REGION WISE DISPARITIES IN OWNERSHIP OF HOUSEHOLD ASSETS AMONGST FARMERS IN PUNJAB

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ABSTRACT

The present paper is an attempt to analyse the levels, patterns, and distribution of household assets amongst farmers across the regions in the rural areas of Punjab. The Multi-stage sampling technique has been used to select the districts, development blocks, villages and households for the purpose of study. The study relates to the agricultural year 2015-16. The results reveal that the average and per capita values of household assets are the highest in the medium, followed by high and low productivity regions. The average values of household durable assets are relatively higher in the high and medium productivity regions because farmers in these regions possess durable assets of superior quality because of their better economic condition. The average value of farm assets is the maximum (Rs. 14017149.30) in the medium, followed by high (Rs. 11386181.09) and low (Rs. 9474303.71) productivity regions. The average value of livestock assets is the highest (Rs. 189709.47) in the high productivity region and the lowest (Rs. 99818.18) in the low productivity region. The Gini Coefficient supports the evidence that distribution of household assets is more uneven (0.5546) in the medium productivity region and less uneven (0.4763) in the high productivity region. The distribution of per capita assets is worse (0.5026) in the medium, followed by high (0.4322) and low (0.4267) productivity regions. The distribution of per household assets is more uneven than the per capita assets across all the regions.

KEY WORDS: Assets, farmers, regions, rural Punjab.

INTRODUCTION

The state of Punjab had been one of the world's most remarkable examples of agricultural growth in the last few decades. This impressive agricultural growth had been closely associated with the success of New Agricultural Technology (NAT), the success of which is well-known as the Green Revolution (Singh & Kohli, 2005). With the adoption of NAT, subsistence agriculture has been transformed into a commercial one. It had led to an increase in farm production and consequently, income of farmers (Sain, Singh & Joshi, 1978). But the NAT led to sustained unbalanced growth among the different regions, and widened the income disparities amongst the farm population in the same region as a result of the unequal sharing of benefits between the marginal, small and large farmers. The NAT was mainly accessible to the large farmers. The high risk and uncertainty, large credit requirements, and absence of controlled irrigation were some of the factors which discouraged majority of the small and marginal farmers from participating in the programme, at least in the initial stage, the large farmers being less affected by these factors were able to increase their farm income considerably through greater participation in the programme (Chowdhury, 1970; Dhangaraje, 1987). Thus, more income resulted in greater savings which enabled them to purchase more land and machinery. This trend increased the income base of already rich farmers, and led to widen the wealth disparities between the different categories of farmers over the period of time. Wealth is a potent component in the factors which determine the position of the agricultural community within society. Wealth gives rise to income in a variety of forms; and provides security, freedom of manoeuvre, and economic and political power (Atkinson, 1980; United Nations, 2007).

Several studies carried out by Mishra, El-Osta, Morehart, Johnson, & Hopkins (2002), and Mishra, Moss, & Erickson (2006) for United States; Anusionwu (1986) for Nigeria; Gould & Saupe (1990) for eight Southwestern Wisconsin Countries; and Takayama (1994) for Japan; Basu (1976) for India, examined the distribution of wealth and assets amongst farm households. National Sample Survey Office (2016) analysed that there were wide variations in average values of assets in rural and urban areas in India; and a rural household on an average owned assets less than half of assets owned by the urban household during the period of 2013. Sarma, Saha, & Jayakumar (2017); Vaidyanathan (1993); Subramanian & Jayraj (2006); Jayadev, Motiram, & Vakulabharanam (2007) examined that Indian rural households witnessed persistent and growing inequality in asset distribution; land continued to be the most important form of

assets for rural households; and distribution of productive assets was more unequal than the distribution of total assets. These studies also revealed that asset inequalities amongst rural households had increased from 1991-92 to 2002-03 and 2012-13. Grewal & Rangi (1981); and Sharma (2001) have brought out that there were sharp inequalities in the ownership of machinery assets in Punjab and Haryana states; land dominated the total assets; and capital intensive technology had widened the inequality in operational land holdings. Kaur (2011) examined wide disparities in the distribution of assets across the different farm-size categories in Punjab; and small farmers were found to be at the lowest followed by medium and large farmers. Debt asset ratio had registered an increase and showed depleting economic condition of Punjab farmers. Several studies carried out by Toor, Singh, &- Kumar (2018); Toor, Singh, & Kumar (2019); Kaur (2017); Kaur (2016); Kaur, Kaur, Anupama, Kaur, & Singh (2018); and Singh, Toor, & Singh (2016) revealed inequalities in the distribution of assets among the farm households in rural Punjab. Sharma, Sharma, & Bala (1994) revealed that land and farm buildings were the main contributors to inequality in the total asset distribution; and Chopra (1984); Rawal (2008); and Kaushik (1991) also revealed that land distribution was the most important factor contributing toward total inequality. Distribution of ownership holdings of land was also extremely unequal in Punjab state; and the substantial share of land continued to be in the hands of large land-owners (Rawal, 2008). Inequalities in operational land had increased in the state from 0.398 to 0.670 during the period of 1970-71 to 2012-13 (National Sample Survey Office, 2015). It could be due to substantial consolidation of holdings by wealthy landowners and fragmentation of smaller holdings by other rural classes in the state (Pritchard, Rammohan, Sekher, Parasuraman, & Choithani, 2014). Inequalities in asset ownership then led to greater viability of deprivation. These inequalities were the consequence of differences in saving or in access to credit, the two sources of finance of asset creation (Chopra, 1984). The present paper is an attempt to examine the levels, patterns, and distribution of household assets amongst farmers across the regions in the rural areas of Punjab.

METHODOLOGY

The Multi-stage sampling technique has been used to select the districts, development blocks, villages and households for the purpose of study. Punjab state has been divided into three regions known as high, medium, and low productivity regions on the basis of agricultural

productivity which is the average of output of major ten crops for the year 2013-14. For avoiding the geographical contiguity, Ludhiana, S. A. S. Nagar and Mansa districts have been selected from the high, medium, and low productivity regions respectively. These three selected districts also cover the agro-climatic zones of the state, representing the Central Plains Zone, Shivalik Foothills Zone, and South-West Zone respectively. The selected districts comprise twenty-one development blocks and all the development blocks have been taken up. One village from each development block has been chosen randomly. Thus, in all, twenty-one villages have been selected, and 10 per cent farm households out of the total farm households from the selected villages have been selected randomly for the survey. A representative sample of 510 farm households comprising the different farm-size categories has been taken up. Out of these 510 farm households, 188, 144, 88, 63, and 27 farm households represent marginal, small, semi-medium, medium, and large farm-size categories respectively. Out of these households, 264,114, and 132 farm households are from the high, medium and low productivity regions respectively. The present study relates to the agricultural year 2015-16. Standard statistical tools such as percentage and mean values have been used for tabular analysis. The statistical technique such as Gini Coefficient has been used; and Lorenz Curves have been drawn for analysing the disparities in assets distribution among the farm households across the regions in the rural areas of Punjab.

RESULTS AND DISCUSSION

Assets lead to positive outcomes for individuals, families, and communities; create opportunities for advancement; and enable the poor to raise their economic, political, and social position (Weiss & Curley, 2003). Per household values of assets of the different categories of farmers across the regions are given in Table 1. The table shows that an average farm household has assets worth Rs. 13285742.08, Rs. 15732827.98, and Rs. 10939219.24 in the high, medium, and low productivity regions respectively. The average value of assets for all the farm-size categories is the highest in the medium productivity region. The farmers belonging to the marginal, small, semi-medium, medium, and large farm-size categories have assets worth Rs. 4787853.66, Rs. 10431080.59, Rs. 24196670.00, Rs. 48744647.28, and Rs. 72673220.00 respectively in this region. On the opposite, the respective farm-size categories in the low productivity region has the lowest values, *i.e.*, Rs. 3219496.46, Rs. 6450989.71, Rs. 12204957.91, Rs. 21365453.89, and Rs. 49076287.50 respectively in this regard.

Table 1. Estimated Values of Assets of Farmers

(Mean Values in Rs.)

Assets	Marginal Farmers	Small Farmers	Semi-medium Farmers	Medium Farmers	Large Farmers	All Sampled Farmers
High Productivity Region						
(A) Household Durable Assets						
Homestead land and residential building	684119.32 (16.95) [140005.81]	1045328.95 (13.54) [202150.13]	1608653.85 (10.58) [257384.62]	2256911.76 (7.60) [306940.00]	3554642.86 (6.51) [540923.91]	1324990.53 (9.97) [234763.42]
Buildings used for commercial purpose	3068.18 (0.08) [627.91]	0.00 (0.00) [0.00]	1346.15 (0.01) [215.38]	23529.41 (0.08) [3200.00]	0.00 (0.00) [0.00]	4318.18 (0.03) [765.10]
Beds	6445.45 (0.16) [1319.07]	7671.05 (0.10) [1483.46]	11548.08 (0.08) [1847.69]	16779.41 (0.06) [2282.00]	23214.29 (0.04) [3532.61]	10023.48 (0.08) [1775.97]
Almirahs	4588.64 (0.11) [939.07]	5736.84 (0.07) [1109.41]	9711.54 (0.06) [1553.85]	16588.24 (0.06) [2256.00]	23785.71 (0.04) [3619.57]	8491.67 (0.06) [1504.56]
Wooden and steel boxes	4756.82 (0.12) [973.49]	5723.68 (0.07) [1106.87]	8076.92 (0.05) [1292.31]	13132.35 (0.04) [1786.00]	18535.71 (0.03) [2820.65]	7498.48 (0.06) [1328.59]
Tables/chairs	1748.30 (0.04) [357.79]	2084.21 (0.03) [403.05]	3090.38 (0.02) [494.46]	4541.18 (0.02) [617.60]	6535.71 (0.01) [994.57]	2722.92 (0.02) [482.45]
Dressing table	1511.36 (0.04) [309.30]	2250.00 (0.03) [435.11]	3721.15 (0.02) [595.38]	6900.00 (0.02) [938.40]	9750.00 (0.02) [1483.70]	3290.15 (0.02) [582.95]
Dining table/ watches and clocks	693.75 (0.02) [141.98]	884.87 (0.01) [171.12]	1025.00 (0.01) [164.00]	3136.76 (0.01) [426.60]	4778.57 (0.01) [727.18]	1345.27 (0.01) [238.36]
Sofa	4147.73 (0.10) [848.84]	5835.53 (0.08) [1128.50]	9211.54 (0.06) [1473.85]	11102.94 (0.04) [1510.00]	18928.57 (0.03) [2880.43]	7310.61 (0.06) [1295.30]
TVs/LCDs/radio/VCR /CD/DVD player	4756.25 (0.11) [973.37]	6256.58 (0.08) [1209.92]	8534.62 (0.06) [1365.54]	11111.77 (0.04) [1511.20]	16178.57 (0.03) [2461.96]	7320.62 (0.06) [1303.46]
Refrigerator	8290.34 (0.21) [1132.79]	10092.11 (0.13) [1300.51]	15588.46 (0.10) [1318.46]	24911.76 (0.08) [1378.00]	45792.86 (0.08) [2260.87]	14375.95 (0.11) [1328.32]
Coolers/fans/ACs	5535.23 (0.14) [1696.63]	6725.00 (0.09) [1951.65]	8240.38 (0.05) [2494.15]	10132.35 (0.03) [3388.00]	14857.14 (0.03) [6968.48]	7496.97 (0.06) [2547.15]
Geyser	647.73 (0.02) [132.56]	1164.47 (0.02) [225.19]	2403.85 (0.02) [384.62]	4132.35 (0.01) [562.00]	6464.29 (0.01) [983.70]	1899.62 (0.01) [336.58]
Inverter/generator	6315.91 (0.16) [1292.56]	7894.74 (0.10) [1526.72]	11134.62 (0.07) [1781.54]	13264.71 (0.04) [1804.00]	15857.14 (0.03) [2413.04]	9120.45 (0.07) [1615.97]
Sewing machine/ electric iron	1650.57 (0.04) [337.79]	1967.11 (0.03) [380.41]	2475.00 (0.02) [396.00]	2963.24 (0.01) [403.00]	3325.00 (0.01) [505.97]	2161.93 (0.02) [383.05]
Washing machine	3943.18 (0.10) [806.98]	4750.00 (0.06) [918.58]	5907.69 (0.04) [945.23]	7132.35 (0.02) [970.00]	8392.86 (0.02) [1277.17]	5209.09 (0.04) [922.95]
Microwave oven/ mixer/juicer	497.16 (0.01) [101.75]	638.16 (0.01) [123.41]	877.88 (0.01) [140.46]	1982.36 (0.01) [269.60]	3032.14 (0.01) [461.41]	937.82 (0.01) [166.27]
Computer/laptop/ printer	1454.55 (0.04) [297.67]	631.58 (0.01) [122.14]	3788.46 (0.02) [606.15]	5147.06 (0.02) [700.00]	11071.43 (0.02) [1684.78]	2662.88 (0.02) [471.81]
Cots	7226.14 (0.18) [1478.84]	8656.58 (0.11) [1674.05]	10663.46 (0.07) [1706.15]	12867.65 (0.04) [1750.00]	15928.57 (0.03) [2423.91]	9503.03 (0.07) [1683.76]

Utensils	7261.36 (0.18) [1486.05]	8486.84 (0.11) [1641.22]	10548.08 (0.07) [1687.69]	12514.71 (0.04) [1702.00]	18928.57 (0.03) [2880.43]	9556.82 (0.07) [1693.29]
Bedding and clothing	8255.68 (0.20) [1689.53]	9914.47 (0.13) [1917.30]	11990.38 (0.08) [1918.46]	15044.12 (0.05) [2046.00]	22214.29 (0.04) [3380.43]	11083.33 (0.08) [1963.76]
Gas connection	3651.91 (0.09) [740.00]	4078.95 (0.05) [788.80]	4973.08 (0.03) [765.69]	5979.41 (0.02) [813.20]	6428.57 (0.01) [978.26]	4470.08 (0.04) [792.01]
Ornaments	44210.23 (1.10) [9047.67]	64059.21 (0.83) [12388.04]	105211.54 (0.69) [16833.85]	157058.82 (0.53) [21360.00]	281428.57 (0.52) [42826.09]	89053.03 (0.67) [15778.52]
RO	1494.32 (0.04) [305.81]	2881.58 (0.04) [557.25]	4213.46 (0.03) [674.15]	5397.06 (0.02) [734.00]	8128.57 (0.01) [1236.96]	3283.71 (0.02) [581.81]
Cellular/landline phones	4988.64 (0.12) [1020.93]	7689.47 (0.10) [1487.02]	14788.46 (0.10) [2366.15]	17794.12 (0.06) [2420.00]	29714.29 (0.05) [4521.74]	10656.82 (0.08) [1888.19]
Bicycles	1371.59 (0.03) [280.70]	1631.58 (0.02) [315.52]	2140.38 (0.01) [342.46]	2582.35 (0.01) [351.20]	2892.86 (0.01) [440.22]	1834.47 (0.01) [325.03]
Motorcycles/ scooters/mopeds	27375.00 (0.68) [5602.33]	32618.42 (0.42) [6307.89]	41903.85 (0.28) [6704.62]	64382.35 (0.22) [8756.00]	71785.71 (0.14) [10923.91]	38867.42 (0.29) [6886.58]
Jeeps/cars	21159.09 (0.52) [4330.23]	65526.32 (0.85) [12671.76]	152019.23 (1.00) [24323.08]	217058.82 (0.73) [29520.00]	450000.00 (0.82) [68478.26]	107678.03 (0.81) [19078.52]
Commercial vehicles	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	8823.53 (0.03) [1200.00]	28571.43 (0.05) [4347.83]	2651.52 (0.02) [469.08]
Sub-total	**871128.41 (21.59) [178277.44]**	**1321178.29 (17.12) [255495.04]**	**2073787.50 (13.64) [331806.00]**	**2952902.94 (9.94) [401594.80]**	**4721164.29 (8.64) [718438.04]**	**1709851.52 (12.87) [302953.56]**
(B) Farm Assets						
Land	2812500.00 (69.69) [575581.40]	5811184.21 (75.29) [1123791.35]	12050000.00 (79.26) [1928000.00]	25192647.06 (84.84) [3426200.00]	47857142.86 (87.59) [7282608.70]	10766287.88 (81.04) [1907583.89]
Farm buildings	8369.32 (0.21) [1712.79]	16921.05 (0.22) [3272.26]	22730.77 (0.15) [3636.92]	39117.65 (0.13) [5320.00]	62857.14 (0.12) [9565.22]	20509.47 (0.15) [3633.89]
Axes/sickles/spades	781.93 (0.02) [160.02]	1047.76 (0.01) [202.62]	1496.73 (0.01) [239.48]	1804.13 (0.01) [245.36]	2632.14 (0.01) [400.54]	1229.02 (0.01) [217.76]
Electric tubewells	68380.68 (1.69) [13994.19]	112434.21 (1.46) [21743.00]	170673.08 (1.12) [27307.69]	261029.41 (0.88) [35500.00]	391071.43 (0.72) [59510.87]	143134.47 (1.08) [25360.74]
Diesel tubewells	5852.27 (0.15) [1197.67]	2171.05 (0.03) [419.85]	1826.92 (0.01) [292.31]	2941.18 (0.01) [400.00]	0.00 (0.00) [0.00]	3314.39 (0.02) [587.25]
Diesel engines	2045.45 (0.05) [418.60]	4701.32 (0.06) [909.16]	5673.08 (0.04) [907.69]	6426.47 (0.02) [874.00]	8357.14 (0.02) [1271.74]	4223.48 (0.03) [783.76]
Leveller	2318.18 (0.06) [474.42]	4006.58 (0.05) [774.81]	11432.69 (0.08) [1829.23]	12352.94 (0.04) [1680.00]	13785.71 (0.03) [2097.83]	6500.00 (0.05) [1151.68]
Tractor	92613.64 (2.29) [18953.49]	179671.05 (2.33) [34745.55]	369134.62 (2.42) [59061.54]	480882.35 (1.62) [65400.00]	607142.86 (1.11) [92391.30]	249431.82 (1.88) [44194.63]
Trolley	13181.82 (0.33) [2697.67]	34276.32 (0.44) [6628.50]	87596.15 (0.58) [14015.38]	101176.47 (0.34) [13760.00]	152142.86 (0.28) [23152.17]	52613.64 (0.40) [9322.15]
Thresher/reaper	965.91 (0.02) [197.67]	1440.79 (0.02) [278.63]	5173.08 (0.03) [827.69]	11352.94 (0.04) [1544.00]	28928.57 (0.05) [4402.17]	4751.89 (0.04) [841.95]
Harvester combine	0.00 (0.00) [0.00]	7894.74 (0.10) [1526.72]	32692.31 (0.22) [5230.77]	108823.53 (0.37) [14800.00]	64285.71 (0.12) [9782.61]	26136.36 (0.20) [4630.87]

Harrow	3204.55 (0.08) [655.81]	8875.00 (0.11) [1716.28]	20557.69 (0.14) [3289.23]	12147.06 (0.04) [3964.00]	39857.14 (0.07) [6065.22]	13539.77 (0.10) [2398.99]
Seed drills	1670.45 (0.04) [341.86]	3679.37 (0.05) [715.01]	8721.15 (0.06) [1395.38]	20176.47 (0.07) [2744.00]	21285.71 (0.04) [3239.13]	7066.29 (0.05) [1252.01]
Fodder cutter	4702.27 (0.12) [962.33]	6572.36 (0.09) [1270.99]	6894.23 (0.05) [1103.08]	9308.82 (0.03) [1266.00]	9892.86 (0.02) [1505.43]	6540.91 (0.05) [1158.93]
Spray pumps	1535.23 (0.04) [314.19]	2997.37 (0.04) [579.64]	6705.77 (0.04) [1072.92]	11175.00 (0.04) [1519.80]	11357.14 (0.02) [1728.26]	4736.93 (0.04) [839.30]
Iron and wooden ploughs/yokes	3346.59 (0.08) [684.88]	5685.53 (0.07) [1099.49]	10153.85 (0.07) [1624.62]	12617.65 (0.04) [1716.00]	20142.86 (0.04) [3065.22]	7445.45 (0.06) [1319.19]
Cart	4728.41 (0.12) [967.67]	5855.26 (0.08) [1132.32]	6028.85 (0.04) [964.62]	6147.06 (0.02) [836.00]	9142.86 (0.02) [1391.30]	5725.76 (0.04) [1014.50]
Farm generator	8647.73 (0.21) [1769.77]	15315.79 (0.20) [2961.83]	39134.62 (0.24) [6261.54]	51764.71 (0.17) [7040.00]	63071.43 (0.12) [9597.83]	25011.36 (0.19) [4431.54]
Rotavator	1250.00 (0.03) [255.81]	6381.58 (0.08) [1234.10]	18557.69 (0.12) [2969.23]	61617.65 (0.21) [8380.00]	66428.57 (0.11) [10108.70]	17367.42 (0.13) [3077.18]
Straw reaper	1363.64 (0.03) [279.07]	2763.16 (0.04) [534.35]	25576.92 (0.17) [4092.31]	31176.47 (0.11) [4240.00]	23571.43 (0.04) [3586.96]	11553.03 (0.09) [2046.98]
Others*	318.18 (0.01) [65.12]	1710.53 (0.02) [330.79]	9990.38 (0.07) [1598.46]	23058.82 (0.08) [3136.00]	62714.28 (0.10) [9543.48]	8861.74 (0.06) 1570.14]
Sub-total	**3037776.25 (75.27) [621619.33]**	**6235603.01 (80.79) [1205867.25]**	**12910750.58 (84.92) [2065720.09]**	**26474743.82 (89.11) [3600565.16]**	**49515810.71 (90.63) [7535014.67]**	**11386181.09 (85.71) [2017398.53]**
(C) Livestock Assets						
Buffaloes in milk	75340.91 (1.87) [15418.60]	101289.47 (1.31) [19587.79]	131730.77 (0.87) [21076.92]	148294.12 (0.52) [20168.00]	276285.71 (0.51) [42043.48]	113969.70 (0.86) [20193.29]
Buffaloes not in milk	10000.00 (0.25) [2046.51]	14289.47 (0.19) [2763.36]	19096.15 (0.13) [3055.38]	18411.76 (0.06) [2504.00]	50214.29 (0.08) [7641.30]	16242.42 (0.12) [2877.85]
Cows in milk	25943.18 (0.64) [5309.30]	23828.95 (0.31) [4608.14]	41826.92 (0.27) [6692.31]	70058.82 (0.24) [9528.00]	37500.00 (0.07) [5706.52]	34757.58 (0.26) [6158.39]
Cows not in milk	1413.82 (0.04) [293.02]	2697.37 (0.03) [521.63]	2461.54 (0.02) [393.85]	2705.88 (0.01) [368.00]	3571.43 (0.01) [543.48]	2276.52 (0.02) [403.36]
Young stock of cattle	11221.59 (0.27) [2296.51]	15203.95 (0.20) [2940.20]	20951.92 (0.13) [3352.31]	29132.35 (0.10) [3962.00]	23357.14 (0.04) [3354.35]	17234.85 (0.13) [3053.69]
Bullock/ox	2955.68 (0.07) [604.88]	3989.47 (0.05) [771.50]	3182.69 (0.02) [509.23]	3102.94 (0.01) [422.00]	3000.00 (0.01) [456.52]	3319.32 (0.02) [588.12]
Others**	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	76.92 (0.00) [12.31]	1176.71 (0.01) [1600.00]	7142.86 (0.01) [1086.96]	1909.09 (0.01) [338.26]
Sub-total	**126893.18 (3.14) [25968.84]**	**161298.68 (2.09) [31192.62]**	**219326.92 (1.44) [35092.31]**	**283470.59 (0.95) [38552.00]**	**401071.43 (0.73) [61032.61]**	**189709.47 (1.42) [33612.95]**
Household Assets (A+B+C)	**4035797.84 (100.00) [825865.61]**	**7718079.98 (100.00) [1492554.91]**	**15203865.00 (100.00) [2432618.40]**	**29711117.35 (100.00) [4040711.96]**	**54638046.43 (100.00) [8314485.32]**	**13285742.08 (100.00) [2353965.04]**
Medium Productivity Region						
(A) Household Durable Assets						
Homestead land and residential building	644326.92 (13.46) [114743.15]	1035588.24 (9.94) [154429.82]	1695833.33 (7.01) [254375.00]	2618181.82 (5.37) [327272.73]	4230000.00 (5.84) [377678.57]	1219429.82 (7.75) [186848.12]

Buildings used for commercial purpose	7692.31 (0.16) [1369.86]	17647.06 (0.17) [2631.00]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	8771.93 (0.05) [1344.09]
Beds	6500.00 (0.14) [1157.53]	8779.41 (0.08) [1309.21]	10083.33 (0.04) [1512.50]	17272.73 (0.04) [2159.09]	34400.00 (0.05) [3071.43]	9820.18 (0.06) [1504.70]
Almirahs	4932.69 (0.10) [878.42]	6750.00 (0.06) [1006.58]	7375.00 (0.03) [1106.25]	16454.55 (0.03) [2056.82]	41400.00 (0.06) [3696.43]	8442.98 (0.05) [1293.68]
Wooden and steel boxes	4951.92 (0.10) [881.85]	6170.59 (0.06) [920.18]	7041.67 (0.03) [1056.25]	12863.64 (0.03) [1607.95]	24400.00 (0.03) [2178.57]	7151.75 (0.05) [1095.83]
Tables/chairs	1878.85 (0.04) [334.59]	2358.82 (0.02) [351.75]	2983.33 (0.01) [447.50]	4363.64 (0.01) [545.45]	7700.00 (0.01) [687.50]	2633.33 (0.02) [403.49]
Dressing table	1961.54 (0.04) [349.32]	2838.24 (0.03) [423.25]	3875.00 (0.02) [581.25]	6727.27 (0.01) [840.91]	11600.00 (0.02) [1035.71]	3307.02 (0.02) [506.72]
Dining table/ watches and clocks	621.16 (0.01) [110.61]	879.42 (0.01) [131.14]	1720.83 (0.01) [258.13]	2724.55 (0.01) [340.57]	10360.00 (0.01) [925.00]	1444.03 (0.01) [221.26]
Sofa	4278.85 (0.09) [761.99]	7147.06 (0.07) [1065.79]	9166.67 (0.04) [1375.00]	12727.27 (0.03) [1590.91]	18200.00 (0.03) [1625.00]	7074.56 (0.04) [1084.01]
TVs/LCDs/radio/VCR/CD/ DVD player	4646.15 (0.10) [827.40]	6558.83 (0.06) [978.07]	8625.00 (0.04) [1293.75]	11954.54 (0.02) [1494.32]	18600.00 (0.03) [1660.72]	6952.63 (0.04) [1065.32]
Refrigerator	5067.31 (0.11) [902.40]	6114.71 (0.06) [911.84]	7375.00 (0.03) [1106.25]	10500.00 (0.02) [1312.50]	15200.00 (0.02) [1357.14]	6591.23 (0.04) [1009.95]
Coolers/fans/ACs	7913.46 (0.17) [1409.25]	11914.71 (0.11) [1776.75]	13908.33 (0.06) [2086.25]	21454.55 (0.04) [2681.82]	55900.00 (0.08) [4991.07]	13149.12 (0.08) [2014.78]
Geyser	798.08 (0.02) [142.12]	1485.29 (0.01) [221.49]	2625.00 (0.01) [393.75]	3272.73 (0.01) [409.09]	6600.00 (0.01) [589.29]	1688.60 (0.01) [258.74]
Inverter/generator	6480.77 (0.14) [1154.11]	8376.47 (0.08) [1249.12]	10666.67 (0.04) [1600.00]	12181.82 (0.02) [1522.73]	16400.00 (0.02) [1464.29]	8471.93 (0.05) [1298.12]
Sewing machine/ electric iron	1637.50 (0.03) [291.61]	2035.29 (0.02) [303.50]	2208.33 (0.01) [331.25]	2768.18 (0.01) [346.02]	4180.00 (0.01) [373.22]	2036.85 (0.01) [312.10]
Washing machine	3457.69 (0.07) [615.75]	4705.88 (0.05) [701.75]	5591.67 (0.02) [838.75]	6890.91 (0.01) [861.36]	10400.00 (0.01) [928.57]	4690.35 (0.03) [718.68]
Microwave oven/ mixer/juicer	378.85 (0.01) [67.47]	626.47 (0.01) [93.42]	1258.33 (0.01) [188.75]	2200.00 (0.01) [275.00]	3880.00 (0.01) [346.43]	874.56 (0.01) [134.00]
Computer/laptop/ printer	1211.54 (0.03) [215.75]	1617.65 (0.02) [241.23]	2333.33 (0.01) [350.00]	5727.27 (0.01) [715.91]	17000.00 (0.02) [1517.86]	2578.95 (0.02) [395.16]
Cots	6692.31 (0.14) [1191.78]	8279.41 (0.08) [1234.65]	2583.33 (0.01) [1287.50]	11363.64 (0.02) [1420.45]	17200.00 (0.02) [1535.71]	8276.32 (0.05) [1268.15]
Utensils	7519.23 (0.16) [1339.04]	9779.41 (0.09) [1458.33]	10416.67 (0.04) [1562.50]	12863.64 (0.03) [1607.95]	22000.00 (0.03) [1982.14]	9657.89 (0.06) [1479.84]
Bedding and clothing	8826.92 (0.17) [1571.92]	10705.88 (0.10) [1596.49]	11833.33 (0.05) [1775.00]	21727.27 (0.04) [2715.91]	31800.00 (0.04) [2839.29]	11956.14 (0.08) [1831.99]
Gas connection	3707.69 (0.08) [660.27]	4438.24 (0.04) [661.84]	4433.33 (0.02) [665.00]	5345.45 (0.01) [668.18]	7500.00 (0.01) [669.64]	4326.32 (0.03) [662.90]
Ornaments	42307.69 (0.88) [7534.25]	74191.18 (0.71) [11063.60]	114166.67 (0.47) [17125.00]	159090.91 (0.33) [19886.36]	243200.00 (0.34) [21714.29]	79460.53 (0.51) [12175.40]
RO	1682.69	2867.65	3083.33	4863.64	8000.00	2767.54

	(0.04) [299.66]	(0.03) [427.63]	(0.01) [462.50]	(0.01) [607.95]	(0.01) [714.29]	(0.02) [424.06]
Cellular/landline phones	5480.77 (0.11) [976.03]	7588.24 (0.07) [1131.58]	8833.33 (0.04) [1325.00]	16909.09 (0.03) [2113.64]	31400.00 (0.04) [2803.57]	8701.75 (0.06) [1333.33]
Bicycles	1154.81 (0.02) [205.65]	1429.41 (0.01) [213.16]	1641.67 (0.01) [246.25]	2300.00 (0.00) [287.50]	3400.00 (0.00) [303.57]	1496.93 (0.01) [229.37]
Motorcycles/scooters /mopeds	28298.08 (0.59) [5039.38]	33029.41 (0.32) [4925.44]	42916.67 (0.18) [6437.50]	65909.09 (0.14) [8238.64]	78000.00 (0.11) [6964.29]	37057.02 (0.24) [5678.09]
Jeeps/cars	14807.69 (0.31) [2636.99]	39264.71 (0.38) [5855.26]	98333.33 (0.41) [14750.00]	233636.36 (0.48) [29204.55]	660000.00 (0.92) [58928.57]	80307.02 (0.52) [12305.11]
Commercial vehicles	0.00 (0.00) [0.00]	4411.76 (0.04) [657.89]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	30000.00 (0.04) [26785.71]	14473.68 (0.09) [2217.74]
Sub-total	**829213.46 (17.32) [147668.15]**	**1327579.41 (12.73) [197972.37]**	**2096912.50 (8.66) [314536.88]**	**3302274.55 (6.77) [412784.32]**	**5928920.00 (7.82) [529367.86]**	**1573590.96 (10.01) [241114.74]**
(B) Farm Assets						
Land	3611538.46 (75.43) [643150.68]	8529411.76 (81.77) [1271929.82]	21425000.00 (88.55) [3213750.00]	44409090.91 (91.11) [5551136.36]	64600000.00 (89.20) [5767857.14]	13564912.28 (86.19) [2078494.62]
Farm buildings	8596.15 (0.18) [1530.82]	15397.06 (0.14) [2296.05]	20416.67 (0.08) [3062.50]	37272.73 (0.08) [4659.09]	64000.00 (0.09) [5714.29]	17065.79 (0.11) [2614.92]
Axes/sickles/spades	822.89 (0.02) [146.54]	1068.83 (0.01) [159.39]	1132.50 (0.01) [169.88]	1800.00 (0.01) [225.63]	3000.00 (0.01) [267.86]	1118.60 (0.01) [171.40]
Electric tubewells	72211.54 (1.50) [12859.59]	102352.94 (0.98) [15263.16]	162083.33 (0.67) [24312.50]	213636.36 (0.44) [26704.55]	420000.00 (0.58) [37500.00]	119561.40 (0.76) [18319.89]
Diesel tubewells	3173.08 (0.07) [565.07]	1617.65 (0.02) [241.23]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	13000.00 (0.02) [1160.71]	2500.00 (0.02) [383.06]
Diesel engines	1980.77 (0.04) [352.74]	2897.06 (0.03) [432.02]	4041.67 (0.02) [606.25]	5754.55 (0.01) [719.32]	10300.00 (0.01) [919.64]	3200.00 (0.02) [490.32]
Leveller	2336.54 (0.05) [416.10]	4279.41 (0.04) [638.16]	8416.67 (0.03) [1262.50]	8636.36 (0.02) [1079.55]	10600.00 (0.01) [946.43]	4526.32 (0.03) [693.55]
Tractor	95769.23 (1.98) [17054.79]	195588.24 (1.88) [29166.67]	212083.33 (0.88) [31812.50]	357727.27 (0.72) [44715.91]	690000.00 (0.95) [61607.14]	189122.81 (1.20) [28978.49]
Trolley	16538.46 (0.35) [2945.21]	33735.29 (0.32) [5030.70]	55833.33 (0.23) [8375.00]	70454.55 (0.14) [8806.82]	128000.00 (0.18) [11428.57]	35894.74 (0.23) [5500.00]
Thresher/reaper	1807.69 (0.04) [321.92]	3176.47 (0.03) [473.68]	9583.33 (0.04) [1437.50]	10454.55 (0.02) [1306.82]	15000.00 (0.02) [1339.29]	4447.37 (0.03) [681.45]
Harvester combine	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]
Harrow	9807.69 (0.20) [1746.58]	21926.47 (0.21) [3269.74]	25333.33 (0.10) [3800.00]	35454.55 (0.07) [4431.82]	45600.00 (0.06) [4071.43]	19100.88 (0.12) [2926.75]
Seed drills	1769.23 (0.04) [315.07]	6485.29 (0.06) [967.11]	7083.33 (0.03) [1062.50]	13636.36 (0.03) [1704.55]	29400.00 (0.04) [2625.00]	6092.11 (0.04) [933.47]
Fodder cutter	4596.15 (0.10) [818.49]	5352.94 (0.05) [798.25]	8000.00 (0.03) [1200.00]	8409.09 (0.02) [1051.14]	12400.00 (0.02) [1107.14]	5890.35 (0.04) [902.55]
Spray pumps	846.15 (0.02) [150.68]	1755.88 (0.02) [261.84]	3041.67 (0.01) [456.25]	7727.27 (0.02) [965.91]	21800.00 (0.03) [1946.43]	2931.58 (0.02) [449.19]
Iron and wooden	3182.69	7191.18	8833.33	11181.82	19000.00	6438.60

ploughs/yokes	(0.07) [566.78]	(0.07) [1072.37]	(0.04) [1325.00]	(0.02) [1397.93]	(0.03) [1696.43]	(0.04) [986.56]
Cart	2221.15 (0.05) [395.55]	4117.65 (0.04) [614.04]	8083.33 (0.03) [1212.50]	6545.45 (0.01) [818.18]	6800.00 (0.01) [607.14]	4021.93 (0.03) [616.26]
Farm generator	1730.77 (0.04) [308.22]	4897.06 (0.05) [730.26]	14853.33 (0.06) [2187.50]	18636.36 (0.04) [2329.55]	62000.00 (0.09) [5535.71]	8302.63 (0.05) [1272.18]
Rotavator	865.38 (0.02) [154.11]	10352.94 (0.10) [1543.86]	16666.67 (0.07) [2500.00]	43636.36 (0.09) [5454.55]	58000.00 (0.08) [5178.57]	11991.23 (0.08) [1837.37]
Straw reaper	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	30000.00 (0.04) [2678.57]	1315.79 (0.01) [201.61]
Others*	1461.54 (0.03) [260.27]	8647.06 (0.08) [1289.47]	12041.66 (0.05) [1806.25]	28364.64 (0.06) [3545.45]	33400.00 (0.05) [2982.14]	8714.91 (0.06) [1334.35]
Sub-total	**3841255.58 (80.23) [684059.21]**	**8960251.18 (85.90) [1336177.81]**	**22002257.50 (90.93) [3300338.63]**	**45288418.18 (92.91) [5661052.27]**	**66272300.00 (91.52) [5917169.64]**	**14017149.30 (89.09) [2147789.01]**
(C) Livestock Assets						
Buffaloes in milk	81346.15 (1.70) [14486.30]	100764.71 (0.96) [15026.32]	66166.67 (0.27) [9925.00]	110818.18 (0.23) [13852.27]	375600.00 (0.52) [33535.71]	101289.47 (0.65) [15520.16]
Buffaloes not in milk	7365.38 (0.15) [1311.64]	16088.24 (0.15) [2399.12]	6083.33 (0.03) [912.50]	13636.36 (0.03) [1704.55]	30000.00 (0.04) [2678.57]	11429.82 (0.07) [1751.34]
Cows in milk	13691.54 (0.29) [2486.30]	12088.24 (0.12) [1082.63]	12333.33 (0.05) [1850.00]	11181.82 (0.02) [1397.73]	35000.00 (0.05) [3125.00]	13885.96 (0.09) [2127.69]
Cows not in milk	2500.00 (0.05) [445.21]	735.29 (0.01) [109.65]	1666.67 (0.01) [250.00]	2272.73 (0.00) [284.09]	4000.00 (0.01) [357.14]	1929.82 (0.01) [295.70]
Young stock of cattle	10903.85 (0.23) [1941.78]	11147.06 (0.11) [1662.28]	10000.00 (0.04) [1500.00]	13454.55 (0.03) [1681.82]	23600.00 (0.03) [2107.14]	11684.21 (0.07) [1790.32]
Bullock/ox	1307.69 (0.03) [232.88]	2426.47 (0.02) [361.84]	1250.00 (0.01) [187.50]	2590.91 (0.01) [323.86]	3800.00 (0.01) [339.29]	1868.42 (0.01) [286.29]
Others**	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]
Sub-total	**117384.62 (2.45) [20904.11]**	**143250.00 (1.37) [21361.84]**	**97500.00 (0.41) [14625.00]**	**153954.55 (0.32) [19244.32]**	**472000.00 (0.66) [42142.86]**	**142087.72 (0.90) [21771.51]**
Household Assets (A+B+C)	**4787853.66 (100.00) [852631.47]**	**10431080.59 (100.00) [1555512.02]**	**24196670.00 (100.00) [3629500.51]**	**48744647.28 (100.00) [6093080.91]**	**72673220.00 (100.00) [6488680.36]**	**15732827.98 (100.00) [2410675.26]**
Low Productivity Region						
(A) Household Durable Assets						
Homestead land and residential building	497333.33 (15.45) [115883.50]	770147.06 (11.94) [153128.65]	1106145.83 (9.06) [192373.19]	1807222.22 (8.45) [34421.05]	4043750.00 (8.23) [455633.80]	1071852.27 (9.81) [207759.91]
Buildings used for commercial purpose	7500.00 (0.23) [1747.57]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	27777.78 (0.13) [5263.16]	0.00 (0.00) [0.00]	6515.15 (0.06) [1262.85]
Beds	4314.58 (0.13) [1005.34]	6641.18 (0.10) [1320.47]	8312.50 (0.07) [1445.65]	11222.22 (0.05) [2126.32]	19875.00 (0.04) [2239.44]	7525.76 (0.07) [1458.74]
Almirahs	2333.33 (0.07) [543.69]	4676.47 (0.07) [929.82]	5954.17 (0.05) [1035.51]	9666.67 (0.05) [1831.58]	23250.00 (0.05) [2619.72]	5862.88 (0.05) [1136.42]
Wooden and steel boxes	3839.58 (0.12) [894.66]	5529.41 (0.09) [1099.42]	7450.00 (0.06) [1295.65]	9861.11 (0.05) [1868.42]	18500.00 (0.04) [2084.51]	6640.91 (0.06) [1287.22]
Tables/chairs	1220.83 (0.04)	1764.71 (0.03)	2900.00 (0.02)	2955.56 (0.01)	5137.50 (0.01)	2140.15 (0.02)

	[284.47]	[350.88]	[504.35]	[560.00]	[578.87]	[414.83]
Dressing table	1083.33 (0.03) [252.43]	1485.29 (0.02) [295.32]	2166.67 (0.02) [376.81]	4361.11 (0.02) [826.32]	7750.00 (0.02) [873.24]	2234.85 (0.02) [433.19]
Dining table/watches and clocks	281.25 (0.01) [65.53]	561.76 (0.01) [111.70]	704.16 (0.01) [122.46]	1530.55 (0.01) [290.00]	3775.00 (0.01) [425.35]	812.50 (0.01) [157.49]
Sofa	1177.08 (0.04) [274.27]	4147.06 (0.06) [824.56]	5833.33 (0.05) [1014.49]	8833.33 (0.04) [1673.68]	17250.00 (0.04) [1943.66]	4806.82 (0.04) [931.72]
TVs/LCDs/radio/VCR/CD/ DVD player	3400.00 (0.11) [792.23]	4997.06 (0.08) [993.57]	6375.00 (0.05) [1108.90]	8277.78 (0.04) [1568.42]	15062.50 (0.03) [1697.19]	5724.24 (0.05) [1109.54]
Refrigerator	4652.08 (0.14) [1083.98]	6044.12 (0.09) [1201.75]	7054.17 (0.06) [1226.81]	8361.11 (0.04) [1584.21]	14250.00 (0.03) [1605.63]	6534.85 (0.06) [1266.67]
Coolers/fans/ACs	5175.00 (0.16) [1205.83]	7850.00 (0.12) [1560.82]	9204.17 (0.08) [1600.72]	15066.67 (0.07) [2854.74]	38750.00 (0.08) [4366.20]	9980.30 (0.09) [1934.51]
Geyser	125.00 (0.00) [29.13]	600.00 (0.01) [119.30]	625.00 (0.01) [108.70]	1622.22 (0.01) [307.37]	4000.00 (0.01) [450.70]	777.27 (0.01) [150.66]
Inverter/generator	1937.50 (0.06) [451.46]	4617.65 (0.07) [918.13]	6354.17 (0.05) [1105.07]	9277.78 (0.04) [1757.89]	16125.00 (0.03) [1816.90]	5291.67 (0.05) [1025.70]
Sewing machine/ electric iron	1623.96 (0.05) [378.40]	1988.24 (0.03) [395.32]	2450.00 (0.02) [426.09]	2600.00 (0.01) [492.63]	4200.00 (0.01) [473.24]	2157.20 (0.02) [418.14]
Washing machine	1489.58 (0.05) [347.09]	3376.47 (0.05) [671.35]	4150.00 (0.03) [721.74]	5488.89 (0.03) [1040.00]	10687.50 (0.02) [1204.23]	3562.12 (0.03) [690.46]
Microwave oven/ mixer/juicer	175.00 (0.01) [40.78]	300.00 (0.01) [59.65]	487.50 (0.01) [84.78]	1108.33 (0.01) [210.00]	2500.00 (0.01) [281.70]	532.20 (0.01) [103.15]
Computer/laptop/ printer	583.33 (0.02) [135.92]	705.88 (0.01) [140.35]	1458.33 (0.01) [253.62]	1944.44 (0.01) [368.42]	6625.00 (0.01) [746.48]	1325.76 (0.01) [256.98]
Cots	6064.58 (0.19) [1413.11]	7558.82 (0.12) [1502.92]	9020.83 (0.07) [1568.84]	9394.44 (0.04) [1780.00]	16375.00 (0.03) [1845.07]	8065.91 (0.07) [1563.44]
Utensils	6333.33 (0.20) [1475.73]	8417.65 (0.13) [1673.68]	9887.50 (0.08) [1719.57]	12166.67 (0.06) [2305.26]	17625.00 (0.04) [1985.92]	8996.21 (0.08) [1743.76]
Bedding and clothing	6989.58 (0.22) [1628.64]	9029.41 (0.14) [1795.32]	11312.50 (0.09) [1967.39]	13527.78 (0.06) [2563.16]	23250.00 (0.05) [2619.72]	10178.03 (0.09) [1972.83]
Gas connection	3068.75 (0.10) [715.05]	3732.35 (0.06) [742.11]	4316.67 (0.04) [750.72]	4277.78 (0.02) [810.53]	6212.50 (0.01) [700.00]	3821.97 (0.03) [740.82]
Ornaments	33604.17 (1.04) [7830.10]	71941.18 (1.12) [14304.09]	114958.33 (0.94) [19992.75]	168055.56 (0.79) [31842.11]	353750.00 (0.72) [39859.15]	96007.58 (0.88) [18609.40]
RO	437.50 (0.01) [101.94]	1382.35 (0.02) [274.85]	1895.83 (0.02) [329.71]	3083.33 (0.01) [584.21]	5375.00 (0.01) [605.63]	1606.06 (0.01) [311.31]
Cellular/landline phones	3145.83 (0.10) [733.01]	6641.18 (0.10) [1320.47]	7875.00 (0.06) [1369.57]	12461.11 (0.06) [2361.05]	22750.00 (0.05) [2563.38]	7364.39 (0.07) [1427.46]
Bicycles	1128.13 (0.04) [262.86]	1366.18 (0.02) [271.64]	1604.17 (0.01) [278.99]	1677.78 (0.01) [317.89]	2837.50 (0.01) [319.72]	1454.55 (0.01) [281.94]
Motorcycles/scooters/ mopeds	16500.00 (0.51) [3844.66]	29470.59 (0.46) [5859.65]	37125.00 (0.30) [6456.52]	42166.67 (0.20) [7989.47]	71875.00 (0.15) [8098.59]	30446.97 (0.28) [5901.62]
Jeeps/cars	3125.00 (0.10)	7647.06 (0.12)	55416.67 (0.45)	134444.44 (0.63)	336250.00 (0.67)	51893.94 (0.47)

	[728.16]	[1520.47]	[9637.68]	[25473.68]	[37887.32]	[10058.74]
Commercial vehicles	2708.33 (0.08) [631.07]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	984.85 (0.01) [190.90]
Sub-total	**621350.00 (19.31) [144780.58]**	**972619.12 (15.08) [193386.26]**	**1431037.50 (11.72) [248876.09]**	**2338433.33 (10.95) [443071.58]**	**5107787.50 (10.41) [575525.35]**	**1365097.35 (12.47) [264600.37]**
(B) Farm Assets						
Land	2408854.17 (74.84) [561286.41]	5109558.82 (79.20) [1015935.67]	10102083.33 (82.75) [1756884.06]	18044444.44 (84.45) [3418947.37]	42400000.00 (86.40) [4777464.79]	9059090.91 (82.81) [1755947.14]
Farm buildings	3218.75 (0.10) [750.00]	10102.94 (0.16) [2008.77]	18041.67 (0.15) [3137.68]	32222.22 (0.15) [6105.26]	59375.00 (0.12) [6690.14]	15045.45 (0.14) [2916.30]
Axes/sickles/spades	696.46 (0.02) [162.28]	1002.95 (0.02) [199.41]	1357.92 (0.01) [236.16]	1698.33 (0.01) [321.79]	2737.50 (0.01) [308.45]	1155.99 (0.01) [224.07]
Electric tubewells	30312.50 (0.94) [7063.11]	87500.00 (1.36) [17397.66]	158541.67 (1.30) [27572.46]	203055.56 (0.95) [38473.68]	322500.00 (0.66) [36338.03]	109621.21 (1.00) [21248.16]
Diesel tubewells	10729.17 (0.33) [2500.00]	5588.24 (0.09) [1111.11]	2708.33 (0.02) [471.01]	3888.89 (0.02) [736.84]	16250.00 (0.03) [1830.99]	7348.48 (0.07) [1424.38]
Diesel engines	1666.67 (0.05) [388.35]	3029.41 (0.05) [602.34]	5208.33 (0.04) [905.80]	5600.00 (0.03) [1061.05]	9625.00 (0.02) [1084.51]	3680.30 (0.03) [713.36]
Leveller	1041.67 (0.03) [242.72]	1882.35 (0.03) [374.27]	7083.33 (0.06) [1231.88]	11444.44 (0.05) [2168.42]	16825.00 (0.03) [1895.77]	4731.82 (0.04) 917.18]
Tractor	47020.83 (1.46) [10956.31]	115000.00 (1.78) [22865.50]	205291.67 (1.68) [35702.90]	305555.56 (1.43) [57894.74]	493750.00 (1.01) [55633.80]	155636.36 (1.42) [30167.40]
Trolley	7500.00 (0.23) [1747.57]	20441.18 (0.32) [4064.33]	38666.67 (0.32) [6724.64]	65555.56 (0.31) [12421.05]	103750.00 (0.21) [11690.14]	30250.00 (0.28) [5863.44]
Thresher/reaper	312.50 (0.01) [72.82]	735.29 (0.01) [146.20]	3125.00 (0.03) [543.48]	12777.78 (0.06) [2421.05]	9750.00 (0.02) [1098.59]	3204.55 (0.03) [621.15]
Harvester combine	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	33333.33 (0.27) [5797.10]	94444.44 (0.44) [17894.74]	112500.00 (0.23) [12676.06]	25757.58 (0.24) [4992.66]
Harrow	2958.33 (0.09) [689.32]	7117.65 (0.11) [1415.20]	16750.00 (0.14) [2913.04]	26277.78 (0.12) [4978.95]	38125.00 (0.08) [4295.77]	11848.48 (0.11) [2296.62]
Seed drills	1750.00 (0.05) [407.17]	4117.65 (0.06) [818.71]	10708.33 (0.09) [1862.32]	20666.67 (0.10) [3915.79]	28750.00 (0.06) [3239.44]	8204.55 (0.08) [1590.31]
Fodder cutter	3610.42 (0.11) [841.26]	4485.29 (0.07) [891.81]	7062.50 (0.06) [1228.26]	8555.56 (0.04) [1621.05]	12250.00 (0.02) [1380.28]	5661.36 (0.05) [1097.36]
Spray pumps	683.33 (0.02) [159.22]	1867.65 (0.03) [371.35]	3145.83 (0.03) [547.10]	9361.11 (0.04) [1773.68]	12250.00 (0.02) [1380.28]	3320.45 (0.03) [643.61]
Iron and wooden ploughs/yokes	2041.67 (0.06) [475.73]	2705.88 (0.04) [538.01]	7104.17 (0.06) [1235.51]	11222.22 (0.05) [2126.32]	17625.00 (0.04) [1985.92]	5329.55 (0.05) [1033.04]
Cart	1583.33 (0.05) [368.93]	2352.94 (0.04) [467.84]	4416.67 (0.04) [768.12]	5166.67 (0.02) [978.95]	6250.00 (0.01) [704.23]	3068.18 (0.03) [594.71]
Farm generator	520.83 (0.02) [121.36]	3823.53 (0.06) [760.23]	8437.50 (0.07) [1467.39]	6666.67 (0.03) [1263.16]	26125.00 (0.05) [2943.66]	5200.75 (0.05) [1008.08]
Rotavator	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	4583.33 (0.04) [797.10]	17500.00 (0.08) [3315.79]	58125.00 (0.12) [6549.30]	6742.42 (0.06) [1306.90]

Straw reaper	2708.33 (0.08) [631.07]	6970.59 (0.11) [1385.96]	0.00 (0.00) [0.00]	8333.33 (0.04) [1578.95]	43750.00 (0.09) [4929.58]	6568.78 (0.06) [1273.13]
Others*	1979.11 (0.06) [461.17]	1397.06 (0.02) [277.78]	3250.00 (0.03) [565.22]	4555.56 (0.02) [863.16]	9000.00 (0.02) [1014.08]	2837.12 (0.03) [549.93]
Sub-total	**2529188.13 (78.55) [589325.39]**	**5389679.41 (83.56) [1071632.16]**	**10640899.58 (87.19) [1850591.23]**	**18898992.78 (88.44) [3580861.79]**	**43799312.50 (89.25) [4935133.80]**	**9474303.71 (86.62) [1836428.91]**
(C) Livestock Assets						
Buffaloes in milk	37562.50 (1.17) [8752.43]	58852.94 (0.91) [11701.75]	86875.00 (0.71) [15108.70]	92222.22 (0.43) [17473.68]	121625.00 (0.25) [13704.23]	64560.61 (0.59) [12513.95]
Buffaloes not in milk	12979.17 (0.40) [3024.27]	12352.94 (0.19) [2456.14]	16750.00 (0.14) [2913.04]	12111.11 (0.06) [2294.74]	7500.00 (0.02) [845.07]	13053.03 (0.12) [2530.10]
Cows in milk	8208.33 (0.25) [1912.62]	6735.29 (0.10) [1339.18]	6250.00 (0.05) [1086.96]	9944.44 (0.05) [1884.21]	13375.00 (0.03) [1507.04]	8022.73 (0.07) [1555.07]
Cows not in milk	2312.50 (0.07) [538.83]	176.47 (0.00) [35.09]	1458.33 (0.01) [253.62]	2222.22 (0.01) [421.05]	1875.00 (0.00) [211.27]	1568.18 (0.01) [303.96]
Young stock of cattle	6291.67 (0.20) [1466.02]	9102.94 (0.14) [1809.94]	10750.00 (0.09) [1869.57]	9833.33 (0.05) [1863.16]	15875.00 (0.03) [1788.73]	8890.15 (0.08) [1723.20]
Bullock/ox	1604.17 (0.05) [373.79]	1470.59 (0.02) [292.40]	2604.17 (0.02) [452.90]	1694.44 (0.01) [321.05]	2687.50 (0.01) [302.82]	1829.55 (0.02) [354.63]
Others**	0.00 (0.00) [0.00]	0.00 (0.00) [0.00]	8333.33 (0.07) [1449.28]	0.00 (0.00) [0.00]	6250.00 (0.01) [704.23]	1893.94 (0.02) [367.11]
Sub-total	**68958.33 (2.14) [16067.96]**	**88691.18 (1.36) [17634.50]**	**133020.83 (1.09) [23134.06]**	**128027.78 (0.61) [24257.89]**	**169187.50 (0.35) [19063.38]**	**99818.18 (0.91) [19348.02]**
Household Assets (A+B+C)	**3219496.46 (100.00) [750173.93]**	**6450989.71 (100.00) [1282652.92]**	**12204957.91 (100.00) [2122601.38]**	**21365453.89 (100.00) [4048191.26]**	**49076287.50 (100.00) [5529722.53]**	**10939219.24 (100.00) [2120377.30]**

Source: Field Survey, 2015-16

*Others include paddy transplanter, *kaddu* palter, solar tubewell, sealers, potato planter and potato digger machines, etc.

** Others include goats, horses, hens, etc.

Note: 1. Figures in brackets ( ) represent percentage of total Household Assets

2. Figures in brackets [ ] represent per capita Household Assets.

3. We have taken the value of land as reported by the farmers. However, the field survey has revealed that there are a few buyers of land at the reported values.

Household durable assets mainly include homestead land and residential building, furnishing articles, means of transportation, electrical appliances, and the like. The average value of household durable assets is the highest (Rs. 1709851.52) in the high, followed by medium (Rs. 1573590.96) and low (Rs. 1365097.35) productivity regions. The average values of all household durable assets have increased from the marginal farm-size category to the large farm-size category across all the regions. In the medium productivity region, all the farm-size categories except the marginal farm-size category have the highest average values of household durable assets. Among the different constituents of household durable assets, homestead land and residential building are the most valuable assets across all the regions. Its average value is the

highest (Rs. 1324990.53) in the high, followed by medium (Rs. 1219429.82) and low (Rs. 1071852.27) productivity regions. The assets such as jeeps/cars, ornaments, and motorcycles/scooters/mopeds are the next important assets. The average values of jeeps/cars, and motorcycles/scooters/mopeds are the highest, *i.e.,* Rs. 107678.03, and Rs. 38867.42 respectively in the high productivity region, and the lowest, *i.e.,* Rs. 51893.94, and Rs. 30446.97 respectively in the low productivity region. The average value of ornaments is the highest (Rs. 96007.58) in the low, followed by high (Rs. 89053.03) and medium (Rs. 79460.53) productivity regions. Farmers in the high and medium productivity regions possess durable assets of superior quality because of their better economic condition. In the low productivity region, the farmers due to their limited income and lack of job opportunities outside the agricultural sector have no other choice than to possess household durable assets of poor quality.

Farm assets play an important role in generating more farm business income by reducing cost of farm operations as well as employment opportunities. The average value of farm assets for an average farm household is the maximum (Rs. 14017149.30) in the medium, followed by high (Rs. 11386181.09) and low (Rs. 9474303.71) productivity regions. In the medium productivity region, all the farm-size categories have the highest average value of farm assets, whereas all the farm-size categories in the low productivity region have the lowest average value in this regard. Land, tractor, electric tubewells, and trolley are the important components of farm assets across all the regions. The average value of land is the highest (Rs. 13564912.28) in the medium, followed by high (Rs. 10766287.88) and low (Rs. 9059090.91) productivity regions. The average values of tractor, electric tubewells, and trolley are the highest, *i.e.,* Rs. 249431.82, Rs. 143134.47, and Rs. 52613.64 respectively in the high productivity region; and the lowest, *i.e.,* Rs. 155636.36, Rs. 109621.21, and Rs. 30250.00 respectively in the low productivity region. The average values of farm assets vary from one region to another in the rural areas of Punjab. The medium productivity region has recorded the highest values of farm assets. The analysis has shown that the medium productivity region is more diversified, and the value of agricultural land is relatively higher than the other two regions. Farmers in the high and low productivity regions generate some income by hiring out harvester combine, straw reaper, leveller, and the like. The ownership of agricultural machinery/equipments has led to create additional income and employment opportunities particularly for the large and medium farm-size categories in these regions.

Livestock provides household nutrition security, stability to family income, and addition employment to farm households. The average value of livestock assets for an average farm household is the highest (Rs. 189709.47) in the high, followed by medium (Rs. 142087.72) and low (Rs. 99818.18) productivity regions. In the high productivity region, all the farm-size categories except the large farm-size category have the highest average value of livestock assets. Among the different constituents of livestock assets, the average value of buffaloes in milk is the highest (Rs. 113969.70) in the high productivity region, and the lowest (Rs. 64560.61) in the low productivity region. The average value of cows in milk is Rs. 34757.58, Rs. 13885.96, and Rs. 8022.73 in the high, medium, and low productivity regions respectively. The average value of buffaloes not in milk is the highest (Rs. 16242.42) in the high productivity region, and the lowest (Rs 11429.82) in the medium productivity region. The average value of young stock of cattle is the highest (Rs. 17234.85) in high productivity region, and the lowest (Rs. 8890.15) in the low productivity region. The field survey has shown that farmers' access to better livestock assets is low in the low productivity region because farmers have meagre income; and they cannot afford to have high priced cattle with their small income.

The data regarding relative shares of different constituents of assets of the different farm-size categories across the regions show that the relative share of household durable assets is 12.87 per cent for an average farm household in the high, followed by low (12.47 per cent) and medium (10.01 per cent) productivity regions. The relative share of most important component of household durable assets such as homestead land and residential building is the highest (9.97 per cent) in the high, followed by low (9.81 per cent) and medium (7.75 per cent) productivity regions. The asset such as jeeps/cars has appeared at the second rank in the high, and medium productivity regions with relative shares of 0.81, and 0.52 per cent respectively. The proportionate share of ornaments ranks at the third position in these two regions; and its relative share is 0.67, and 0.51 per cent respectively. In the low productivity region, ornaments emerge at the second place, and jeeps/cars at the third place with the relative shares of 0.88, and 0.47 per cent respectively. The relative share of motorcycles/scooters/mopeds ranks at the fourth position across all the regions; and this share is 0.29, 0.24, and 0.28 per cent in the high, medium, and low productivity regions respectively. The relative shares of household durable assets vary among the different farm-size categories across all the regions.

Farm assets account for 85.71, 89.09, and 86.62 per cent for an average farm household in the high, medium, and low productivity regions respectively. Among the different constituents of farm assets, land has appeared as the most valuable asset. Its relative share is 81.04, 86.19, and 82.81 per cent in the high, medium, and low productivity regions respectively. It is evident that land is the main productive asset across all the regions. The second important farm asset is tractor across all the regions; and the proportionate share of this asset is the highest (1.88 per cent) in the high, followed by low (1.42 per cent) and medium (1.20 per cent) productivity regions. Electric tubewells are the next important farm asset, and its relative share is the highest (1.08 per cent) in the high, followed by low (1.00 per cent) and medium (0.76 per cent) productivity regions. The proportionate share of trolley has appeared at the fourth rank across the regions; and its relative share is the highest (0.40 per cent) in the high, followed by low (0.28 per cent) and medium (0.23 per cent) productivity regions. The field survey has highlighted the fact that farmers in the high and medium productivity regions own relatively more productive assets such as land and agricultural machinery/equipments.

The proportionate share of livestock assets in the total assets is 1.42, 0.90, and 0.91 per cent in the high, medium, and low productivity regions respectively. The relative share of most valuable livestock asset such as buffaloes in milk is the highest (0.86 per cent) in the high, followed by medium (0.65 per cent), and low (0.59 per cent) productivity regions. The field survey has shown that buffalo is the main milch animal among all the farm-size categories across all the regions. Cows in milk are the second important livestock asset in the high, and medium productivity regions, and its relative share is 0.26, and 0.09 per cent respectively for an average farm household. In the low productivity region, buffaloes not in milk have emerged at the second place with a relative share of 0.12 per cent. The proportionate share of young stock of cattle is 0.13, 0.08, and 0.07 per cent in the high, low, and medium productivity regions respectively. The field survey has shown that certain farm households in the high productivity region are aware about superior breeds of cattle because they participate regularly in *pashu* and *kisan melas*. Thus, they have kept livestock of better quality for more financial gains.

The results further reveal that the per capita value of assets is Rs. 2353965.04, Rs. 2410675.26, and Rs. 2120377.30 in the high, medium, and low productivity regions respectively. The per capita value of assets for all the farm-size categories in the medium productivity region is the highest, whereas all the farm-size categories except the medium farm-size category in the

low productivity region have the lowest per capita value of household assets. The per capita value of durable assets is worth Rs. 302953.56 in the high productivity region, followed by the low (Rs. 264600.37) and medium (Rs. 241114.74) productivity regions. The per capita value of durable assets amongst the farm households is the highest in the high productivity region. It reveals that economic condition of farmers in the high productivity region is relatively better and they are maintaining better levels of living as compared to those in the medium and low productivity regions. The per capita value of farm assets is the highest (Rs. 2147789.01) in the medium, followed by high (Rs. 2017398.53) and low (Rs. 1836428.91) productivity regions. The per capita value of farm assets for all the farm-size categories except the large farm-size category is the maximum in the medium productivity region, followed by the high and low productivity regions. The per capita value of livestock assets is the highest (Rs. 33612.95) in the high, followed by medium (Rs. 21771.51) and low (Rs. 19348.02) productivity regions. It reflects that farmers in the high and medium productivity regions are better placed as compared to those in the low productivity region.

The inequalities in the distributional patterns of assets across the regions have been examined by taking the cumulative percentages of per household and per capita values of household assets for each decile group after arranging the same in an ascending order. Table 2 shows that the distribution of household assets is more unequal in the medium productivity region as compared to the high and low productivity regions. In the medium productivity region, the bottom 10 per cent farm households share only 1.73 per cent of the total assets, whereas the top 10 per cent share 43.47 per cent of the total assets. In the high and low productivity regions, the bottom 10 per cent farm households share only 1.87, and 1.96 per cent, whereas the top 10 per cent farm households share 36.18, and 38.09 per cent of the total assets respectively. It is clear that per household assets shared by the top 10 per cent farm households are 19.34, 25.12, and 19.43 times of the bottom 10 per cent farm households in the high, medium, and low productivity regions respectively. The results further show that the bottom 70 per cent farm households share 32.95, 25.84, and 32.18 per cent of the total assets in the high, medium, and low productivity regions respectively; and this share is less than the share of top 10 per cent farm households across all the regions. The Gini Coefficient supports this evidence that concentration of household assets is relatively higher in the medium productivity region (0.5546) than the low (0.4898) and high (0.4763) productivity regions.

Table 2. Distribution of Assets of Farmers

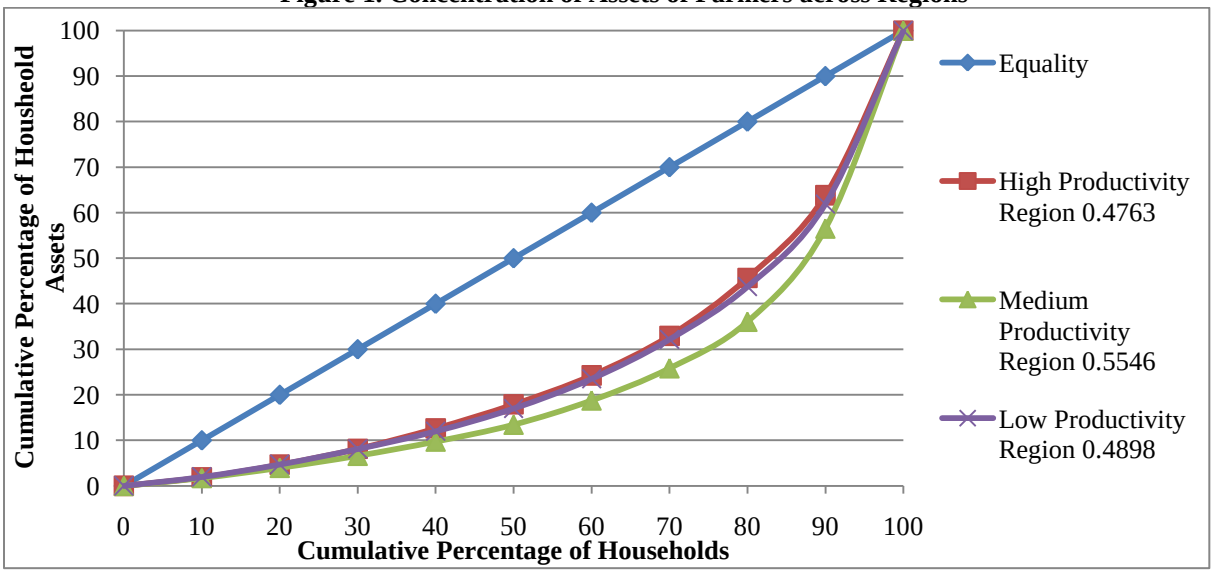
Cumulative Percentage of Households/Persons	High Productivity Region		Medium Productivity Region		Low Productivity Region	
	Per Household Assets	Per Capita Assets	Per Household Assets	Per Capita Assets	Per Household Assets	Per Capita Assets
10	1.87	1.98	1.73	1.65	1.96	2.25
20	4.65	5.23	3.97	3.89	4.70	5.37
30	8.14	9.49	6.62	6.99	8.10	9.50
40	12.61	14.62	9.74	10.89	11.99	14.54
50	17.89	20.80	13.45	15.91	17.00	20.41
60	24.25	28.22	18.77	20.02	23.52	27.51
70	32.95	37.60	25.84	30.50	32.18	37.16
80	45.68	49.38	36.06	43.81	43.74	50.55
90	63.82	66.57	56.53	63.02	61.91	69.36
100	100.00	100.00	100.00	100.00	100.00	100.00
Gini Coefficient	**0.4763**	**0.4322**	**0.5546**	**0.5026**	**0.4898**	**0.4267**

Source: Field Survey, 2015-16

The distribution of per capita assets is more uneven in the medium productivity region. In this region, the bottom 10 per cent persons of the farm households share 1.65 per cent, whereas the top 10 per cent persons of the farm households share 36.98 per cent of the total per capita assets. In the high, and the low productivity regions, the bottom 10 per cent persons of the farm households share 1.98 and 2.25 per cent, whereas the top 10 per cent persons of the farm households share 33.43 and 30.64 per cent of the total per capita assets respectively. The per capita assets shared by the top 10 per cent persons of the farm households are 16.88, 22.41, and 13.62 times of the top 10 per cent persons of the farm households in the high, medium, and low productivity regions respectively. The results further show that the bottom 60 per cent persons of the farm households share 28.22, and 27.51 per cent of the total per capita assets in the high, and low productivity regions respectively; and this share is less than the share of the top 10 per cent persons in these two regions. In the medium productivity region, the share of per capita assets of the bottom 70 per cent persons of the farm households (30.50 per cent) is less than that of the top 10 per cent persons. The Gini Coefficient also supports the evidence that the distribution of per capita assets is worse (0.5026) in the medium, followed by high (0.4322) and low (0.4267) productivity regions. The distribution of per household assets is more uneven than the per capita assets across all the regions.

The Lorenz Curves drawn in Figure 1 show that the inequality in distribution of assets is the highest in the medium productivity region because the difference between the Lorenz Curve of this region and the line of equality is the maximum. On the contrary, the high productivity region has a relatively fair distribution of household assets because the difference between the line of equality and the Lorenz Curve of this region is the minimum.

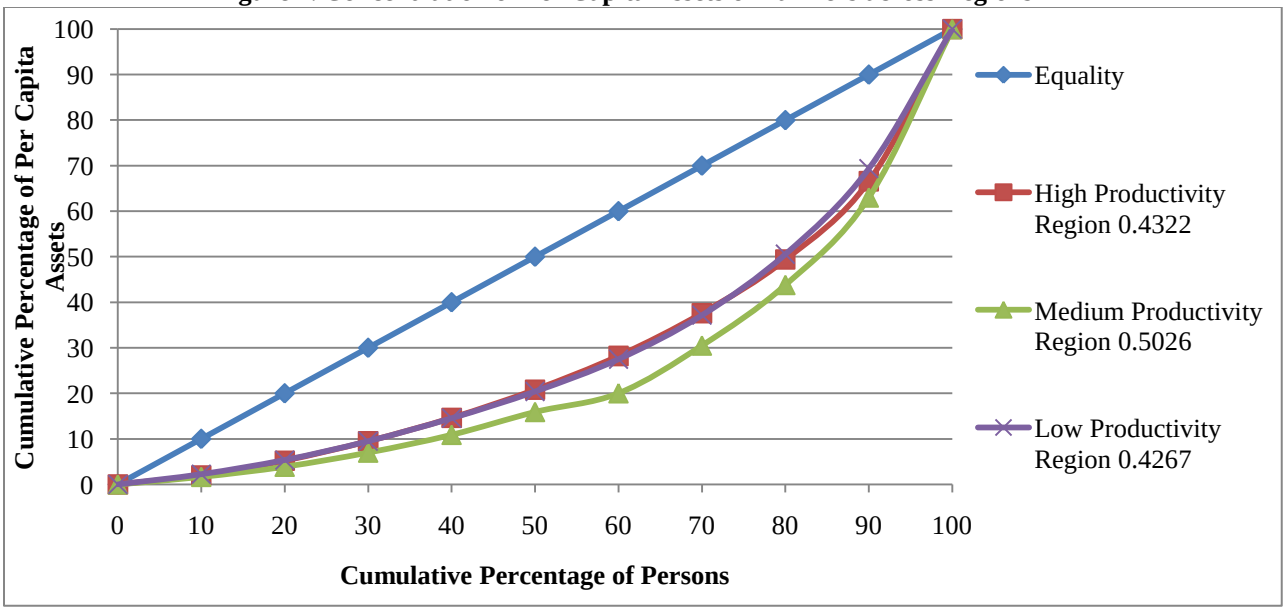
Figure 1. Concentration of Assets of Farmers across Regions



Note: Based on Table 2

It is evident from Figure 2 that the concentration of per capita assets is the highest in the medium productivity region because the difference between the Lorenz Curve of this region and the line of equality is the maximum. On the other hand, the difference between the Lorenz Curve of the low productivity region and the line of equality is the minimum; and this region has the least concentration of per capita assets.

Figure 2. Concentration of Per Capita Assets of Farmers across Regions



Note: Based on Table 2

CONCLUSIONS

The average value of assets of farmers is the highest (Rs. 15732827.98) in the medium, followed by high (Rs. 13285742.08) and low (Rs. 10939219.24) productivity regions. There are wide disparities in the ownership of assets of farmers across the regions. The per capita value of assets is worth Rs. 2353965.04, Rs. 2410675.26, and Rs. 2120377.30 in the high, medium, and low productivity regions respectively. The percentage share of household durable assets is 12.87 in the high, followed by low (12.47) and medium (10.01) productivity regions. Farm assets account for 85.71, 89.09, and 86.62 per cent; and livestock assets account for 1.41, 0.90, and 0.91 per cent in the high, medium, and low productivity regions respectively. The household durable assets such as homestead land and residential building, jeeps/cars, ornaments; farm assets such as land, tractor, electric tubewells; and livestock assets such as buffaloes in milk, and cows in milk are more valuable among the farm households across all the regions. The average values of household durable, farm and livestock assets have increased from the marginal farm-size category to the large farm-size category across the regions. Farmers in the high and medium productivity regions possess costlier durable assets and other productive assets such as land, agricultural machinery/equipments, livestock, and others. In the low productivity region, farmers have less income due to low agricultural productivity and absence of gainful employment opportunities outside the agricultural sector. As a result, they possess less assets. Thus, financial assistance, loan at zero rate of interest and subsidies for purchasing the exotic-breeds of milch animals should be given by the government for generating employment opportunities and creating additional income for reducing economic disparities. Dairy animals need to be taken as collateral for providing loans for increasing their access to institutional credit. There is need to encourage dairy farming and other subsidiary occupations such as poultry, bee keeping, fishery, etc. for raising the income levels of farmers. The ownership of expensive and modern farm machinery/equipments is mainly limited to the medium and large farm-size categories across all the regions. Land reforms should be implemented earnestly and the distribution of land in favour of farmers of marginal and small farm-size categories will increase their size of land holdings and farm business income as well. It will also enable them to avail the benefits of new inputs and capital equipment. Arrangements should also be made to provide modern agricultural machinery/equipments to the farmers through the primary co-operative societies across all the

regions so that they can hire it at reasonable rates. The low productivity region should be the focus of such activities.

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