



Extent of Inequalities in the Distribution of Household Assets among Rural Households in Himachal Pradesh

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Abstract: *The present paper attempted to analyse the extent of inequalities in the distribution of household assets among rural households in Himachal Pradesh. Samples of 300 households (165 marginal farmers, 75 small farmers, 54 medium farmers and 06 large farmers) have been selected with multi-stage random sampling. The extent of inequalities in the distribution of household assets has been analysed with the help of Lorenz curve and Gini-coefficient. The Gini-coefficient for the distribution of productive assets among the marginal, small, medium and large size of holdings have been worked out 0.1673, 0.3239, 0.3314 and 0.3569 respectively. The value of Gini Co-efficient as well as the shape of the Lorenz curve for the different size of holding groups clearly shows that the extent of inequalities in the distribution of productive assets shows an increasing tendency with an increase in the size of holdings.*

Key Words: *assets, distribution, Gini-Coefficient, households, inequality.*

1. INTRODUCTION:

The distribution of wealth is one of today's most widely discussed and controversial issues. Assets are an important indicator of economic well-being of households. Acquired through inheritance, gifts (including dowry) and accumulated savings, assets provide means of livelihood as well as security against adverse economic shocks. Inherited assets across generations are an important source of perpetuating inequality of wealth and income around the world (Piketty, 2014). There is clear evidence of wealth concentration across the nation (Basu, 1976). The series of events that have taken place in India since the mid-1960s bring back attention in the issue of rural development and economic inequalities (Julka and Soni, 1988). The unequal distribution of assets in India is the main cause of income inequality, and rising incomes exclusively increase the asset gap. Land is the primary productive asset in rural areas, and unequal land distribution leads to unequal income distribution, which then results in unequal access to the decision-making process (Bhat, 1993). During the last seven decades, India has made substantial economic growth and is gradually emerging as a major economic force. The overall rate of economic growth has remained remarkable. However, it is estimated that the benefits of the initial economic progress have been experienced by a small percentage of the population, while hundreds of millions continue to live below the poverty line. This could lead to huge rises in wealth inequality, which could have serious consequences.

2. REVIEW OF LITERATURE:

Jayadev et.al. (2007) conducted a study on the pattern of wealth disparities in India during the liberalization era. They used micro data from the All India Debt and Investment Survey (in 1991-92 and 2002-03) collected by the National Sample Survey Organization. They focused on household per capita net worth and household per capita assets, two distinct metrics of wealth. They concluded that, whether examined by summary measures like the Gini-coefficient or by Central shares of wealth, wealth levels in the country have increased across nearly all groupings, accompanied by a small but noticeable rise in the level of interpersonal wealth inequality. They also came to the conclusion that there has been a significant gap in wealth outcomes between states with middle and higher incomes and those with lower incomes in terms of the growth rates of wealth holdings. Wealth disparity has significantly increased in states with faster economic growth. The level of wealth holdings varies significantly between socioeconomic groups, to sum up. Thakur and Sharma (2008) conducted an empirical investigation on the distribution of household assets and the resultant pattern



of income and employment among the weaker sections in the rural areas of Haryana based on primary data collected from 300 sample households. They concluded that this study established the interrelationship between the values of household productive assets, gainful employment opportunities and household income. Among the landless and smaller size of holdings owing to the lack of sufficient productive assets (i.e. mainly land, livestock and machineries), the family human labour days are either unemployed and/or underemployed, which resulted in meager household income. Whereas, contrary to it, the households falling on the larger size of holdings have sufficient productive assets which provide gainful employment opportunities to the family human labour which ensure regular and sound source of household income with the help of which they can afford to maintain a good standard of living. Jin et.al., (2010) concluded that income inequality has a negative (positive) impact on households' consumption (savings), even after we control for family income. They argued that people save to improve their social status when social status is associated with pecuniary and non-pecuniary benefits. Rising income inequality can strengthen the incentives of status-seeking savings by increasing the benefit of improving status and enlarging the wealth level that is required for status upgrading. They also found that the negative effect of income inequality on consumption is stronger for poorer and younger people, and income inequality stimulates more education investment, which are consistent with the status seeking hypothesis. Zacharias and Vakulabharanam (2011) analyzed the relationship between wealth inequality and caste divisions in India used nationally representative surveys on household wealth conducted during 1991–92 and 2002–03. They found that the groups in India that are generally considered disadvantaged (known as Scheduled Castes or Scheduled Tribes) have, as one would expect, substantially lower wealth than the “forward” caste groups, while the Other Backward Classes and non-Hindus occupy positions in the middle. They used the ANOGI decomposition technique and estimated that between-caste inequality accounted for about 13% of overall wealth inequality in 2002–03. The stratification parameters indicate that the forward caste Hindus overlap little with the other caste groups, while the latter have significantly higher degrees of overlap with one another and with the overall population. Xie and Jin (2015) studied the level, distribution, and composition of household wealth in contemporary China with new nationwide longitudinal survey data available from the China Family Panel Studies (CFPS). They found that the wealth Gini coefficient of China was 0.73 in 2012. The richest 1 percent owned more than one-third of the total national household wealth, while the poorest 25 percent owned less than 2 percent. Housing assets, which accounted for over 70 percent, were the largest component of household wealth. Finally, the urban-rural divide and regional disparities played important roles in household wealth distribution, and institutional factors significantly affected household wealth holdings, wealth growth rate, and wealth mobility. Singh et.al., (2016) concluded that there is direct correlation between having different farm assets and farm-size among all the farmer household categories and with the medium farmer category having the highest proportion of financial assets relative to overall assets. The farmer is also expected to own the largest portion of non-agricultural land and other assets. Anghel, et.al., (2018) analyzed the level of inequality in Spain and how it evolved over the course of the past crisis and the early stages of the current recovery and showed less wage dispersion in Spain than in other comparable economies, even after the crisis years, while the surge in unemployment during the period resulted in a high level of inequality in per capita income. The level of inequality in Spain is more moderate when total gross household income is analyzed, decreasing during the crisis as a result of pensions developing more favourably than other sources of income, in conjunction with young people delaying setting up home. Wealth inequality exceeds income inequality and increased during the downturn as a result of financial assets outperforming real assets. Balestra and Tonkin (2018) described how household wealth is distributed in 28 OECD countries, based on evidence from the second wave of the OECD Wealth Distribution Database and wealth concentration is twice the level of income inequality: across the 28 OECD countries covered, the wealthiest 10% of households hold, on average, 52% of total household wealth, while the 60% least wealthy households own little over 12%. Further they concluded that some countries feature large shares of households with high levels of debt relative to both their incomes and the assets that they hold; this potentially exposes such households to significant risks in the event of changes in asset prices or falls of their income. Cowell et.al., (2018) used data from five countries (Italy, U.K., U.S., Sweden and Finland) to identify the effects of characteristics on component wealth holdings, their value and their distribution. There is considerable cross-country variation in levels of household wealth and in wealth inequality. They assessed the extent to which these differences can be accounted for by differences in the distributions of households' demographic and economic characteristics. They concluded that the biggest share of cross-country differences is not attributable to the distribution of household demographic and economic characteristics but rather reflect strong unexplained country effects. Frémeaux and Leturcq (2020) examined the individualization of wealth in France between 1998 and 2015, using precise survey data on the property titles of assets. They showed that the usual measures of wealth inequality, which allocate the same share of household wealth to each spouse or partner, overestimate the share of wealth held by women. This results in an underestimation of both the level and the growth of a) wealth inequality between individuals and b) the gender wealth gap. They argued for better consideration of the ownership status and intra-household distribution of wealth in the measurement of wealth inequality. Pfeffer and Waitkus (2021)



Used harmonized data on 15 countries included in the Luxembourg Wealth Study (LWS), they demonstrated a lack of association between national levels of income and wealth inequality and concentration. Used decomposition approaches, they then estimate the degree to which national levels of wealth inequality and concentration relate to cross-national differences in wealth portfolios and the distribution of specific asset components. Considering the role of housing equity, financial assets, non-housing real assets, and non-housing debt, they showed that cross-national variation in wealth inequality and concentration is centrally determined by the distribution of housing equity.

3. OBJECTIVES AND METHODOLOGY:

The specific objectives of the present study are to work out the inequalities in the distribution of household assets among rural households in the agrarian economy of Himachal Pradesh. For the present empirical investigation Mandi district has been selected purposively mainly due to the reason that the topography of the district is more or less similar to that of the state of Himachal Pradesh. Further, the district-wise percentage of poor varies from 20 percent to 54 percent, whereas this percentage in district Mandi is 20 percent. Therefore both from the topography as well as from the percentage poor point of view this selected district can represent the economic activities of the rural household in the state of Himachal Pradesh as a whole. Mandi district has ten development block viz. Mandi Sadar, Rewalsar, Drang, Chauntra, Chachiot, Siraj, Dharampur, Gopalpur, Sunder Nagar and Karsog. With the help of multi-stage random sampling a sample of 300 households was selected from Dharampur and Gopalpur development blocks. Out of the total 300 sample households, 165 households fall in the category of marginal farmers, 75 households fall in the category of small farmers, 54 households fall in the category of medium farmers and the remaining 6 households fall in the category of large farmers. In order to achieve the objective of the present study, the required information has been collected from the selected sample with the help of pre-tested scheduled by conducting personal interviews.

Tools and Techniques:

The primary data collected have been tabulated by classifying into homogenous categories and the appropriate statistical tools and techniques have been applied to work out the results in order to achieve the objectives of the present study. The measures of inequalities have been proposed in the economic literature fall broadly into two categories. On the one hand there are measures that try to catch the extend of inequalities in some objective sense, usually employing some statistical measures of relative variation of income; and on the other hand: there are indices that try to measure inequalities in terms of some normative measures, notion of social welfare so that a high degree of inequality corresponds to a lower level of social welfare for a given total of income (Sen, 1974).

Objective Measures of Inequalities:

In order to measure the extent of assets inequality in the area under study, the following measures have been applied.

1. Lorenz Curve:

Extent of inequalities in different groups of sample households has been examined with the help of Lorenz Curve. In Lorenz Curve technique, the size of items and the frequencies are both cumulated and taking the total as 100, percentage, are calculated for the various cumulated values. These percentages are plotted on a graph paper. If there is proportionally equal distribution of the frequencies over various values of a variate, the points would lie in a straight line. This line is called 'line of equal distribution. If the distribution of items is not proportionately equal it indicates variability, and the curve would be away from the line of equal distribution. The farther the curve is from the line, the greater is variability in the series. A higher Lorenz implies more social welfare for the same total of income. The main drawback of Lorenz Curve is that it does not give any qualitative/ numerical value of the extent of inequality. It merely gives a picture of the extent to which a series is pulled away from an equal distribution. It serves as a supplement and should be used along with some quantitative measures of inequality (Elhance, 1973).

2. Gini-coefficient:

Gini-coefficient is used to attach some absolute measures to the degree of inequality or give some idea whether the inequality is large or small. Gini-coefficient is not purely statistical and it embodies implicit judgment about the weight to be attached to inequality at different points on the income scale. This co-efficient may be interpreted in two ways. First, it may be seen geometrically in terms of Lorenz curve.

$$\text{Gini - Coefficient} = \frac{\text{Area between Lorenz Curve and diagonal}}{\text{Total Area under diagonal}}$$



The co-efficient may be seen to range from zero when income is equal (the Lorenz Curve follows the diagonal) to one and at the other extreme (the Lorenz curve have > shape). Secondly, it may be computed mathematically as follows (Sen, 1974).

The value of the Gini-coefficient for the distribution of assets among the sample households have been worked out with the help of following formula:-

$$G(a) = 1 + (1/n) - (2/n^2 z) \sum_{i=1}^n (n+1-i)a_i$$

Where,

- G (a) = Gini coefficient of the asset distribution
- n = total number of households
- Z = mean value of the assets distribution
- a_i = value of the assets of the ith person

4. ANALYSIS, FINDINGS AND RESULT:

The extent of inequalities in the distribution of household assets among the marginal, small, medium, large as well as among all the household have been analyzed with the help of Lorenz curve and Gini-coefficient.

4.1. Distribution of Household Productive Assets among the Marginal Farmers:

The cumulated percentage values of productive assets as well as the number of persons falling in each assets group among the marginal farmers have been presented in Table 1.

Table 1 Distribution of Household Productive Assets among the Marginal Farmers

S.N.	Assets Class Group (Rs.)	Value of Household Productive Assets (Rs)	Cumulated Value of Household Assets (Rs)	Cumulated Percentage	No. of Persons	Cumulated Persons	Cumulated Percentage
1	0-600000	21719300	21719300	14.28	165.2	165.2	25.07
2	600000-800000	22021650	43740950	28.76	113.7	278.9	42.33
3	800000-1000000	17470700	61211650	40.25	69.7	348.6	52.91
4	1000000-1200000	22695650	83907300	55.17	85.2	433.8	65.84
5	1200000-1400000	35354100	119261400	78.42	114.1	547.9	83.15
6	1400000-1500000	20081700	139343100	91.62	71.6	619.5	94.02
7	1500000 and above	12736900	152080000	100.00	39.4	658.9	100.00

Source: Primary data collected from households of study area.

The cumulated percentage of values of productive assets as well as the population on the marginal size of holdings group, when plotted on a graph paper gives the resultant shape of the Lorenz curve which is evident from Fig.1, which clearly indicates that the bottom 42.33 per cent of the population is sharing about 28 per cent of the total productive assets at the one end and at the other end about 22 per cent of the total productive assets is shared by the top 17 per cent population.

The value of Gini-Coefficient of the productive assets among the marginal farmers has been worked out with the help of following formula:

$$G(a) = 1 + (1/n) - (2/n^2 z) \sum_{i=1}^n (n+1-i)a_i$$

Where,

- G (a) = Gini-coefficient of the value of productive assets.
- n = total population
- z = mean value of the productive assets.



a_i = value of the productive assets of the i th person.

$$\sum_{i=1}^n (n+1-i)a_i = 41799062055$$

$$z = 1152080000/658.9 = 230808.924$$

$$n = 658.9$$

Thus,

$$G(a) = 1 + (1/658.9) - (2/658.92 \times 230808.924) (41799062055)$$

$$= 1 + 0.001517681 - (2/434149.21 \times 230808.924) (41799062055)$$

$$= 1.001517681 - (83598124110/100205512000.00)$$

$$= 1.001517681 - 0.834266723$$

$$= 0.1673$$

DISTRIBUTION OF THE HOUSEHOLD PRODUCTIVE ASSETS AMONG THE MARGINAL FARMERS

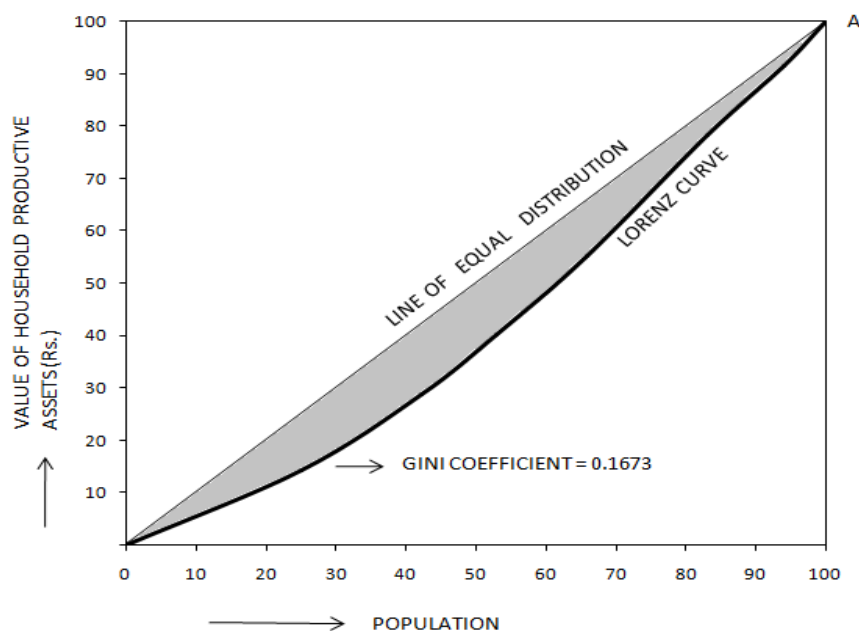


FIGURE 1

The value of Gini-Coefficient for the productive assets among the marginal farmers has been worked out 0.1673, both the value of Gini-Coefficient and the shape of Lorenz curve shows less inequalities in the distribution of household productive assets among the marginal farmers.

4.2. Distribution of Household Productive Assets among the Small Farmers:

The cumulated percentage of the distribution of household productive assets as well as the number of persons falling in each assets group among the small farmers have been presented in Table 2. The cumulated percentage of values of productive assets as well as the population on the small size of holding groups, when plotted on a graph paper gives the resultant shape of the Lorenz curve which is evident from Fig. 2, which clearly indicates that the bottom 19 per cent of the population is sharing about 7 per cent of the total productive assets at the one end and at the other end about 22 per cent of the total productive assets is shared by the top 11 per cent population.

Table 2 Distribution of Household Productive Assets among the Small Farmers

S.N.	Assets Class Group (Rs.)	Value of Household Productive Assets (Rs)	Cumulated Value of Household Assets (Rs)	Cumulated Percentage	No. of Person	Cumulated Person	Cumulated Percentage
1	0-900000	10465000	10465000	7.06	89	89	19.35



2	900000-1400000	24858200	35323200	23.83	110.9	199.9	43.46
3	1400000-1600000	15400000	50723200	34.22	73.2	273.1	59.37
4	1600000-2000000	20942500	71665700	48.35	68.5	341.6	74.26
5	2000000-4000000	44423000	116088700	78.32	67.9	409.5	89.02
6	4000000 and above	32136000	148224700	100.00	50.5	460	100.00

Source: Primary data collected from households of study area

The value of Gini-Coefficient of the productive assets among the small farmers has been worked out as follows:

$$\sum_{i=1}^n (n+1-i)a_i = 23122834620$$

$$z = 148224700/460 = 322227.6087$$

$$n = 460$$

Thus,

$$G(a) = 1 + (1/460) - (2/460 \times 322227.6087) (23122834620)$$

$$= 1 + 0.002173913 - (2/211600 \times 322227.6087) (23122834620)$$

$$= 1.002173913 - (2/68183362000) (23122834620)$$

$$= 1.002173913 - 0.678254458$$

$$= 0.3239$$

DISTRIBUTION OF THE HOUSEHOLD PRODUCTIVE ASSETS AMONG THE SMALL FARMERS

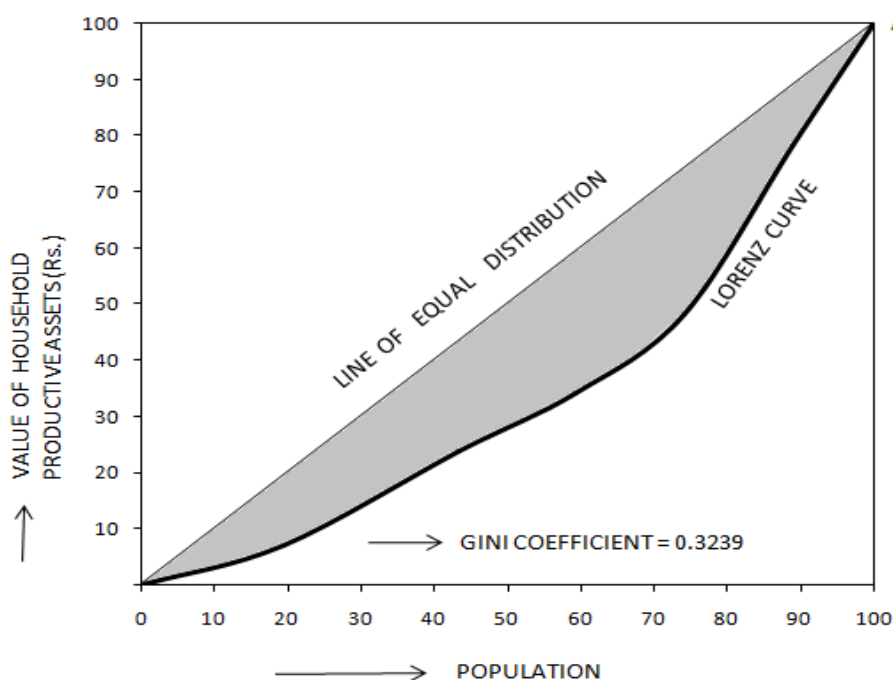


FIGURE 2

The value of Gini-Coefficient of the productive assets among the small farmers has been worked out 0.3239, both the value of Gini-Coefficient and the shape of Lorenz curve shows higher inequalities in the distribution of household productive assets among the small farmers if compared to marginal farmer.

4.3. Distribution of Household Productive Assets Among the Medium Farmers:

The cumulated percentage of the distribution of household productive assets as well as the number of persons falling in each assets group among the medium farmers have been presented in Table 3. The cumulated percentage of values of productive assets as well as the population on the medium size of holding groups, when plotted on a graph paper gives the resultant shape of the Lorenz curve which is evident from Fig. 3, which clearly indicates that the bottom 17 per cent of the population is sharing about 8 per cent of the total productive assets at the one end and at the other end about 25 per cent of the total productive assets is shared by the top 10 per cent population.



Table 3 Distribution of Household Productive Assets among the Medium Farmers

S.N.	Assets Class Group (Rs.)	Value of Household Productive Assets (Rs.)	Cumulated Value of Household Assets (Rs.)	Cumulated Percentage	No. of Person	Cumulated Person	Cumulated Percentage
1	0-1700000	13400000	13400000	8.99	60.7	60.7	17.68
2	1700000-2000000	32590000	45990000	30.85	116.2	176.9	51.51
3	2000000-2200000	18468000	64458000	43.24	55.9	232.8	67.79
4	2200000-4000000	16825000	81283000	54.52	39.4	272.2	79.27
5	4000000-4500000	30923200	112206200	75.26	38.8	311	90.56
6	4500000-5000000	13680000	125886200	84.44	18.5	329.5	95.95
7	5000000 and above	23197000	149083200	100.00	13.9	343.4	100.00

Source: Primary data collected from households of study area

The value of Gini-Coefficient of the productive assets among the medium farmers has been worked out as follows:

$$\sum_{i=1}^n (n+1-i)a_i = 17190285260.00$$

$$z = 149083200/343.4 = 434138.6139$$

$$n = 343.4$$

Thus,

$$G(a) = 1 + (1/343.4) - (2/343.4 \times 2 \times 434138.6139) (17190285260.00)$$

$$= 1 + 0.002912056 - (2/117923.56 \times 434138.6139) (17190285260.00)$$

$$= 1.002912056 - (2/51195170880) (17190285260.00)$$

$$= 1.002912056 - 0.671558859$$

$$= 0.3314$$

DISTRIBUTION OF THE HOUSEHOLD PRODUCTIVE ASSETS AMONG THE MEDIUM FARMERS

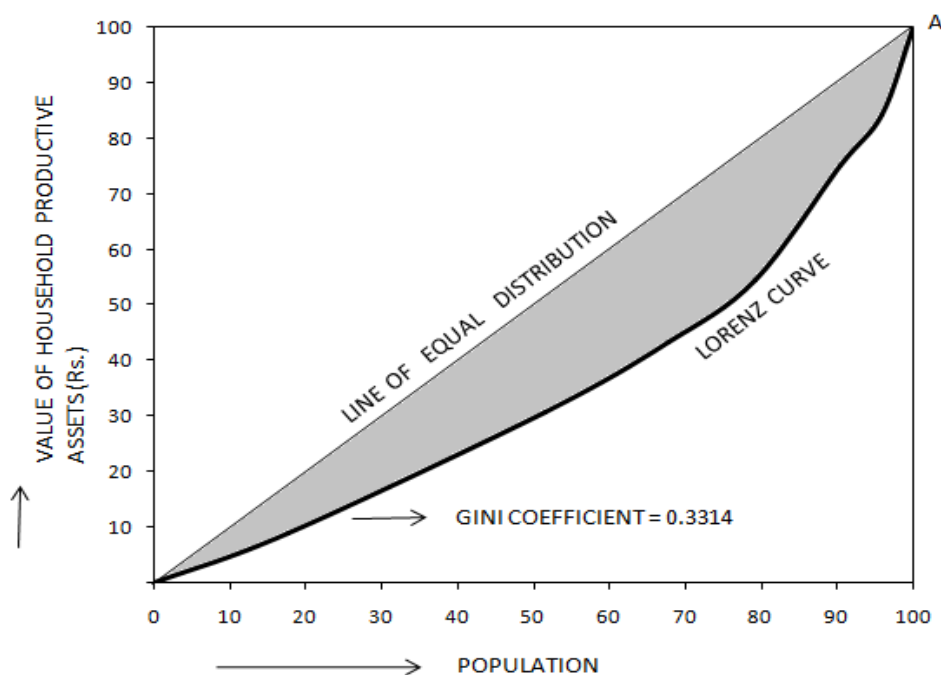


FIGURE 3

The value of Gini-Coefficient of the household productive assets on the medium farmers has been worked out 0.3314, which is higher, if compared to the value of Gini-Coefficient of the distribution of the value of household productive assets on the marginal and small farmers.



4.4. Distribution of Household Productive Assets among the Large Farmers:

The cumulated percentage of the distribution of household productive assets as well as the number of persons falling in each assets group among the large farmers have been presented in Table 4. The cumulated percentage of values of productive assets as well as the population on the large size of holding groups, when plotted on a graph paper gives the resultant shape of the Lorenz curve which is evident from Fig. 4, which clearly indicates that the bottom 22 per cent of the population is sharing about 17 per cent of the total productive assets at the one end and at the other end about 31 per cent of the total productive assets is shared by the top 14 per cent population.

Table 4 Distribution of Household Productive Assets among the Large Farmers

S.N.	Assets Class Group (Rs.)	Value of Household Productive Assets (Rs)	Cumulated Value of Household Assets (Rs)	Cumulated Percentage	No. of Person	Cumulated Person	Cumulated Percentage
1	0-4000000	7174500	7174500	17.84	7	7	22.22
2	4000000-5000000	4760000	11934500	29.67	5	12	38.10
3	5000000-10000000	5245000	17179500	42.71	6.2	18.2	57.78
4	10000000-12000000	10638000	27817500	69.16	9	27.2	86.35
5	12000000 and above	12403700	40221200	100.00	4.3	31.5	100.00

Source: Primary data collected from households of study area

The value of Gini-Coefficient of the productive assets among the large farmers has been worked out as follows:

$$\sum_{i=1}^n (n+1-i)a_i = 427490670$$

$$z = 40221200/31.5 = 1276863.492$$

$$n = 31.5$$

Thus,

$$G(a) = 1 + (1/31.5) - (2/31.5^2 \times 1276863.492) (427490670)$$

$$= 1 + 0.031746032 - (2/992.25 \times 1276863.492) (427490670)$$

$$= 1.031746032 - (2/1266967800) (427490670)$$

$$= 1.031746032 - 0.674824838$$

$$= 0.3569$$

DISTRIBUTION OF THE HOUSEHOLD PRODUCTIVE ASSETS AMONG THE LARGE FARMERS

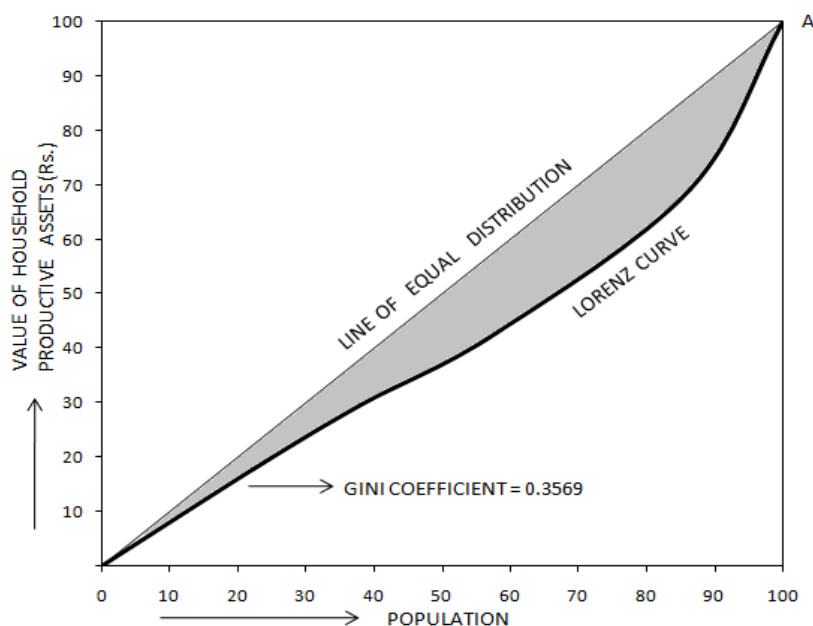


FIGURE 4



The value of Gini-Coefficient of the household productive assets on the large farmers has been worked out 0.3569, which is higher, as compared to the value of Gini-Coefficient of the distribution of the value of household productive assets on the marginal, small and medium size of holding groups. Thus, the value of Gini-Coefficient of the productive assets on the large size of holdings shows a higher inequality in the distribution of household productive assets.

4.5. Distribution of Household Productive Assets among All the Farmers

The cumulated percentage of the distribution of household productive assets as well as the number of persons falling in each assets group among the all farmers together has been presented in Table 5. The cumulated percentage of values of productive assets as well as the population among all the sample households, when plotted on a graph paper gives the resultant shape of the Lorenz curve which is evident from Fig.5, which clearly indicates that the bottom 29 per cent of the population is sharing about 14 per cent of the total productive assets at the one end and at the other end about 28 per cent of the total productive assets is shared by the top 10 per cent population.

Table 5 Distribution of Household Productive Assets among All the Farmers

S.N.	Assets Class Group (Rs.)	Value of Household Productive Assets (Rs)	Cumulated Value of Household Assets (Rs)	Cumulated Percentage	No. of Person	Cumulated Person	Cumulated Percentage
1	0-600000	21719300	21719300	4.44	165.2	165.2	11.06
2	600000-1000000	49957350	71676650	14.64	272.4	437.6	29.29
3	1000000-1500000	118389650	190066300	38.82	455	892.6	59.75
4	1500000-2000000	79669400	269735700	55.09	284.8	1177.4	78.82
5	2000000-3000000	35293000	305028700	62.30	95.3	1272.7	85.20
6	3000000-4000000	51597500	356626200	72.84	74.9	1347.6	90.21
7	4000000 and above	132982900	489609100	100.00	146.2	1493.8	100.00

Source: Primary data collected from households of study area

The value of Gini-Coefficient of the productive assets among all the farmers has been worked out as follows:

$$\sum_{i=1}^n (n+1-i)a_i = 251124955055$$

$$z = 489609100/1493.8 = 327760.8114$$

$$n = 1493.8$$

Thus,

$$G(a) = 1 + (1/1493.8) - (2/1493.82 \times 327760.8114) (251124955055)$$

$$= 1 + 0.000669434 - (2/2231438.44 \times 327760.8114) (251124955055)$$

$$= 1.000669434 - (2/731378073580) (251124955055)$$

$$= 1.000669434 - 0.68671721$$

$$= 0.3139$$

DISTRIBUTION OF THE HOUSEHOLD PRODUCTIVE ASSETS AMONG ALL THE FARMERS

The value of Gini-Coefficient of the household productive assets among all the sample households has been worked out 0.3139. It is clear from the value of Gini-Coefficient of the household productive assets and the Lorenz curve according to size of holdings that the extent of inequality in the distribution of household productive assets shows an increasing tendency with an increase in the size of holdings.

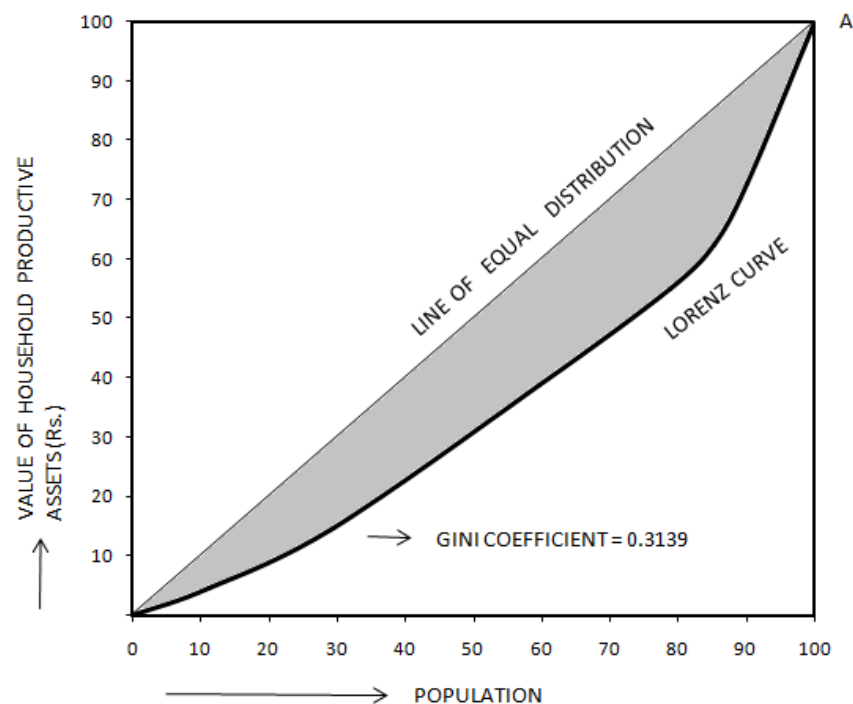


FIGURE 5

5. SUMMARY, CONCLUSION AND SUGGESTIONS:

In the present study, the value of Gini-coefficient for the distribution of productive assets has been worked out 0.1673 for household falling on the marginal size of holdings. Both the value of Gini-coefficient and the shape of Lorenz curve (Fig.1) shows less inequalities in the distribution of productive assets among the marginal farmers. The Gini-coefficient for the distribution of productive assets among the small and medium size of holdings have been worked out 0.3239 and 0.3314 respectively. The value of Gini-coefficient and the shape of Lorenz curve for the medium size of holding groups (Fig. 3) shows more inequalities if compared to the value of Gini-coefficient as well as the shape of Lorenz curve on the marginal and small size of holdings. The Gini-coefficient for the distribution of household productive assets on the large holding group has been worked out 0.3569. The value of Gini-coefficient as well as the shape of Lorenz curve (Fig. 4) shows that higher inequalities exists in the distribution of household productive assets among the large size of holding groups as compared to the marginal, small and medium size of holding groups. The Gini-Coefficient of the value of productive assets among all the sample households has been worked out 0.3139. The value of Gini Co-efficient as well as the shape of the Lorenz curve for the different size of holding groups clearly shows that the extent of inequalities in the distribution of productive assets shows an increasing tendency with an increase in the size of holdings.

Thus, it can be concluded from the present empirical study that there exists lot of inequalities in the distribution of household assets among the sample households falling on the different holding groups, which resulted in wide variations in the socio-economic conditions of the sample households. As a result, in order to eliminate inequalities in household asset distribution across the sample households belonging to different holding groups, as well as to improve the socio-economic situations of poor rural households through rural development projects. Infrastructure development, raising the minimum wage, expands the earned income tax, building assets for working families, investing in education, and progressive taxation (taxing the wealthy more) should all be promoted. Government should adopt such Policies that can affect the level of economic inequality include redistribution between rich and poor, making it easier for people to climb the ladder of opportunity; and estate taxes, which are taxes on inheritances.

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