Punjab. In this region agriculture is the principal source of livelihood. The role of the secondary and tertiary sector is minimal in providing alternative employment.
- The influx of migrant labour is also quite substantial in this region. It grew phenomenally during the 1980s and 1990s and has begun to cause unemployment among local agricultural labourers.
- The impact of mechanisation, particularly the role of combine harvesters in paddy and wheat harvesting, also leads to unemployment among local agriculture labourers.
- This region is different from the Majha and Doaba region. The phenomenon of *Siri* and attached labour is still strongly embedded in the agrarian

- structure of this region. Migrant labourers are gradually replacing locals as attached labourers. Both the *Siri* and attached labourers are deeply indebted and find it difficult to extricate themselves from the debt trap.
- Indebtedness and impoverishment lead to a high incidence of suicides both among farmers, as well as agricultural labourers.
- The number of days of employment of a casual agricultural labour is limited to 70 days in Sangrur district and 152 days in Faridkot district. In the absence of alternative sources of employment, labourers become severely dependent on local landowners and moneylenders to meet their survival needs.

conditions are particularly harsh. A typical work day includes irrigating the fields at night, bringing in fodder and feeding the animals, as well as participating in harvesting and threshing. On an average, a work day lasts 13-14 hours and even longer during peak season. As most become severely indebted to their employers, by the end of the year they must either continue with the same employer or take a loan from a new employer to pay off their debts to the old one. They are entitled to seven holidays in a year and absence from work beyond this period leads to loss in wages.

Ludhiana district attracts the maximum number of migrant labourers, who are rapidly replacing local agricultural labourers in most agricultural operations during peak season. Apart from this, the use of combine harvesters, which began in the early 1980s and accelerated during the 1990s, has reduced labour requirements. Unpredictable weather conditions have also compelled farmers in the district to use combine harvesters. A massive inflow of migrant labour, as well as

increased mechanisation, has severely affected the employment potential of local agricultural labourers.<sup>9</sup>

In almost all districts of the Malwa region, agriculture is the main source of livelihood. In the districts of Faridkot and Sangrur, 86.28 percent and 75 percent of the total population respectively, is dependent on agriculture. Most agricultural labourers here belong to the Mazhabi, Ramdasia, Sansi, Jhiwar and potter caste and as in other parts of Punjab, most are illiterate. Female participation rates are also very low in these districts. Most workers are aged between 19 and 35 years.

Casual labourers are invariably indebted to moneylenders, landowners and relatives. Most of these debts are incurred to meet social obligations such as illness, marriage, house construction and death. Their indebtedness makes agricultural labourers further dependent on moneylenders and their local employers. The socio-economic status of agricultural labourers depends on the number

<sup>&</sup>lt;sup>9</sup> Sukhbir Gill and Manjit Singh

of days they are employed and the amount of wages they earn. Casual male labour gets only 72 days of employment in a year in Sangrur and 152 days in Faridkot. Casual female labour gets only 42 days of employment in Sangrur district whereas in Faridkot district they get 110 days. The main reasons for the lower number of employment days in Sangrur are mechanisation of agriculture and the influx of migrant labourers.

Wheat harvesting, paddy transplantation and paddy harvesting involve significant numbers of casual labourers. Paddy transplantation is carried out almost exclusively by migrant labour, while harvesting is totally mechanised, except for areas that suffer from waterlogging, or are affected by excessive rain or wind. The combine harvester does one-third of the wheat harvesting. Only two-third of harvesting is carried out by human labour. Of this, about 40 percent is carried out by local labour, while the remaining work is carried out by migrant labour.

A combination of mechanisation and the influx of migrant labour has considerably affected the employment days of local labour in Sangrur district. In Faridkot a larger number of employment days is available because of the cotton crop, which is highly labour-intensive. However, in Faridkot, the effect of mechanisation and influx of migrant labour can be seen in the wheat and paddy crop. The number of days of employment during the 1980s was higher in this district as compared to the 1990s.

The condition of the attached labourer is much worse than that of the casual labourer. Annual wage rates of attached labour range from Rs. 9000 to Rs.10, 000/- in Faridkot and Rs. 12000-13000 in Sangrur. Patterns of payment differ in both districts. In Sangrur the attached labourer is paid the entire amount in advance as soon as he joins the employer. When he subsequently borrows money, the first two thousand is given free of interest, after

which rates of interest rise to as high as 36 percent per annum. In Faridkot, the annual fixed wage is paid in three instalments. Money is lent at a rate of 36 percent per annum. The attached labourer in both these districts ends up deeply in debt by the end of the year. These debts are cleared by fresh loans from new employers.

Working conditions of the attached labourers are appalling. Working hours range from 14 hours during a normal day to 16 to 17 hours during the peak season. During this time many nights must be spent in the fields or in the employers' homes. The condition of attached labour in the Malwa region is much worse than in the Majha and Doaba regions.

# **Employment and Wages of Agricultural Labourers**

The Rural Labour Enquiry Report (1974-75) shows that in 1964-65, rural labour households constituted about 17 percent of total rural households in Punjab-Haryana. In 1974-75 their strength rose to 21.52 percent. A majority of rural labour households consist of agricultural labourers and among them the percentage of landless labourers is extremely high ranging from 87.66 percent in 1964-65 to 89.50 percent in 1974-75. Agricultural labourer households consist mostly of Scheduled Caste families. While 85 percent of families belong to Scheduled Castes, only about 15 percent are from non-Scheduled Castes. Agricultural labour households are placed in the lowest position in the social and economic hierarchy of rural Punjab.

An overview of the period 1961-84 shows that the wage hikes of the early years of the Green Revolution were not sustained in the later 1970s or 1980s. In the 1960s and early 1970s there was an unprecedented demand for labour, and this was mainly for planting of labour-intensive crops like wheat, paddy, sugarcane and cotton. Local agricultural labour was provided full employment. This gradually petered out, partly due to rising



Mechanised farming

mechanisation and partly due to the impact of migrant labour from Uttar Pradesh and Bihar. Notwithstanding this fact, it is also evident that Punjab is the only state where wage rates have not declined during the period 1961-1984, which is a result of the labour absorption capacity of the Green Revolution, as well as the fact that the benefits of rising agricultural productivity did trickle down to wage earners. Wage rates were highest in the wheat and paddy areas. The Green Revolution produced a rise in the wages of male agricultural labourers although there was no rise in the wages of female agricultural labourers. Real wage rates for artisans, like blacksmiths and carpenters also showed an impressive increase. Agricultural labour households remained slightly better off than marginal-farming households.

However, from the mid-1980s there has been a gradual decline in the status of agricultural labour in Punjab. Mechanisation of farms increased, reaching its pinnacle in the 1990s. With the advent of tractors, both bullock and plough labour was displaced. With the introduction of combine harvesters there was a massive displacement of both agricultural and migrant labourers. Today

nearly 40 percent of the wheat crop and 70 percent of the paddy crop is harvested through combines.

Thus the agriculture sector has reached saturation point in Punjab and its share of labour absorption has declined sharply. As a result agriculture today provides less employment days as compared to the period 1961-84. Unemployment and underemployment in agriculture have risen and there has been a fall in the total employment days of both male and female agricultural labourers.

### **Small Farmers in Punjab**

The number of small and marginal farms rises every year due to distribution and division of land by inheritance, family partitions and other modes of transfer of rights. A disparity between ownership and operational holdings indicates that better-off farmers acquire land from small farmers under lease. This phenomenon is known as reverse tenancy and is the opposite of the trend in which a poor farmer takes land on lease from a prosperous farmer to earn his living.

Small farms of 5 acres or so are non-viable on their own. Even if it is assumed that farmers can cultivate

the best possible crops or combination of crops, the returns remain inevitably small. The Commission for Agricultural Costs and Prices has calculated that during 1997-98, returns from a single hectare of land for paddy and wheat crop in Punjab was only Rs. 7300. If the average size of small farms is taken as 1.61 hectares, the total net return was only Rs. 12000 for two crops in a year, which is well below the minimum wages necessary for survival. Thus, small farms, per se, are not viable unless they are supported with additional income from other sources.

In 1990-91, the average size of farm holdings in India was 1.57 hectares. Marginal and small farmers accounted for 78.2 percent of agricultural holdings in the country but owned only 32.4 percent of the area. Between 1970-71 and 1990-91 the share of marginal and small holdings increased to 77.65 percent, while that of large farmers decreased by 40.2 percent. Thus there is an increasing division of holdings. Holdings are becoming smaller, forcing many marginal farmers to look for alternative sources of income such as, animal husbandry and agricultural labour. 10

Of late, many have argued for contract farming as a means to augment incomes of small farmers. The National Agricultural Policy (2000) endorsed this view. It states, "Private sector participation will be promoted through contract farming and land leasing arrangements to allow accelerated technology transfer, capital inflow and assured markets for crop production." However, such arrangements are effective only in certain areas and in certain crops. By implication this policy will boost the agro-processing industry, which, however, prefers to deal with a small number of large farmers rather than large numbers of small farmers.

The liberalisation of the economy in the 1990s has created a new set of problems for the farming community in general and the small farmer in particular. "Farmers have been pulled by the increasing demands of the market and the state, into a nexus of relationships that extend beyond the farm, to the national and international level. The interaction between small holders and more powerful economic and political organisations is not new. What characterises the contemporary situation is the variety of forces with which small farmers must deal. The size, complexity and impersonality of these organisations have resulted in a qualitative change in the nature of small holders' relationship to the outside world".11

Today, small and marginal farmers can simply be defined as agricultural labourers possessing small landholdings. Fruit and vegetable farming can play an important role in enhancing the incomes of these small and marginal farmers. Punjab's geographical location and other favourable climatic factors, make it fairly suitable for horticulture, which can be profitably marketed in the rest of India and can even find export markets. Yet the production and marketing of fruits and vegetables pose serious problems for small and marginal farmers. They prefer the rice-wheat rotation of crops mainly because of the assured price policy, easy market clearance, stable yield and short duration of crops. As horticultural crops lack these economical features, farmers are reluctant to bring more areas under fruit and vegetable cultivation. The relative lack of availability of quality seeds for vegetables and fruits is another reason. For example, in the case of potatoes, the main vegetable crop of Punjab, only large farmers possess the cash reserves to be able to buy quality potato seeds.

<sup>&</sup>lt;sup>10</sup> Statistical Abstract, Director of Public Relations, Government of India, and various volumes of Statistical Abstract, Directorate of Economics and Statistics, Government of Punjab

<sup>11</sup> Glover and Kusterer (1990)

#### **Indebtedness of Punjab Farmers**

The most important reason for the indebtedness of the Punjabi farmer is the increased mechanisation of agriculture. The use of various farm inputs such as chemical fertilisers, weedicides, seeds, tubewells, tractors, combines, hired labour and rent for leased land. etc., has led to an overall increase in the cash expenditure of farmers. Yet the per capita income of farmers has not grown at the same rate as input prices and sheer cost of agricultural production. As a result, farmers have little surplus cash at their disposal and are forced to borrow huge amounts. This has led to a spurt in the growth of agricultural credit. Since the mid 1980s, there has been stagnation in the yields of main crops. In spite of modern inputs, there has been a steady decline in the net surplus generated in the production of these crops. Hence, farmers have increasingly begun to depend on loans to finance their costs of production.

A study<sup>12</sup> has shown that small farmers are more inclined to borrowing money. The proportion of farmers taking short-term loans is very high (86 percent) in all size categories. Yet the dependence of small farmers on short-term borrowing is much higher compared to large farmers. The highest amount of loan per acre is taken from commission agents (except in the case of medium farmers whose per acre borrowing is more from co-operative credit societies). The number of farmers who could not repay the entire amount was very high among small farmers (70 percent); followed by semi-medium and medium farmers (40-47 percent). The study also points out that even among big farmers, 28 percent were unable to repay the entire amount. The study also shows that almost the entire amount of unpaid short-term loans was due to commission agents. Only a very small amount was due to formal sector credit agencies.

Another study by Shergill (1998) reveals that of Rs. 1448 crore of long-term loans, around 17 percent of the total amount was outstanding towards Punjab farmers. Out of these 24.68 percent was outstanding against small farmers, 37 and 14 percent against semi-medium and medium farmers and 25 percent against large farmers. Nearly 54.2 percent of the total amount borrowed for long-term productive purposes was outstanding against farmers as a whole. Around 27.19 percent of long-term loans borrowed for nonproductive purposes were for small farms, 22 percent for semi-medium; 18 percent for medium and 10.71 percent for large farms. Out of a total mortgaged debt of Rs. 406 crore, 60 percent is taken by small farmers and another 30 percent is taken by large farmers. The total estimated debt of Punjab farmers is Rs. 5,701 crore.

The severe indebtedness of small farmers as compared to large farmers is revealed even more clearly when we compare debt per operated acre among the two categories of farms. Small farms owed Rs. 10,105 per operated acre compared to Rs. 4230 owed by big farms. The annual interest burden per acre worked out to Rs. 1897 in the case of small farms. About 70 percent of small farms failed to completely clear their short-term loans. About 14 percent of small farms were forced to take the extreme step of mortgaging their land.

Cash expenditure per acre of small farms on farm operations was also 23 percent higher compared to that of large farms. Small farms' cash expenditure per acre on current consumption was also more than double that of big farms. So according to Shergill (1986), excessive cash expenditure per acre on farm operations and current consumption by small farmers seem to be the root causes of the chronic deficit in cash flow and results in their heavier indebtedness.

<sup>&</sup>lt;sup>12</sup> Shergill (1999)

This tendency of small farmer families to imitate the consumption standards of big farmer families to maintain themselves at the same social level seems to be one of the reasons for their chronic and excessive cash deficit and results in their deep and constant indebtedness. Malcolm Darling mentions this 'demonstration pressure' as one of the major causes of indebtedness of the peasantry in Punjab. The proportion of farmers trapped in a hopeless debt situation is higher among the small farmers - a sort of debt trap that has resulted in about one-tenth of small farming families mortgaging some of their land. The heavier indebtedness of small farmers seems to be the result of their disproportionate cash expenditure on farm operations and domestic consumption.

#### **Agriculture: Recent Trends**

The main economic factors contributing to an agrarian crisis at the macro level are: the declining proportion of cultivators and increase in agricultural labourers, pauperisation and proletarianisation of the lower strata of the peasantry, continuing decline in the net income of farmers, the wheat-paddy rotation trap, crop loss, declining economic status of agricultural labourers and rise in rural unemployment.

The decline in the percentage of cultivators and increase in the percentage of agricultural labourers is an important feature of the agricultural crisis of Punjab. Cultivators constituted 42.56 percent of the total workers in Punjab during 1970-71. This proportion declined to 32.83 percent by 1990-91. During the same period, the percentage of agricultural labourers increased from 20.11 percent to 23.31 percent. These are depressing figures, which indicate a dual processes of pauperisation and proletarianisation.

Further, the operational holdings of marginal farmers during the same period declined from 37.63 percent to 26.50 percent, which also

reinforced the process of pauperisation and proletarianisation of the peasantry. Many studies in Punjab have reflected the robust health of Punjab's agriculture and the sound position of small farmers in the 1970s and 1980s giving way to the subsequent decline in the 1990s. Shergill (1986) has studied the positive impact of the Green Revolution on the small peasantry. Increase in land prices and farm incomes had a stabilising impact and arrested the process of pauperisation and proletarianisation. The studies of Baldev Singh (1982), Sukhpal Singh (1983), Chatha et. al (1985) and Gill (1986 and 1994) indicate that while land transactions continued, these transactions were not accompanied by pauperisation and proletarianisation. Nonetheless, it was found that 24 percent of small farmers and 31 percent of marginal farmers were living below the poverty line in 1979-80. The proportion of marginal farmers below the poverty line increased to 34.07 percent by 1990-91. The agrarian situation toward the later part of 1980s and the entire period of 1990s showed evidence of a steady deterioration in the situation of small and marginal farmers. A study by Manick (1997) of two villages of Sangrur district and two villages of Faridkot district during 1995 clearly showed that marginal and small farmers were forced into distress sale of their lands, which were then purchased by medium and large farmers.

This showed that while marginal and small farmers became pauperised, land was becoming concentrated in the hands of medium and large farmers. Shergill's latest study (1998) also reinforces the picture of the deteriorating economic condition of marginal and small farmers. The study shows that 70 percent of small farmers are unable to repay crop loans taken from commission agents for productive and non-productive purposes and the debt burden among them is oppressive. There is also evidence that the lower strata of the peasantry is being forced to sell lands and tractors at throwaway prices. Sadly,

in a large number of cases there are simply no takers. 13

The declining trend is seen in the latest Shergill study as well (1998). Data from the last 10 years shows that while the yield of wheat has grown at a very slow rate, the yield of rice has remained stagnant and the yield of cotton (American and Desi) has actually declined. Similarly, the yields of sugarcane, maize and potato have remained stagnant. The net value of all crops per acre (at constant 1980-81 prices) has remained stagnant over this decade. However, expenditure on modern farm inputs has been growing steadily, resulting in a continuous decline in the net surplus generated from the production of these crops. This has resulted in an increased dependence on borrowed funds to finance the purchase of modern farm inputs. About one-third of surveyed farmers reported an actual decline in paddy yield during the last three years.

The Punjab farmer is entrapped by the wheat-paddy rotation pattern from which he finds it difficult to extricate himself. Even the Johl Committee Report (May 1986) had observed that the overdependence of farmers on wheat and paddy has created an uncertain market situation due to the delayed announcement of procurement prices and decreasing demand for Punjab's foodgrains. Over the last 13 years, this position has worsened. Also, the wheat-paddy rotation pattern has adversely affected the groundwater table.

Punjab experienced a consistent and substantial crop loss in cotton during the 1990s. There has been other crop loss as well, as acknowledged by the Punjab government (Department of Agriculture) in its report submitted to the Central

government for compensation to Punjab farmers for the crop loss for Kharif 1998, due to rains. Huge losses have been reported in cotton and other crops. In fact the cotton crop has seen the third successive bad year. According to the estimates of the Punjab government, the total loss suffered by the farmers in the state was Rs. 847,200,000.<sup>14</sup>

The economic condition of local agricultural labourers deteriorated sharply during the 1990s, in particular. The mechanisation of wheat and paddy harvesting considerably displaced both local and migrant labour. This reduced the number of effective days of employment for local agricultural labourers. As a result of a massive influx of migrant labour, both the number of days of employment and wage rates of local agricultural labourers have fallen sharply over the last 20 years. 15

Gill (1994) observes that the unemployment rate for males with a secondary education and females with a graduate degree was higher in rural Punjab and above the all-India level. The rural unemployment rate for males was 10.71 percent for those with a secondary education and 9.1 percent for graduates and above. Educated youth from the poor peasantry finding that the landholdings of their parents are non-viable, are in severe need of employment outside agriculture. A large percentage of youth is thus unemployed and their number is increasing every year.

#### **Conclusion**

The crisis in agriculture and its subsequent impact on labour, small and marginal farmers is a crucial priority for the state. Atomisation of landholdings, increasing number of migrants offering cheap labour, mechanisation and a fall in the overall price situation of the principal produce of Punjab—

<sup>&</sup>lt;sup>13</sup> Punjabi Tribune, dated January 21, 1999, Indian Express, dated January 12 & 24, 1999.

<sup>&</sup>lt;sup>14</sup> Analysis of Agricultural Production, Rainfall and its Adverse Effects, Agriculture Department, Government of Punjab, 1998

<sup>&</sup>lt;sup>15</sup> Manjit Singh, 1995; Sidhu, 1991; Sidhu M.S. *et al* 1998

wheat and paddy—have been the main causes of Punjab's agricultural crisis.

The problem needs to be tackled on many fronts. The State government has already begun work on trying to break the wheat-paddy pattern and negotiating with the government of India for better support prices. Similarly, the water crisis, the

problems of declining water tables, coupled with increasing bad lands, need urgent attention. The change from the wheat-paddy cycle to alternative high return crops is just one aspect of the strategy. It is equally important to ensure an increase in productivity and a decrease in the costs of production.