# Land Sale Transactions in South-Western Punjab: An Analysis

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## Abstract

*The present study, based on primary data, was carried out with the objectives to study the pattern of sale of agricultural land, distribution of land and farmer's perception towards land sale market in south-western region of Punjab. The data pertained to year 2015-16. The participation in land sale market of farmers was the highest among the small (26.67%) and semi-medium farmers (33.33%) and the lowest among large farmers. However, the extent of inequality with regard to distribution of land has increased after the transactions in sample households. Selling of land is still a social taboo among farming community. They need transparent system of land records, sale of land and registered persons to handle the market.*

## Introduction

Market transactions in farm land play an important role in the evolution of land ownership structure in the rural society. Land ownership pattern is influenced by several factors; the important among them are inheritance, sale policy and land transactions. A series of land reforms were taken in different states of the country after mid-1950s. In a developing country like India, that faces an ever-increasing pressure on agricultural production due to population rise as well as economic development, both the sale and lease transactions in market for agricultural land need to be viewed with serious policy consequences. Such transactions may significantly affect the production and distribution patterns in agricultural sector. Socio-economic conditions of farmers largely influence their decisions regarding sale or lease of land (Shergill 1985 and 1990; Chatha 1986; Birthal *et al,* 1991). With the ever-rising population and disguised unemployment in agriculture, the land labour ratio is declining more rapidly than rise in land and labour productivity (Mani and Pandey, 1997). In our country, the numbers of marginal holdings are increasing and the average size of holding is declining. The forces leading to decrease in total availability of agricultural land in the country i.e. the reduction of viability of agricultural holdings into non-viability due to inheritance, land sale and land lease (Mani and Pandey, 2000).

The post-land reform period has witnessed

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a significant shift in the ownership of land from those who have interest in agriculture for their survival to those who have no interest in this occupation. This occurs mainly due to breakdown of joint families, as a result survival of marginal and small farmers become difficult (Nair and Menon, 2006). Punjab is considered as agriculturally developed states of India due to its achievements in agriculture production. The state has experienced a tremendous increase in agricultural production during the period of Green Revolution mainly due to mixing of institutional and technological factors. However, over a period of time, the marginal and small farmers were unable to withstand to capital intensive technology and their number has declined (Sekhon *et al*, 2009). It was about five lakh during 1991, which declined to about 3.59 lakh during 2010-11 (Sharma *et al,* 2014), as about 1.41 lakh marginal and small farmer have left farming. Out of these farmers 36 per cent sold their whole land, 12 per cent sold some part of their land and remaining 52 leased in/out their entire land. With this backdrop present paper has been was constructed to study the pattern of sale of agricultural land, distribution, determinants and farmer's perception towards land market in south-western region of Punjab.

## Data Sources and Methodology

The present study is empirical and relies on primary data collected from south-western region of Punjab. Multistage random sampling technique was used to select the district, block, village and farm household. For the purpose of study, two districts Faridkot and Bathinda were selected. Out of these selected districts, four blocks and six villages were randomly selected namely,Deviwala and Sibiaa from Kotkapura, Dhaipai from Jaitu, Maurkalan from Maur, Gummti Kalan and Selbrah from Phul block. The land transactions and names of farmers were noted down from the revenue patwari circle for the period 2011 to 2015. The respondents who had either sold or purchased land during this period were taken as sample units. In this way, the total sampled households were 120 consisting of 60 sellers, 46 purchasers of land for agricultural uses and 14 farmer purchasers of agricultural land for non-farming activities. The data required for the study were obtained from the farmers by administering pre-tested structured interview schedule for the year 2015-16, farm size category was based on owned land. Tabular and regression model was applied for analysing the data collected. The inequality of land distribution was calculated by using the Gini coefficient. The Gini coefficient is a measure of inequality of distribution.

$$G = 1 - \sum_{k=1}^{n} (X_k - X_{k-1})(Y_k + Y_{k-1})$$

G = Gini coefficient, n = Number of sale and purchase households, $X_k$ = Cumulative proportion of the households in $k^{th}$ category, $Y_k$ = Cumulative proportion of land sale-purchase corresponding to $k^{th}$ category.

## Results and Discussion

Variation has been observed in socio-economic characters of the respondents. The aspects considered were family size, education, age and farm holding size of the families. A perusal of Table 1 shows that the cultivators in all the categories of farmers belong to old age group, because the average age was more than 50 years. It was found that farming in Punjab managed by old aged farmers. The results exhibit that the younger generation of Punjab show disenchantment in agriculture. It was found that medium and large farmers were more educated as

**Table 1: Socio-economic profile of respondents**

| Particulars | Farm size categories | | | | | |
|---|---|---|---|---|---|---|
| | **Marginal** | **Small** | **Semi-medium** | **Medium** | **Large** | **Overall** |
| Average age (years) | 56.88 | 49.51 | 53.82 | 51.71 | 52.6 | 52.51 |
| Number of years in school | 7.41 | 8.58 | 8.08 | 11.34 | 11.6 | 9.13 |
| Average family size | 4.94 | 4.74 | 4.97 | 5.18 | 3.6 | 4.9 |
| Farm size before transaction (acre) | 1.47 | 3.69 | 7.57 | 14.60 | 30.00 | 9.07 |
| Farm size after transaction (acre) | 0.40 | 3.27 | 7.00 | 14.87 | 30.52 | 8.92 |

compared to other farm size categories with an average schooling year of 11 and 12 years, respectively. The average family size was approximately four members per family for marginal, small and semi-medium farmer families as compared to three and five members per family for large and medium farmers respectively. There was a decline in average size of operational holding after the land transactions. Before transaction the average size of operational holding was 9.07 acres which decreased to 8.92 acres. There was a sizeable decline in the marginal, small and semi-medium categories of farmers.

In addition to age, education, size of owned land, rental value of land and prices were also worked out. The increasing population has been exerting a continued pressure on agricultural land in a multifaceted manner, such as more land is required for increasing employment within agriculture, for increasing food demand, raw material and for housing. It was observed that land rent in the study area varied from Rs.30 thousand to Rs.41 thousand per acre (Table 2). The average land rent in all selected villages was Rs.36.35 thousand per acre. It was observed that lease of

agricultural lands was usually for cultivation purpose whereas the sale of agricultural land took place for both agricultural and non-agricultural uses and so are the prices of land. In addition, the land quality characteristics in terms of land rent rating and the socio-economic characteristics of buyers and sellers influence and complicate land market for both purposes. For the present study, land prices in selected villages were studied. The average price was Rs.14.32 lakh per acre. The range of land price varied between Rs.3.36 lakh to Rs.40.26 lakh in Maurkalan. The prices of land mainly depend up on the land productivity, competition among buyers and location of land.

The expired evidence showed that the ratio of rent/price of land was 3.71 during 1971-72 and decreased to 3.25 during 1987-88 (Singh *et at*, 1991). Whereas the ratio of land rent and land prices was 0.03 in most of the villages during 2015-16. It implies that the proportionate relation between rent and land prices had not been maintained as against the assumption held by the classical rent theory. The declining rate of return of investment in land lower than the prevalent interest rate

**Table 2: Rental value and price of land across sampled villages**

| Districts | Villages | Average land rent ( Rs.000' per acre) | Coefficient of variation | Average land price (Rs.lakh per acre) | Coefficient of variation | Ratio of land rent and price of land |
|---|---|---|---|---|---|---|
| Faridkot | Dhaipai | 36.33 | 10.64 | 11.35 | 100.11 | 0.03 |
| | Deviwala | 36.56 | 8.79 | 13.33 | 109.86 | 0.02 |
| | Sibiaa | 37.49 | 5.36 | 15.10 | 131.73 | 0.02 |
| Bathinda | Maur Kalan | 38.25 | 3.76 | 20.63 | 113.27 | 0.02 |
| | Gummti Kalan | 37.04 | 9.67 | 14.01 | 76.94 | 0.03 |
| | Selbrah | 33.46 | 8.30 | 10.47 | 120.00 | 0.03 |
| **Average** | | **36.35** | | **14.32** | | **0.03** |

of the financial institution resulted in the concentration of land in the hands of already wealthy segment of rural Punjab and squeezed out the majority of small and marginal farmers from the land market (Harishama, 2009). Trend is still continue low ratio of land rent and price may be due to land bubble caused exorbitant increase in prices of land during last few years has become inaccessible for those who do not have sufficient initially liquidity.

Sale pattern of land observed that the semi-medium farmers sold the highest area of land (1.35 acre) but the large farmers sold very low (0.07 acre) of land (Table 3). The marginal and small farmers sold 0.48 and 1.03 acre of land respectively. The average land sold by the all farm size category was 0.98 acre per farm. The proportion of land sale was higher in marginal and small farms. The proportion of sold land to the owned land ranged between 0.23 to 45.71 per cent. The proportion of sold land was higher among the marginal and small farmers i.e. 45.71 and 30.03 per cent and the lowest among the large farmers (0.23%). For the total sample

the proportionate area sold to own land was 12.30 per cent. It was concluded that small and marginal farmers sold major part of their land. Many studies endorsed the reason for sale of land was low returns from agriculture, rising input costs, stagnant productivity and high cost of living.

The distribution of owned and operated land holdings among the sampled respondent before transaction was analysed (Table 4). It shows that among all farm size categories, the number of households (32) and the owned area (185.92 ha) was the highest in medium farm category accounting for 26.67 per cent of the total households and 45.71 per cent of total area, respectively. The 29.17 per cent semi-medium households occupied 25.98 per cent of the total area. Very small portion of the households belonged to large farm size category occupied about 14.67 per cent of the total owned land. On the other hand, about 40 per cent of marginal and small farmer's category occupied about 14 per cent of the total owned land of sampled households. It is clear that there is an unequal distribution of land in Punjab state and it is highly

**Table 3: Land sale in relation to farm size in south-western Punjab**

| Farm size categories | Number of farmers | Average owned land (Acre) | Average sold land (Acre) | Sold land percentage to owned land |
|---|---|---|---|---|
| Marginal | 7 | 1.05 | 0.48 | 45.71 |
| Small | 16 | 3.43 | 1.03 | 30.03 |
| Semi-medium | 20 | 7.42 | 1.35 | 18.19 |
| Medium | 15 | 13.81 | 0.78 | 5.65 |
| Large | 2 | 30.07 | 0.07 | 0.23 |
| **Total** | **60** | **7.97** | **0.98** | **12.30** |

concentrated to large and medium farmers. The Gini coefficient calculated from this table was 0.40 which revealed that the extent of inequalities with regard to distribution of land.

After transaction of land it was observed that the number of medium sized farmers(32) and the area operated (191.11ha) possessed 47.55 per cent of total operated area(Table 5). As per estimates, 27.50 per cent of total households corresponding to semi-medium category occupied 24.93 per cent of the total operated area. Even after transaction take place, the operational land occupied by households was highly concentrated to medium and semi-medium farmers.

The value of Gini coefficient came out to be 0.088 which further indicated that the extent of inequality with regard to distribution of operational area increased among the sampled households. The average sold land on different farm size ranges 0.02 to 0.55 hectare. It was observed that the proportion of sold land to the owned area was higher among marginal farmers i.e. 45.23 per cent followed by small farmer and lowest among large farm size category.

**Reasons for sale of land by sample respondents**

It is important to know whether farmers were selling land under distress conditions or not. Heavy debt, family consumption needs,

**Table 4: Distribution of farmers and owned land in the surveyed villages before sale of land in of Punjab, 2015-16**

| Size class (Ha) | Number of households | %age of house-holds | Cumulative %age of households | Area (ha) | %age of area | Cumulative %age of area |
|---|---|---|---|---|---|---|
| Marginal | 17 | 14.17 | 14.17 | 10.06 | 2.46 | 2.46 |
| Small | 31 | 25.83 | 40.00 | 45.73 | 11.18 | 13.64 |
| Semi-medium | 35 | 29.17 | 69.17 | 106.23 | 25.98 | 39.62 |
| Medium | 32 | 26.67 | 95.84 | 185.92 | 45.71 | 85.33 |
| Large | 5 | 4.17 | 100.00 | 59.97 | 14.67 | 100.00 |
| **Total** | **120** | **100.00** | | **408.96** | **100.00** | |
| **Gini coefficient** | **0.40** | | | | | |

**Table 5: Distribution of land after transaction in the surveyed villages of Punjab, 2015-16**

| Size class (Ha) | Number of households | %age of house-holds | Cumulative %age of households | Amount of area (acres) | %age of area | Cumulative % of area |
|---|---|---|---|---|---|---|
| Landless | 8 | 6.67 | 6.67 | 0.00 | 0.00 | 0.00 |
| Marginal | 18 | 15.00 | 21.67 | 14.06 | 3.50 | 3.50 |
| Small | 24 | 20.00 | 41.67 | 34.57 | 8.57 | 12.07 |
| Semi-medium | 33 | 27.50 | 69.17 | 100.18 | 24.93 | 37.00 |
| Medium | 32 | 26.67 | 95.84 | 191.11 | 47.55 | 84.55 |
| Large | 5 | 4.17 | 100.00 | 62.08 | 15.45 | 100.00 |
| **Total** | **120** | **100.00** | | **401.91** | **100.00** | |
| **Gini coefficient** | **0.45** | | | | | |

drug addiction, family size pressure and low returns from agriculture were the factors that affected the land sale market. The dominant reason for land sale in all size groups was the repayment of old debts (56.67%). For this purpose 65 per cent semi-medium farmers, 56.25 per cent small and 46.67 per cent medium farmers sold their land. Expenditure on social ceremonies was also observed as another reason for land sale among 51.67 per cent farmers. The operational efficiency depends up on the farm size. As the farm size decreases the resources were not used properly as a result low returns from agriculture were obtained.

Nearly 48 per cent farmers sold land due to the fragmentation of small land holdings at different places which occurred mainly due to the breakage of joint families. Among all the sampled farmers, they opined that the another important reasons like pressure by arhtiyas, for sending children abroad, due to illness in the family and expenditure on construction of house were reported by 45.00, 38.33, 40.00 and 45.00 per cent respectively. The sampled farmers were selling land due to repayment of old debts, land division and for installation

of tube well. Medical treatments were not the main reasons but their significance could not be ignored and it can be accepted partially. Regression analysis was also carried out to work out the significance of variable. Land sold (acres) was regressed on variables i.e. expenditure on social-ceremonies (X1), loan repayment (X2), expenditure on migration (X3), and expenditure on construction of house (X5) were significant. The variable expenditure on medical treatment (X4) was positive but non-significant.

The relationship between land sale and income of the respondents in the study area revealed that farmers together sold 23.88 ha of land in the study area with an average annual income of Rs 3.48 lakh. Farmers who bought land (16.83 ha) for agricultural purposes having an average income of Rs 5.87 lakh. The annual income of buyers was more and the major source of their income was income from services and abroad. None of the farmer utilized the agricultural income to purchase land. Some farmers also bought land for non-farming purpose. They together bought 7.57 ha of land for various purposes like colonization and other speculative gains.

**Table 6: Reasons for sale of land by sampled farmers of Punjab**

**(Multiple response)**

| Farm size categories | | | | | | |
|---|---|---|---|---|---|---|
| **Particulars** | **Marginal (n=7)** | **Small (n=16)** | **Semi-medium (n=20)** | **Medium (n=15)** | **Large (n=2)** | **Total (N=60)** |
| Pressure of arthiyas | 3 (42.86) | 8 (50.00) | 6 (30.00) | 10 (66.67) | 0 (0.00) | 27 (45.00) |
| Visit by bank officials | 3 (42.86) | 5 (31.25) | 11 (55.00) | 8 (53.33) | 2 (100.00) | 29 (48.33) |
| Division of land | 2 (28.57) | 10 (62.50) | 10 (50.00) | 7 (46.67) | 0 (0.00) | 29 (48.33) |
| For installation of tubewell | 5 (71.43) | 7 (43.75) | 8 (40.00) | 5 (33.33) | 1 (50.00) | 26 (43.33) |
| Social ceremonies | 2 (28.57) | 11 (68.75) | 11 (55.00) | 7 (46.67) | 0 (0.00) | 31 (51.67) |
| Loan repayment | 5 (71.43) | 9 (56.25) | 13 (65.00) | 7 (46.67) | 0 (0.00) | 34 (56.67) |
| Low returns from agriculture | 3 (42.86) | 5 (31.25) | 8 (40.00) | 8 (53.33) | 1 (50.00) | 25 (41.67) |
| Sending children abroad | 4 (57.14) | 2 (12.50) | 8 (34.78) | 9 (60.00) | 0 (0.00) | 23 (38.33) |
| Medical treatment | 2 (28.57) | 5 (31.50) | 12 (60.00) | 4 (26.67) | 1 (50.00) | 24 (40.00) |
| Construction of house | 5 (71.43) | 4 (25.00) | 10 (50.00) | 7 (46.67) | 1 (50.00) | 27 (45.00) |
| Others | 3 (42.86) | 4 (25.00) | 9 (45.00) | 7 (46.67) | 2 (100.00) | 25 (41.67) |

**Table 7: Result of regression analysis of factors affecting land sale market**

| Variables | Regression coefficients | p-value |
|---|---|---|
| Intercept | 0.13 | 0.36 |
| Expenditure on social ceremonies (X1) | 0.16 ** | 0.0016 |
| Loan repayment (X2) | 0.17* | 0.038 |
| Expenditure on migration (X3) | 0.16** | 0.000006 |
| Expenditure on medical treatment (X4) | 0.17$^{NS}$ | 0.51 |
| Expenditure on construction of house (X5) | 0.15** | 0.000001 |
| **R²** | **0.65** | |

*Notes: **, * shows that variables were significant at 1 and 5 per cent level of significance. NS shows variables were non-significant.*

**Table 8: Farmers' perception toward the land sale market**

| Particulars | Number of respondents (N=60) | Percentage | Rank |
|---|---|---|---|
| | | Multiple response | |
| Assured market | 49 | 81.67 | II |
| Registered property dealers | 43 | 71.67 | IV |
| Computerisation of land records | 34 | 56.67 | VI |
| Social taboo | 53 | 88.33 | I |
| Ban on social gatherings | 39 | 65.00 | V |
| Creation of employment opportunities | 47 | 78.33 | III |
| Education and medical facilities at reasonable prices | 30 | 50.00 | VII |

In this analysis the aspects considered were family size, education level, average annual income and average farm land sold by farmers.

The sale of land has taken place through sale to others in small portion and none of them converted their own land for making plots. It was observed that average extent of farm land sold affected by average family size, average annual income and their literacy reveals the use of sold farm land for non-agricultural purposes. It was found that the average extent of agricultural land sale was higher among the low income households and lower among the high income groups. Literacy status also influenced the sale of farm land. The educated farmers were getting employment opportunities even in non-farming sectors and so they had capacity to hold their land. Study supports the finding of (Govindaprasad and Manikandan, 2016) that literacy level and farm land sold are conversely related.

Assured markets are those markets which provide information to buyer and seller about price awareness and all the procedure under proper rules and regulations. The property dealers should be registered by the government with fixed commission. Selling of agricultural land is a social taboo revealed by 88 per cent farmers and not a matter of pride (Table 8). As many as about 82 per cent and 72 per cent farmers demanded the assured markets for land sale and registered property dealers so that they could save themselves from the exploitation. As many as 56.67 per cent farmers opined that there should be computerization of land records. Farmers also demanded there should be ban on social gatherings, creation of employment opportunities and provision of medical facilities at reasonable prices.

**Conclusion and Policy Implications**

The present study was conducted in the south-western Punjab reveals that the tendency to sell agricultural land is more among the low income group. Sale of agricultural land has lowered the status of most of farmers in to landless and marginal farmers in the study area. The extent of inequality with regard to distribution of land was increased after the transaction in sampled household. The main non-agricultural uses of purchased land are keeping for speculative gains and

construction of colonies. The farmers sell agricultural land due to distress condition like debt burden, poor economic base, rising cost of inputs, expenditure on migration of their child, expenditure on social ceremonies, construction of house, medical treatment and also due to addiction to alcohol. The sale of agricultural land affected the economic status of the farmers and none of the farmer reported any exceptional gains from land sale during this period.

## References

Birthal P S, Negi S D, Jha K A and Singh D 2014. Income of farm households in India: Determinants, distributional consequences and policy implications. *Agricultural Economic Research Review* **27**: 37-48.

Birthal P S and Singh R P 1991. Land lease market, resource adjustment and agricultural development. *Indian Journal of Agricultural Economics* **46**: 362-68.

Chatha I S, Singh S and Grewal S S 1986. Land transactions in rural Punjab: An analysis. *Yojna* **30**: 4-8.

Govindaprasad P K and Manikandan K 2016. Farmland conversion and food security: Empirical evidences from three villages of Tami Nadu. *Indian Journal of Agricultural Economics* **71**: 493-503.

Hirashma S 2008.The land market in development: A case study of Punjab in Pakistan and India. *Economic and Political Weekly*, **43**:41-47

Mani G and Pandey V K 1997.Some policy implications of sales and lease transactions in agricultural land in progressive area of West U.P. *Indian Journal of Agricultural Economics* **52**: 741-50.

Mani G and Pandey V K 2000.A study on land transfer and demand-supply relations in land market in Western Uttar Pradesh. *Indian Journal of Agricultural Economics* **55**: 1-14.

Nair K N and Menon V 2006. Lease farming in Kerala findings from micro level studies. *Economic and Political Weekly* **30***: 2732-38.

Sekhon M K, Manjeet K, Mahal A K and Sidhu M S 2009. Efficiency and viability of small and marginal farmers in Punjab. *Journal of Agricultural Development and Policy*. **19** (2): 91-100.

Sharma V K, Singh S and Singh V P 2014. Changing structure of agriculture in Punjab. *Journal of Agricultural Development and Policy* **24**: 20-28.

Shergill H S 1985. Physiognomy and anatomy of growing, decaying and static farm in Punjab. *Economic and Political Weekly* **20**: A23-A30.

Shergill H S 1990. Land market transactions and expansion/contraction of owned area of cultivating peasant families in Punjab. *Indian Journal of Agricultural Economics* **45**: 12-19.

Singh B, Bal H S and Kumar N 1991. A spatio-temporal analysis of land-lease market in Punjab, *Indian Journal of Agricultural Economics* **46**:354-60