



Income Inequalities among Farm Households in Hoshiarpur District of Punjab

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ABSTRACT

The main objective of the present study was to examine the inequalities in the levels, pattern and per capita income among the different farm households in the rural area of Hoshiarpur district of Punjab. Gini coefficients and Lorenz curve have been used to show the clear picture of income disparities among farm households. The study revealed that the gap in the levels of income between the marginal and the large farmers is increasing day by day. Majority of marginal and small farmers were living in vulnerable conditions. They are failed to meet their basic requirements due to low income earnings from agriculture sector. The annual income of average large farm households was 9.3 times greater than the annual income of the marginal farm households. The average household income and per capita income was directly associated with the farm-size in the rural of Hoshiarpur district of Punjab. The study suggests that the socio-economic conditions of farm households could be improved by the commercialisation of agriculture sector, cooperative farming and by providing the proper price of their crops.

Key Words: Coefficient, Farm, Households, Income, Inequality.

INTRODUCTION

Inequality in the world has many dimensions. There are inequalities in income, ownership of land, health, access to education and in political voice. Inequality in India is very complex and diversified. During the last six decades, inequalities in income and consumption expenditure of households have been increasing in both rural as well as urban India. In Punjab, inequality in income as well as consumption also increased sharply after 1990s as documented by Das and Pathak (2012). The income of farming community was largely dependent on the monsoon rainfall as revealed by Chakraborty and Acharya (2018). Punjab is one of the productive states of the India. More than 60 percent population of Punjab is living in rural area and directly or indirectly depending upon the agricultural activities. The process of transformation of Punjab agriculture from a traditional to a modern has brought in its wake new opportunities for investment in agriculture because of the high rate of return to such investment.

After green revolution, the uses of chemical fertilizers, new variety of seeds and the use of new mechanical implements have increased. It created income disparities among different regions and within the farm households. Kaur (2017) revealed that in case of large and medium farm households, a major part of income comes from farm business income but due to low ownership of land and income level, the participation of small and marginal farmers in high yield variety was low.

Rural households earn their incomes from various sources including cultivation, livestock, agricultural wage labour and other non-farm occupations. Income from agriculture is largely related to land ownership and since land distribution is highly unequal in India as resulted there is high level of disparities in the income among rural households revealed by Ranganathan *et al* (2016). The main objective of the present study was to analyze the disparities in the levels, pattern and per capita income distribution of household income

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among sampled households in Hoshiarpur district of Punjab.

MATERIALS AND METHODS

The present study is based on the primary data collected during 2017-18 with the help of schedule from sampled households selected through multi-stage sampling technique. In the first stage, Hoshiarpur district was selected on the basis of two parameters *i.e.* highest literacy rate and highest sex ratio. In the second stage, out of 10 development blocks of Hoshiarpur district, only three development blocks selected on the basis of geographical conditions namely, Tanda has been selected from plain area, Talwara from mountain area and Bhunga from mixture of both plain and mountain area. At the third stage, one village selected from each development block and in totality three villages have been selected randomly.

Further farm households categorised into five size groups based on their size of land holding *viz.* marginal, small, semi-medium, medium and large farm households. At the last stage of sampling, 200 sampled households in all, 60 from Talwara block, 68 from Bhunga block and 72 from Tanda block were selected from the selected villages. Further different techniques such as average, percentage, Gini-Coefficient and Lorenz curve were used to draw the inference.

RESULTS AND DISCUSSION

The results revealed that an average sampled farm household earned Rs. 2,63,786 per annum from both agricultural and non-agricultural resources as indicated in Table 1. The income earned from agricultural activities was higher than non-agricultural activities. The results highlighted that among farm households, farm business

Table 1. Average Income of Household (Rs).

Sources of income	MF	SF	SMF	MEDF	LF	AFSHs
Farm business	49,793	91,667	1,45,563	2,40,000	4,33,333	1,23,867
Milk and milk products	12,586	17,333	30,938	40,667	43,333	22,978
Horticulture	6,207	31,667	65,625	1,16,667	2,83,333	52,056
Forestry	1,724	5,667	12,188	14,667	26,667	7,756
Sale of livestock	1,759	1,296	3,000	8,800	3,333	3,067
Rent from leased out land	862	5,000	12,500	26,667	30,000	9,444
Hiring out agri.labour	345	0	0	0	0	111
Sub total	73,276	1,52,630	2,69,813	4,47,467	8,20,000	2,19,278
Govt emp.	9,655	8,889	15,000	34,000	60,000	16,111
Private emp.	6,897	6,296	8,750	8,000	0	7,000
Artisan work	0	0	0	0	0	0
Wage work	2,069	0	0	0	0	667
Remittances	2,931	7,778	8,125	11,333	60,000	8,611
Pensions	8,448	5,111	15,000	8,000	40,000	9,589
MGNREGS	77	0	0	0	0	25
Trader	0	0	0	0	0	0
Others*	1,569	3,704	1,875	2,667	3,333	2,506
Sub total	31,646	31,778	48,750	64,000	1,63,333	44,508
Total	10,4922	1,84,407	3,18,563	5,11,467	9,83,333	2,63,786

Source: Field Survey, 2017-18.

Income Inequalities among Farm Households

Table 2. Percentage of Household Income among Farm Sample Households.

Sources of Income	MF	SF	SMF	MEDF	LF	AFSHs
Farm business	47.4	49.7	45.6	46.9	44.0	46.9
Milk & milk product	12	9.4	9.7	7.9	4.4	8.7
Horticulture	5.9	17.1	20.6	22.8	28.8	19.7
Forestry	1.6	3.0	3.8	2.8	2.7	2.9
Sale of livestock	1.6	0.7	0.9	1.7	0.3	1.1
Rent from leased out land	0.8	2.7	3.9	5.2	3.0	3.5
Hiring out agricultural labour	0.33	0.00	0.00	0.00	0.00	0.04
Sub total	69.8	82.7	84.7	87.4	83.3	83.1
Govt employee	9.2	4.8	4.7	6.6	6.1	6.1
Private emp.	6.5	3.4	2.7	1.5	0	2.6
Artisan work	0	0	0	0	0	0
Wage work	1.9	0	0	0	0	0.2
Remittances	2.7	4.2	2.5	2.2	6.1	3.2
Pensions	8.0	2.7	4.7	1.5	4.0	3.6
MGNREGS	0.07	0	0	0	0	0.01
Trader	0	0	0	0	0	0
Others*	1.5	2.01	0.59	0.52	0.34	0.95
Sub total	30.1	17.2	15.3	12.5	16.6	16.8
Total	100	100	100	100	100	100

Source: Field Survey, 2017-18.

MF=Marginal Farmers, SF=Small Farmers, SMF=Semi-Medium Farmers, MEDF=Medium Farmers, LF = Large Farmers AFSHs=All Farm Sampled Household, Others*- Religious work, Sales and Exchange of assets, Income from commercial vehicles etc.

income followed by income from horticulture and vegetables, milk and milk products, salaries and pensions were found to be important. There was a positive relationship between average income of farm households and farm size. The data clearly showed that as the farm size decreases, the average income also decreased.

Farm business income was the highest for large farm households followed by medium, semi-medium, small and marginal farm households. Income earned from horticulture and vegetables was the second important source of income for

farm households. The other sources such as income from forestry, rent from leased out land and sale of livestock also contribute in the income of farm households. It was found that marginal farmers do not show their tendency to do wage work because they consider wage work as against their social status. The annual income of average large farm households was 9.3 times greater than the marginal farm households. The results prove that the income inequalities among large and other farm households are increasing over period of time.

The result (Table 2) highlighted that out of the total income, an average farm sampled household received more than 80 per cent of their income from agricultural activities in the rural area of Hoshiarpur district of Punjab. Income earned from farm business was the highest (49.7%) for small farm households whereas, it was lowest (44.0 %) in

Table.3 Levels of Per Capita Income (INR) of Farm Sampled Households

Sources of Income	MF	SF	SMF	MEDF	LF	AFSHs
Farm business	1,00,98	15,469	29,113	45,000	59,091	22,986
Milk & milk product	2,552	2,925	6,188	7,625	5,909	4,264
Horticulture	1,259	5,344	13,125	21,875	38,636	9,660
Forestry	350	956	2,438	2,750	3,636	1,439
Sale of livestock	357	219	600	1,650	455	569
Rent from Leased out Land	175	844	2,500	5,000	4,091	1,753
Hiring out Agrl. Labour	70	0	0	0	0	21
Subtotal	14,860	25,756	53,963	83,900	1,11,818	40,691
Govt emp.	1,958	1,500	3,000	6,375	8,182	2,990
Private emp.	1,399	1,063	1,750	1,500	0	1,299
Artisan work	0	0	0	0	0	0
Wage work	420	0	0	0	0	124
Remittances	594	1,313	1,625	2,125	8,182	1,598
Pensions	1,713	863	3,000	1,500	5,455	1,779
From MGNREGS	16	0	0	0	0	5
Trader	0	0	0	0	0	0
Others*	318	625	375	500	455	465
Sub total	6,418	5,363	9,750	12,000	22,273	8,259
Total	21,278	31,119	63,713	95,900	1,34,091	48,950

Source: Field Survey, 2017-18.

large farm households. Income earned from milk and milk products was next important source of income which accounts for 8.7 per cent of the total income of farm households. The income from forestry, rent from leased-out land and sale of livestock was found to be very small.

The level of per capita income of farm sampled households showed that an average farm household received per capita income of Rs. 48,950/- annually. The per capita income earned from horticulture and vegetables were the highest (Rs. 38,636/-) for large farm households whereas, it was the lowest (Rs. 1,259/-) in the case of marginal farm households. The results further revealed that as farm size decreases, family size and per capita income of various farm households also decreased. The other sources such as income from forestry, rent from leased out land and sale of livestock also contribute in the per-capita income of farm households.

The per capita income of the large farm households was 6.3 times more than the per capita income of marginal farm households and 4.3 times more than the per capita income of small farm households, which clearly showed that there is high degree of inequality exists across large, small and marginal farm households.

Household Income Distribution

Table 6 explains the inequalities in the distribution of total income across the various farm sampled households in the rural area of Hoshiarpur district. Gini coefficient ratio is a tool mainly used to measure the degree of inequalities. The highest value of Gini-coefficient ratio indicates highest degree of inequalities.

The value of Gini coefficient was 0.3937 for farm households. Overall top 10 per cent of farm sampled households enjoyed 28.5 per cent of the

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Table 6. Distribution of Household Income of Sampled Households.

Cumulative Percentage of Households	10	20	30	40	50	60	70	80	90	100	Gini-coefficients
Farm Households	2.4	5.6	10.0	15.6	22.5	30.5	40.6	54.2	71.4	100	0.3937

Source: Field Survey, 2017-18.

total income. On the contrary side, the bottom 10 per cent share was only 2.4 per cent of total income. The percentage share of income of bottom 10 per cent was almost 11.6 times lower than the income earned by the top 10 per cent of farm sampled households.

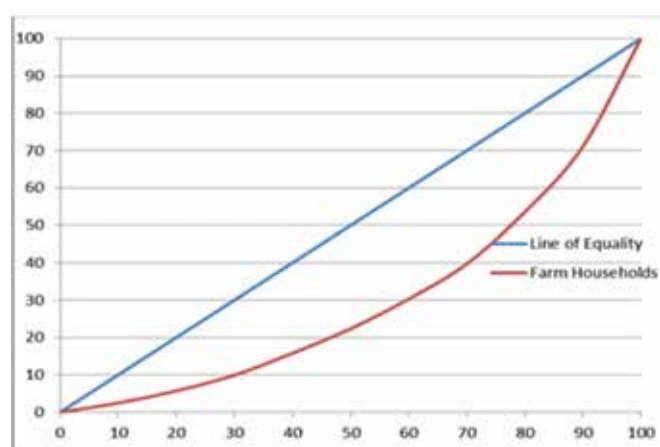


Figure 1. Inequality in Income among Farm Sampled Households Showing by Lorenz Curve

Lorenz curve has great utility in the study of degree of inequality in the distribution of income and wealth. By viewing the respective Lorenz curve, it was observed that income inequalities are more serious in case of farm households.

CONCLUSION

Inequalities in the income caused the greater disparities in the living standard of rural households in India as well as in Punjab. The observation showed that majority of marginal and small farmers are living in vulnerable conditions. They are failed to meet their basic requirements due to low income earnings from agriculture sector. The study concluded that there is a positive relationship between average income of farm households and farm size. The annual income of average large farm

households is 9.3 times greater than the annual income of the marginal farm households. The percentage share of income of bottom 10 per cent is almost 11.66 times lower than the income earned by the top 10 per cent of farm sampled households. For the equal and sustainable development there is greater need to address the issues related to inequality.

The study suggests that efforts should be made to increase the level of income among marginal and small farm households by providing the proper price of their crops, by providing debt at low rates of interest, subsidizing the agricultural seeds and other inputs. While fixing the minimum support price, total cost of agricultural and income earnings of marginal and small farmers should also be taken in to account. It will be helpful to reduce the inequalities between marginal and large farm households.

REFERENCES

- Chakraborty A and Acharya S K (2018). Monsoon and farm income: Different aspects and their impacts. *J Krishi Vigyan* 6(2): 163-167.
- Das D and Pathak M (2012). The growing rural-urban disparity in India: Some issues. *Int J Advancements in Res & Tech* 1(5), 1-7.
- Kaur K (2017). *Disparities in ownership of assets and income among rural households in Punjab: A case study of Sri Mukhtar Shaib District*. Unpublished M. Phil. Dissertation, Department of Economics, Punjabi University, Patiala, India.
- Ranganathan T, Tripathi A and Rajoriya B (2016). Retrieved from, https://www.researchgate.net/publication/301355952_Changing_Sources_of_Income_and_Income_Inequality_among_Indian_Rural_Households, accessed on 24-05-2018-09-04.

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