

LEVELS OF LIVING OF FARMERS AND AGRICULTURAL LABOURERS IN RURAL PUNJAB

Gian Singh*, Anupama*,
Rupinder Kaur**, Gurinder Kaur***
and Sukhveer Kaur****

ABSTRACT

The present paper is an attempt to analyse the levels of living of farmers and agricultural labourers in rural Punjab. The study reveals that the levels of income and consumption expenditure of agricultural labourers, marginal, small, semi-medium farmers are significantly lower than the medium and large farmers. The consumption pattern of the agricultural labourers, marginal, small, semi-medium and medium farm-size categories is of subsistence in nature. A large share of total consumption expenditure by these categories is allocated to the non-durable items. On the other hand, in the case of large farm-size category, the highest proportion of expenditure is accounted for by the durable items, followed by socio-religious ceremonies, non-durables and services. The average propensity to consume is greater than one for the marginal, small, semi-medium and medium farm-size categories. More than four-fifth' of the farm and agricultural labour households in the State of Punjab are under debt. The amount of debt per indebted household and per sampled household increases as farm-size goes up. The category-wise amount of debt per owned acre decreases as farm-size goes up. It implies that the burden of debt is greater on the lower farm-size categories as compared to the upper farm-size categories. The average amount of debt per indebted agricultural labour household in rural Punjab is ₹ 68329.88.

Keywords: Farmers, Agricultural Labourers, Income, Consumption Expenditure, Debt.

* Professor, Department of Economics, Punjabi University, Patiala.

** Assistant Professor, Department of Economics, Punjabi University, Patiala.

*** Professor, Department of Geography, Punjabi University, Patiala.

**** Assistant Professor, Dashmesh Khalsa College, Zirakpur.

Introduction

Agriculture plays an important role in economic development, such as provision of food to the nation, enlarging exports, transfer of manpower to non-agricultural sectors, contribution to capital formation and securing markets for industrialisation (Walia and Garg, 2015). Agriculture remains as the perennial source of livelihood and also provides raw materials to a very large number of industries (Alexpandi and Rameshkumar, 2014).

The agricultural and rural development is inextricably interwoven, each reinforcing or decelerating their growth. The performance of agricultural development determines the levels of living of the people living in rural areas (Mahajan, 2015). The New Agricultural Technology launched during the mid-1960s as it relates to the package of high-yielding varieties of seeds, assured irrigation for intensive agriculture, chemicals, fertilisers, insecticides and pesticides, agricultural extension programmes for the training and education of farmers, emphasis on research and its application, etc., helped India in the transformation of traditional agrarian economy with the most pervasive forces resulted in a growing polarisation between large-scale and small-scale cultivators (Wilson, 2002). It is conceded that in the wake of introduction of New Agricultural Technology, farm incomes have increased and farming today is in better shape (Grewal and Sidhu, 1976), but a significant proportion of the gross income of progressive farmers is ploughed back into agriculture by the use of new inputs.

It has resulted in a continuous decline in the net surplus generated from the production of crops (Shah and Agarwal, 1970). It is found that the farmers have suffered losses both due to increased cost of cultivation in some crops and reduction in value of output in some other crops. Continued suffering of losses or earning only a low margin of profit from crop cultivation would definitely discourage farmers from engaging in agriculture (Narayanamoorthy, 2013).

Due to government faulty policy, the terms of trade have been against the agriculture sector for the last 43 years. So, farming has become a loss making profession (Kaur, 2015). As a result of negative agricultural price policy of the government of India, the income of marginal and small peasants has decreased so low that they have been trapped in high indebtedness and are unable to pay even interest on their loans out of their current income. This policy's drubbings are not confined to marginal and small farmers only, but even greater aggressive effects are being experienced by agricultural labourers and rural artisans (Singh, 2014).

With the commencement of economic reforms in 1991 and membership of World Trade Organisation (WTO) in 1995, India witnessed a distinct slow-down in agricultural growth during the past two decades, in spite of substantial acceleration in the growth of economy as they started showing their impact in the form of virtual freezing of Minimum

Support Prices (MSP) and reduction in farm input subsidies (Shergill, 2010). The agrarian sector of the country would undergo a process of rapid capitalistic change during liberalisation leading to concentration of land in few hands and proletarianisation and pauperisation of small peasantry (Haque, 1996). The slow-down is accompanied by a significant reduction in the share of agriculture in national product, but without much reduction in the share of workers depending on it for their livelihood. The contribution of agriculture to Indian economy in terms of Gross Domestic Product (GDP) is declining steadily year by year due to the process of industrialisation and the economic growth that gathered momentum with the manufacturing and service sectors growing rapidly (Gol, 2013).

Since the mid-1990s, large sections of the farm households have been facing a great deal of distress as a consequence of decline in agricultural income, erosion of their repayment capacity and increased debt burden. Although agriculture now accounts for only 14 per cent of Gross Domestic Product (GDP), it is still the main source of livelihood for majority of the rural population. As such rapid growth of agriculture is critical for inclusiveness, important structural changes are taking place within the sector; and there are definite signs of improved performance (Gol, 2013). The policy with regard to agriculture since 1991 has caused massive distress among the rural people tied to the labour markets of the urban areas for survival (Tiwana, 2015). The present paper is an attempt

to analyse the levels of livings of farmers and agricultural labourers in rural Punjab.

Methodology

For the purpose of the present study, data are collected from the three districts of Punjab State representing the three different regions i.e., the South-West region, the Central Plains region and the Shivalik Foothills region. The South-West region comprises Bathinda, Mansa, Ferozepur, Fazilka, Faridkot, Muktsar and Moga districts. The Central Plains region constitutes Patiala, Fatehgarh Sahib, Sangrur, Amritsar, Kapurthala, Jalandhar, Nawanshahr, Tarn Taran and Ludhiana districts. The Shivalik Foothills region comprises Hoshiarpur, Pathankot, Gurdaspur and Ropar districts. Keeping in view the differences in agro-climatic conditions and to avoid the geographical contiguity of the sampled districts, it was deemed fit to select one district from each region on random basis. Mansa district from the South-West region; Ludhiana district from the Central Plains region; and Hoshiarpur district from the Shivalik Foothills region have been selected for the purpose of the present study.

On the basis of random sampling method one village from each development block of the selected districts has been chosen. There are twenty seven development blocks in the selected three districts. Thus, in all the selected blocks, twenty seven villages have been selected from the three districts under the study. A representative proportional sample of households comprising the marginal farmers, small farmers, medium farmers, large farmers

and agricultural labourers have been taken up for the survey. Out of these 27 villages, 1007 farm households and 301 agricultural labour households are selected from the three districts for the purpose of survey, out of which, 240 farm households and 111 agricultural labour households from Mansa district, 481 farm households and 139 agricultural labour households from Ludhiana district and 286 farm households and 51 agricultural labour households from Hoshiarpur district have been selected. Out of total selected 1308 households, 1007 are farm households and 301 are agricultural labour households. Out of 1007 selected farm households, 408 belong to the category of marginal farmers, 273 to small farmers, 192 to semi-medium farmers, 186 to medium farmers and 46 to large farmers. The present study relates to the agricultural year 2014-15.

Results and Discussion

Household Income: The income earned from the various sources by the different farm-size categories and agricultural labourers is given in Table 1. The Table shows that an average sampled farm household earns ₹ 2,91,798.19, per annum in rural Punjab. There are considerable variations in the income levels earned by the different farm-size categories. The income figures of ₹ 1,39,365.27, ₹ 2,22,992.32, ₹ 3,69,432.68, ₹ 5,66,407.60 and ₹ 12,02,780.38 against the respective marginal, small, semi-medium, medium and large farm-size categories clearly reflect the variations in the income levels of the different farm-size categories. It is evident that as the farm size increases, there is also an increase in the average income of the farm households.

Table 1: Levels of Income of Farmers and Agricultural Labourers
(Mean Values, in ₹, Per Annum)

S. No.	Sources of income	Marginal Farmers	Small Farmers	Semi-Medium Farmers	Medium Farmers	Large Farmers	All Sampled Farmers	Agri. Labourers
1.	Farm business income	86270.67 {61.90} {18152.88}	173027.93 {77.59} {32331.71}	303726.52 {82.21} {52394.87}	486369.98 {85.87} {77118.12}	968231.43 {80.50} {136621.61}	226504.22 {77.62} {42285.83}	0.00
2.	Milk & milk products	24779.84 {17.78} {5214.12}	31787.82 {14.26} {5939.82}	38830.66 {10.51} {6698.55}	27002.74 {4.77} {4281.52}	40512.42 {3.37} {5716.48}	30271.65 {10.37} {5651.38}	759.80 {0.93} {156.11}
3.	Livestock	2183.84 {1.57} {459.52}	2563.82 {1.15} {479.07}	1645.83 {0.45} {283.92}	3325.61 {0.59} {527.30}	3186.81 {0.26} {449.67}	2329.87 {0.80} {434.96}	0.00
4.	Hiring out labour in agriculture	922.81 {0.66} {194.18}	0.00	0.00	0.00	0.00	373.89 {0.13} {69.80}	74032.62 {90.89} {15210.80}
5.	Hiring out labour in non-agriculture	0.00	0.00	0.00	0.00	0.00	0.00	4388.37 {5.39} {901.64}
6.	Hiring out labour in urban industrial sector	0.00	0.00	0.00	0.00	0.00	0.00	625.55 {0.77} {128.53}
7.	Hiring out labour in non-industrial urban sector	0.00	0.00	0.00	0.00	0.00	0.00	116.58 {0.14} {23.95}

(Contd.....)

Table 1 (Contd.....)

8. Hiring out agricultural equipment	869.94 (0.62) {183.05}	130.84 (0.06) {24.45}	1041.67 (0.28) {179.69}	11000.00 (1.94) {1744.14}	37267.08 (3.10) {5258.55}	3250.19 (1.11) {606.77}	0.00
9. Rent from leased out land	0.00	560.74 (0.25) {104.78}	7994.79 (2.16) {1379.16}	909.09 (0.16) {144.14}	67934.78 (5.65) {9585.89}	4859.07 (1.67) {907.13}	0.00
10. Salaries	14781.15 (10.61) {3110.22}	5535.96 (2.48) {1034.44}	6833.60 (1.85) {1178.84}	21168.18 (3.74) {3356.40}	36086.96 (3.00) {5092.02}	12290.84 (4.21) {2294.56}	438.54 (0.54) {90.10}
11. Pensions	3907.74 (2.80) {822.26}	4712.93 (2.11) {880.65}	3001.47 (0.81) {517.78}	9506.99 (1.68) {1507.42}	23525.70 (1.96) {3319.58}	5338.70 (1.83) {996.68}	925.25 (1.14) {190.10}
12. Remittances	4589.08 (3.30) {965.62}	4029.21 (1.81) {752.89}	5909.46 (1.60) {1019.42}	6818.19 (1.20) {1081.08}	26035.20 (2.16) {3673.68}	5863.51 (2.01) {1094.65}	0.00
13. Sale of manure	0.00	0.00	0.00	0.00	0.00	0.00	104.32 (0.13) {21.43}
14. Others*	1060.20 (0.76) {223.08}	643.07 (0.29) {120.16}	448.68 (0.13) {77.40}	306.82 (0.05) {48.65}	0.00	716.25 (0.25) {133.72}	61.14 (0.07) {12.56}
Total	139365.27 (100) {29324.93}	222992.32 (100) {41667.97}	369432.68 (100) {63729.63}	566407.60 (100) {89808.77}	1202780.38 (100) {169717.48}	291798.19 (100) {54475.49}	81452.17 (100) {16735.22}

Source: Field Survey 2014-15.

*Others: It includes income from sources such as shop keeping, tailoring, beauty parlour, etc.

** Figures in brackets () represent percentage of total income.

***Figures in brackets { } represent per capita income.

Farm business income is the most important component of household income, followed by income from milk & milk products and salaries. The Table clearly describes that in absolute terms, these sources of income have shown a similar pattern across the different farm-size categories except the large farm-size category. In the large farm-size category, farm business income is the most important component of household income, followed by income from leased out land and milk & milk products. The field survey highlights the fact that the farm households generally hesitate to hire out labour in agriculture. This can be explained in terms of socio-cultural environment. Income from hiring out labour in agriculture is reported only by the marginal farm-size category. This fact has an important implication that the farm business income of the marginal farm-size category is not sufficient to meet their minimum consumption needs; and farmers of this category earn some income from hiring out labour in agriculture.

The relative shares of income from the various sources of farm households and agricultural labourers show that the main source of income in the case of an average sampled household across the farm-size categories is the farm business income. On an average, 77.62 per cent of the total income comes from farm business income. However, there are considerable variations in the relative share of farm business income across the different farm-size categories. The marginal, small, semi-medium, medium and large farm-size categories have 61.90, 77.59, 82.21, 85.87

and 80.50 per cent of their average annual household income, respectively from farm business income. The second important source of income in the case of an average sampled farm household is milk & milk products. As much as 10.40 per cent of the total income comes from this source. The relative share of income from this source has a negative relationship with farm size.

Income from salaries ranks third in the case of an average sampled farm household. The next important source of income is remittances. The proportional share from this source is 2.01 per cent for an average sampled farm household. It is 3.30 per cent for the marginal farm-size category, followed by the large, small, semi-medium and medium farm-size categories. Pensions appear at the fifth place in the income pattern of farm households. The relative share from this source is 1.83 per cent. It is 2.80 per cent for the marginal farm-size category, followed by the small, large, medium and semi-medium farm-size categories. The sixth place in the income pattern of the farm households goes to income from leased out land. An average sampled farm household earns 1.67 per cent of their total income from this source. This share increases with an increase in the farm-size, except the medium farm-size category. The large farm-size category earns maximum, i.e., 5.65 per cent from this source of income. The marginal farm-size category has not reported any income from this source. This fact can be explained in terms of their meagre land ownership. The components of income

such as hiring out agricultural equipment, livestock, hiring out labour in agricultural sector and other sources account for a meagre share of the total income for an average sampled farm household.

The Table also shows that an average agricultural labour household earns ₹ 81,452.17, per annum in rural Punjab. As the agricultural labourers are landless and they have no other choice than to sell their labour power in the agricultural sector, the main source of income in the case of agricultural labour households is the income from hiring out labour in the agricultural sector. They earn 90.89 per cent of the total income from this source. This is because of the fact that Punjab's economy provides limited alternative employment opportunities in the secondary and tertiary sectors. The second important source of income in this category is income from hiring out labour in the non-farm rural sector. This source contributes 5.39 per cent towards their total income. The next important source of income is pensions. The proportional share of this source is 1.14 per cent. The components of income such as hiring out labour in the urban industrial sector, salaries, hiring out labour in the non-industrial urban sector and sale of manure account for a meager share of the total income for an average agricultural labour household.

An average sampled farm household earns per capita income of ₹ 54,475.49, annually. However, there are differences in the per

capita income levels of the different farm-size categories. For example, the large farm-size category earns the maximum, i.e., ₹ 1,69,717.48 per capita, followed by the medium, semi-medium, small and marginal farm-size categories. The medium farm-size category has registered an income of ₹ 89,808.77 per capita; and it is ₹ 63,729.63, ₹ 41,667.97 and ₹ 29,324.93 for the semi-medium, small and marginal farm-size categories, respectively. Although the family size increased with an increase in the farm size, yet the per capita income is also positively associated with farm size. However, there are considerable differences in the range of average per capita income and the average household income of the various farm-size categories. The per capita income earned by the large farm-size category is 5.78 times the per capita income earned by the marginal farm-size category. On the other hand, the average household income earned by the large farm-size category is 8.63 times the income earned by the marginal farm-size category. An average agricultural labour household earns per capita income of ₹ 16,735.22, annually.

The above analysis clearly shows that the income levels of agricultural labourers, marginal, small, semi-medium farmers are significantly lower than the medium and large farmers.

Consumption Expenditure

One of the key indicators of levels of living of an individual is consumption pattern. The consumption pattern and levels of living of an individual are closely related to

income (Sharma, et al. 2015). For the purpose of analysis that follows, the consumption basket is presumed to constitute consumer non-durables, consumer durables, services and socio-religious ceremonies, whereas the important constituents of consumer non-durables are foodgrains, milk & milk products, sugar/gur, edible oils, clothing, footwear, intoxicants, fuel and light, tea leaves, LPG and other items of daily use. The durables include house construction, electric fans, coolers, AC, television, radio, bicycles, scooters, cars and jeeps and so on. Services cover consumption expenditure on education, healthcare, conveyance, communication and entertainment. The socio-religious ceremonies cover consumption expenditure on marriages and other socio-religious ceremonies.

The consumption expenditure is demonstrated in Table 2. The Table explains that annual consumption expenditure of an average farm household is ₹ 3,35,739.14. However, there are variations in the consumption expenditure of the different farm-size categories. For example, households belonging to the large farm-size category have recorded the maximum annual per household consumption expenditure of ₹ 11,36,247.03, whereas the annual consumption expenditure for the marginal,

small, semi-medium and medium farm-size categories has been recorded at ₹ 1,88,523.14, ₹ 2,87,451.40, ₹ 4,05,573.08 and ₹ 5,97,275.52, respectively. The Table highlights that consumption expenditure on the non-durables, durables, services, marriages and other social ceremonies have a tendency to increase from the marginal farmers to the large farmers. However, there are few exceptions; for example, the average expenditure incurred on eggs by the semi-medium farm-size category is more than that of the medium farm-size category. The expenditure incurred on radio, TV, VCD and LCD by the small farm-size category is less than the other farm-size categories; and this expenditure of the medium farm-size category is also less than that of the semi-medium farm-size category. The expenditure incurred on watches and clocks by the small farm-size category is less than the other farm-size categories. The expenditure incurred on refrigerator is the highest among the farmers belonging to large farm-size category, followed by the marginal, semi-medium, medium and small farm-size categories. The large farm-size category has reported no expenditure on bicycles and the small farm-size category spends the minimum, followed by the marginal, medium and semi-medium farm-size categories.

Table 2: Levels of Consumption Expenditure of Farmers and Agricultural Labourers
(Mean Values, in ₹ Per Annum)

S.No.	Items of Consumption	Marginal Farmers Non-durables	Small Farmers Non-durables	Semi-Medium Farmers Non-durables	Medium Farmers Non-durables	Large Farmers Non-durables	All Sampled Farmers Non-durables	Agri. Labourers Non-durables
A. Non-durables								
1.	Foodgrains							
(i)	Cereals	15075.27 {8.00} {3172.10}	18905.55 {6.58} {3532.66}	23812.28 {5.87} {4107.78}	26603.34 {4.45} {4218.19}	29236.86 {2.57} {4125.45}	19433.84 {5.79} {3628.08}	10594.71 {11.66} {2176.80}
(ii)	Pulses	3073.94 {1.63} {646.81}	3316.10 {1.15} {619.64}	4068.49 {1.00} {701.84}	4425.82 {0.74} {701.75}	6038.25 {0.53} {852.02}	3582.76 {1.07} {668.86}	2183.52 {2.40} {448.63}
2.	Milk & milk products	27603.68 {14.64} {5808.30}	44718.45 {15.56} {8356.01}	55596.70 {13.71} {9590.81}	73034.82 {12.23} {11580.30}	79643.12 {7.01} {11237.99}	43928.15 {13.08} {8200.90}	10505.42 {11.56} {2158.45}
3.	Sugar/Gur (Jaggery)	4540.38 {2.41} {955.38}	5254.10 {1.83} {981.77}	5776.53 {1.42} {996.49}	6636.52 {1.11} {1052.28}	7824.38 {0.69} {1104.05}	5302.75 {1.58} {989.97}	3743.59 {4.12} {769.16}
4.	Edible oils	2487.10 {1.32} {523.33}	2902.54 {1.01} {542.36}	3712.73 {0.92} {640.47}	4006.23 {0.67} {635.22}	6594.48 {0.58} {930.51}	3153.79 {0.94} {588.78}	1847.64 {2.03} {379.62}
5.	Vegetables	5581.36 {2.96} {1174.42}	7023.54 {2.44} {1312.41}	9287.82 {2.29} {1602.21}	10054.39 {1.68} {1594.21}	13637.89 {1.20} {1924.36}	7437.95 {2.22} {1388.58}	3798.34 {4.18} {780.41}

(Contd.....)

Table 2 (Contd.....)

6.	Fruits	1002.79 (0.53) {211.00}	1538.68 (0.54) {287.52}	2321.79 (0.57) {400.52}	3620.81 (0.61) {574.11}	4651.86 (0.41) {656.40}	1795.03 (0.53) {335.11}	325.42 (0.36) {66.86}
7.	Condiments and spices	2294.51 (1.22) {482.81}	2787.32 (0.97) {520.83}	3372.39 (0.83) {581.76}	3748.08 (0.63) {594.29}	4274.43 (0.38) {603.14}	2851.09 (0.85) {532.27}	1599.27 (1.76) {328.59}
8.	Pickles/ jams / juices	659.07 (0.35) {138.68}	953.31 (0.33) {178.13}	1338.43 (0.33) {230.89}	1557.59 (0.26) {246.97}	2178.06 (0.19) {307.33}	1016.28 (0.30) {189.73}	519.10 (0.57) {106.66}
9.	Tea leaves	1920.65 (1.02) {404.14}	2494.43 (0.87) {466.11}	3054.19 (0.75) {526.87}	3243.39 (0.54) {514.27}	4253.00 (0.37) {600.12}	2514.46 (0.75) {469.42}	1531.70 (1.69) {314.70}
10.	Meat/mutton/ fish	497.08 (0.26) {104.59}	506.76 (0.18) {94.69}	892.75 (0.22) {154.01}	1060.18 (0.18) {168.10}	3255.18 (0.29) {459.32}	750.34 (0.22) {140.08}	225.08 (0.25) {46.25}
11.	Eggs	117.16 (0.06) {24.65}	133.98 (0.05) {25.04}	296.09 (0.07) {51.08}	291.72 (0.05) {46.25}	1202.69 (0.11) {169.70}	220.68 (0.07) {41.20}	47.17 (0.05) {9.69}
12.	Biscuits/ bread/ sweets	1035.19 (0.55) {217.82}	1464.91 (0.51) {273.73}	1994.36 (0.49) {344.04}	2270.66 (0.38) {360.03}	4118.63 (0.36) {581.16}	1583.39 (0.47) {295.60}	479.63 (0.53) {98.55}
13.	Intoxicants and drugs	2407.63 (1.28) {506.61}	3115.36 (1.08) {582.13}	5619.73 (1.39) {969.44}	8035.05 (1.35) {1274.03}	15252.07 (1.34) {2152.13}	4290.44 (1.28) {800.98}	1909.83 (2.10) {392.40}
14.	Fuel and electricity	10945.31 (5.81) {2303.09}	14434.46 (5.02) {2697.20}	16682.09 (4.11) {2877.77}	22300.51 (3.73) {3535.94}	32265.01 (2.84) {4552.73}	14951.23 (4.45) {2791.23}	1896.74 (2.09) {389.71}

(Contd.....)

Table 2 (Contd.....)

15. Clothing	7645.00 (4.06) {1608.64}	10520.44 (3.66) {1965.83}	14541.19 (3.59) {2508.45}	19387.35 (3.25) {3074.03}	22475.16 (1.98) {3171.34}	11442.99 (3.41) {2136.28}	5074.09 (5.58) {1042.53}
16. Footwear	2586.98 (1.37) {544.35}	3408.36 {1.19} {636.88}	4585.30 (1.13) {790.99}	5927.88 (0.99) {939.92}	9434.27 (0.83) {1331.22}	3795.41 (1.13) {708.56}	1685.38 (1.85) {346.28}
17. Washing and toilet articles	2507.25 (1.33) {527.57}	2966.66 (1.03) {554.34}	3649.25 (0.90) {629.52}	4030.97 (0.67) {639.15}	6044.72 (0.53) {852.94}	3144.28 (0.94) {587.00}	2055.88 (2.26) {422.40}
18. LPG	2918.57 (1.55) {614.12}	3793.08 (1.32) {708.77}	4509.40 (1.11) {777.90}	5098.90 (0.85) {808.47}	6755.01 (0.59) {953.16}	3824.75 (1.14) {714.04}	1447.01 (1.59) {297.30}
19. Others	73.50 (0.04) {15.47}	0.00 0.00	520.83 (0.13) {89.85}	1132.42 (0.19) {179.55}	414.08 (0.04) {58.43}	246.96 (0.07) {46.10}	6.98 (0.01) {1.43}
Sub-total (1-19)	94972.42 (50.38) {19983.88}	130238.04 (45.31) {24336.06}	165632.35 (40.84) {28572.70}	206466.60 (34.57) {32737.05}	259549.15 (22.84) {36623.50}	135266.60 (40.29) {25252.77}	51476.51 (56.63) {10576.40}
B. Durables							
1. House construction, addition of rooms and major repairs	16618.56 (8.82) {3496.84}	40742.24 (14.17) {7613.03}	67230.70 (16.58) {11597.75}	101183.86 (16.94) {16043.57}	136289.43 (11.99) {19231.02}	45665.13 (13.60) {8525.17}	5154.63 (5.67) {1059.07}
2. Radio/TV/ VCD/ LCD	203.73 (0.11) {42.87}	177.23 (0.06) {33.12}	1303.87 (0.32) {224.93}	715.91 (0.12) {113.51}	1869.05 (0.16) {263.73}	527.13 (0.16) {98.41}	170.43 (0.19) {35.02}
3. Watches/clocks	23.98 (0.01) {5.05}	9.88 (0.00) {1.85}	51.27 (0.01) {8.84}	57.12 (0.01) {9.06}	326.09 (0.03) {46.01}	42.06 (0.01) {7.85}	7.31 (0.01) {1.50}

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Table 2 (Contd.....)

4.	Electric fans/ coolers /ACs	370.97 (0.20) {78.06}	781.74 (0.27) {146.08}	1186.42 (0.29) {204.67}	1891.89 (0.32) {299.97}	4317.96 (0.38) {609.28}	951.02 (0.28) {177.55}	155.48 (0.17) {31.95}
5.	Refrigerator	804.80 (0.43) {169.34}	410.85 (0.14) {76.77}	692.32 (0.17) {119.43}	534.09 (0.09) {84.68}	3242.24 (0.29) {457.49}	764.24 (0.23) {142.67}	366.82 (0.40) {75.37}
6.	Sewing machine	66.71 (0.04) {14.04}	40.12 (0.01) {7.50}	144.50 (0.04) {24.93}	0.00 0.00 0.00	217.39 (0.02) {30.67}	75.39 (0.02) {14.07}	40.99 (0.05) {8.42}
7.	Washing machine	213.90 (0.11) {45.01}	380.79 (0.13) {71.15}	505.99 (0.12) {87.29}	1819.19 (0.30) {288.45}	2053.83 (0.18) {289.80}	539.17 (0.16) {100.66}	19.93 (0.02) {4.10}
8.	Furniture	66.39 (0.04) {13.97}	123.91 (0.04) {23.15}	692.16 (0.17) {119.40}	530.56 (0.09) {84.12}	1468.94 (0.13) {207.27}	305.93 (0.09) {57.11}	33.55 (0.04) {6.89}
9.	Utensils	142.45 (0.08) {29.97}	321.17 (0.11) {60.01}	468.20 (0.12) {80.77}	709.85 (0.12) {112.55}	897.06 (0.08) {126.58}	337.07 (0.10) {62.93}	172.92 (0.19) {35.53}
10.	Cots	77.66 (0.04) {16.34}	229.98 (0.08) {42.97}	293.48 (0.07) {50.63}	235.01 (0.04) {37.26}	743.78 (0.07) {104.95}	204.28 (0.06) {38.14}	494.19 (0.54) {101.54}
11.	Almirah (wooden/steel)	59.67 (0.03) {12.56}	160.37 (0.06) {29.97}	57.29 (0.01) {9.88}	261.36 (0.04) {41.44}	952.38 (0.08) {134.39}	144.92 (0.04) {27.06}	16.61 (0.02) {3.41}
12.	Bicycles	211.82 (0.11) {44.57}	172.04 (0.06) {32.15}	298.88 (0.07) {51.56}	220.08 (0.04) {34.89}	0.00 0.00 0.00	208.68 (0.06) {38.96}	139.55 (0.15) {28.67}

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Table 2 (Contd.....)

13.	Scooters/motorcycles/ mopeds	2724.44 {1.45} {573.27}	3307.38 {1.15} {618.01}	4014.47 {0.99} {692.52}	10332.83 {1.73} {1638.36}	12373.71 {1.09} {1745.98}	4234.10 {1.26} {790.46}	439.70 {0.48} {90.34}
14.	Cars/jeeps	1621.68 {0.86} {341.23}	2334.54 {0.81} {436.23}	4944.52 {1.22} {852.96}	37246.84 {6.24} {5905.81}	173757.76 {15.29} {24517.97}	13424.93 {4.00} {2506.28}	0.00 0.00 0.00
15.	Geysers	0.00 0.00 0.00	85.86 {0.03} {16.04}	142.76 {0.04} {24.63}	272.73 {0.05} {43.24}	173.91 {0.02} {24.54}	82.27 {0.02} {15.36}	0.00 0.00 0.00
16.	Power generator	121.63 {0.06} {25.59}	194.83 {0.07} {36.41}	555.37 {0.14} {95.80}	5681.82 {0.95} {900.90}	1239.13 {0.11} {174.85}	761.11 {0.23} {142.09}	0.00 0.00 0.00
17.	Power inverter	991.97 {0.53} {208.73}	787.03 {0.27} {147.06}	1223.88 {0.30} {211.13}	1204.55 {0.20} {190.99}	1710.14 {0.15} {241.31}	1032.01 {0.31} {192.66}	149.50 {0.16} {30.72}
18.	Cellular/landline phones	286.75 {0.15} {60.34}	555.57 {0.19} {103.81}	667.59 {0.16} {115.16}	818.66 {0.14} {129.80}	2614.08 {0.23} {368.86}	585.04 {0.17} {109.22}	138.21 {0.15} {28.40}
19.	Water filter/RO	60.89 {0.03} {12.81}	237.78 {0.08} {44.43}	288.25 {0.07} {49.72}	500.00 {0.08} {79.28}	1202.38 {0.11} {169.66}	242.71 {0.07} {45.31}	0.00
20.	Computer/laptop/printer	94.60 {0.05} {19.91}	0.00 0.00 0.00	260.42 {0.06} {44.92}	734.85 {0.12} {116.52}	2826.09 {0.25} {398.77}	281.29 {0.080} {52.51}	0.00 0.00 0.00
21.	Others	27.03 {0.01} {5.69}	4205.55 {1.46} {785.84}	2602.83 {0.64} {449.07}	90.91 {0.01} {14.40}	0.00 0.00 0.00	1655.30 {0.49} {309.40}	47.18 {0.05} {9.69}

(Contd.....)

Table 2 (Contd.....)

Sub-total (1-23)	24789.61 (13.15) {5216.17}	55258.86 (19.22) {10325.58}	87625.16 (21.61) {15115.93}	165042.09 (27.63) {26168.84}	348275.35 (30.65) {49143.15}	72063.79 (21.46) {13453.51}	7563.62 (8.32) {1554.03}
C. Services							
1. Education	14838.37 (7.87) {3122.2}	28619.99 (9.96) {5347.88}	45669.74 (11.26) {7878.34}	61639.27 (10.32) {9773.43}	88105.59 (7.75) {12432.08}	31889.78 (9.50) {5953.47}	3988.44 (4.39) {819.47}
2. Healthcare	20467.56 (10.86) {4306.74}	18070.70 (6.29) {3376.66}	28976.51 (7.14) {4998.64}	28449.07 (4.76) {4510.84}	48280.63 (4.25) {6812.60}	23408.13 (6.97) {4370.04}	7929.90 (8.72) {1629.28}
3. Entertainment	1869.15 (0.99) {393.30}	2455.19 (0.85) {458.77}	3331.45 (0.82) {574.70}	3975.52 (0.67) {630.35}	6142.75 (0.54) {866.77}	2686.13 (0.80) {501.47}	1331.36 (1.46) {273.54}
4. Conveyance	3580.99 (1.90) {753.50}	4978.77 (1.73) {930.33}	7329.18 (1.81) {1264.33}	8834.75 (1.48) {1400.82}	10625.67 (0.94) {1499.33}	5455.50 (1.62) {1018.48}	2352.49 (2.59) {483.34}
5. Communication	2346.10 (1.24) {493.66}	3469.47 (1.21) {648.30}	4816.56 (1.19) {830.89}	5490.68 (0.92) {870.59}	10671.33 (0.94) {1505.77}	3776.78 (1.12) {705.08}	1320.66 (1.45) {271.34}
6. Others	6.47 0.00 {1.36}	0.00 0.00 0.00	64.93 (0.02) {11.20}	0.00 0.00 0.00	0.00 0.00 0.00	15.00 0.00 {2.80}	0.00 {0.00 0.00}
Sub-total (1-6)	43108.64 (22.87) {9070.82}	57594.13 (20.04) {10761.94}	90188.37 (22.24) {15558.10}	108389.28 (18.15) {17186.05}	163825.97 (14.42) {23116.55}	67231.32 (20.02) {12551.34}	16922.86 (18.62) {3476.98}

Table 2 (Contd.....)

D. Socio-religious Ceremonies											
1. Marriages	21011.97 (11.15) {4421.29}	39019.27 (13.57) {7291.08}	53817.10 (13.27) {9283.81}	107429.12 (17.99) {17033.81}	343293.86 (30.21) {48440.24}	54422.35 (16.21) {10160.05}	12655.48 (13.92) {2600.20}				
2. Other social ceremonies	2871.73 (1.52) {604.26}	2101.88 (0.73) {392.75}	3978.48 (0.98) {686.31}	6114.73 (1.02) {969.54}	8713.77 (0.77) {1229.55}	3424.31 (1.02) {639.28}	1460.80 (1.61) {300.14}				
3. Religious ceremonies	1768.76 (0.94) {372.18}	3239.22 (1.13) {605.27}	4331.62 (1.07) {747.23}	3833.70 (0.64) {607.87}	12588.93 (1.11) {1776.35}	3330.77 (0.99) {621.82}	818.11 (0.90) {168.09}				
Sub-total (1-3)	25652.46 (13.61) {5397.73}	44360.37 (15.43) {8289.10}	62127.20 (15.32) {10717.36}	117377.54 (19.65) {18611.21}	364596.56 (32.09) {51446.14}	61177.43 (18.22) {11421.15}	14934.39 (16.43) {3068.43}				
Total	188523.14 (100.00) {39668.61}	287451.40 (100.00) {53712.68}	405573.08 (100.00) {69964.09}	597275.52 (100.00) {94703.15}	1136247.03 (100.00) {160329.34}	335739.14 (100.00) {62678.78}	90897.37 (100.00) {18675.84}				

Source: Field Survey, 2014-15.

Note: 1. Figures in brackets () represent percentage of total consumption expenditure.

2. Figures in brackets { } represent per capita consumption expenditure.

The marginal farm-size category has reported no expenditure on geysers, while the large farm-size category spends less than the medium farm-size category. The expenditure incurred on power inverter is the highest among the farmers belonging to the large farm-size category, followed by the semi-medium, medium, marginal and small farm-size categories. The small farm-size category has reported no expenditure on computer, laptop and printer. The expenditure incurred on healthcare by the small farm-size category is less than the other farm-size categories.

The large farm-size category spends the maximum amount on socio-religious ceremonies, followed by the durables, non-durables and services, but the remaining farm-size categories spend the maximum amount on the non-durable items. The maximum expenditure incurred on all the items by the large farmers reveals that ownership of means of production has its important role in determining the farmers' levels of living. The consumption expenditure of the large farm-size category is found to be 6.03 times the consumption expenditure of the marginal farm-size category and 12.5 times the consumption expenditure of the agricultural labour households.

The Table further reveals that for an average farm household, the non-durables consumption expenditure accounts for a major proportion of the total consumption expenditure, followed by the durable commodities, services and socio-religious ceremonies. An average sampled farm

household spends 40.29 per cent on the non-durable items. However, the marginal farm-size category spends the maximum, i.e., 50.38 per cent of total consumption expenditure on such items. This proportion decreases with an increase in farm-size. Among the non-durables, milk & milk products is the most important item of consumption. The field survey has revealed that the different agricultural production activities require hard labour. As a result, the farmers rear some milch animals; and the proportion of this consumption item is the highest among the non-durables items. This is followed by foodgrains consumption, i.e., 6.86 per cent. This proportional share has decreased with an increase in farm-size. An average sampled farm household spends 4.45 per cent on fuel and electricity. This proportional share decreases as farm-size increases. Slightly more than 3.40 per cent of total consumption expenditure is incurred on clothing by an average sampled farm household. This proportional share also decreases as farm size increases. An average farm household spends 2.22 per cent on vegetables. This proportion is as high as 2.96 per cent for the marginal farm-size category and as low as 1.20 per cent for the large farm-size category. Slightly less than 1.6 per cent of total consumption expenditure is incurred on sugar/gur (jaggery) by an average farm household. This proportion is as high as 2.41 per cent for the marginal farm-size category and as low as 0.69 per cent for the large farm-size category. This proportional share also decreases with an increase in farm-size. The non-durable items like intoxicants and drugs, LPG, footwear and edible oils washing and toilet articles, condiments

and spices, tea leaves, fruits, biscuits, bread and sweets and others have a meagre share in the total consumption expenditure of an average farm household. This implies that the marginal farmers (50.38 per cent) and small farmers (45.31 per cent) spend most of their income to meet the non-durable requirements of their families.

For an average farm household, 21.46 per cent of the total consumption expenditure is incurred on the durable items. This proportion increases as the farm-size goes up. Among the durable items, a major share goes to house construction, addition of rooms and major repairs accounting 13.60 per cent for an average farm household. This proportion is the lowest for the marginal farm-size category, followed by the large, small, semi-medium and medium farm-size categories. This is followed by expenditure on cars and jeeps. This proportion is the highest for the large farm-size category, followed by the medium, semi-medium, marginal and small farm-size categories. Scooters/ motorcycles/mopeds contribute 1.26 per cent of total consumption expenditure for an average farm household. This proportional share is the highest for the medium farm-size category and the lowest for the semi-medium farm-size category. The other durable items have a meagre share in the total consumption expenditure of farm households.

For an average sampled farm household, 20.02 per cent of total consumption expenditure is incurred on services. The marginal farm-size category spends the maximum (22.87 per cent) of total consumption expenditure on services,

followed by the semi-medium, small, medium and large farm-size categories. Among the services, a major share goes to expenditure on education, accounting 9.50 per cent for an average sampled farm household. This is followed by healthcare expenditure, i.e., 6.97 per cent. This proportion is the highest (10.86 per cent) for the marginal farm-size category, followed by the semi-medium, small, medium and large farm-size categories. Next in order of magnitude is the expenditure on conveyance, communication and entertainment. The socio-religious ceremonies account for 18.22 per cent for an average farm household. This proportion is the highest (32.09 per cent) for the large farm-size category, followed by the medium, small, semi-medium and marginal farm-size categories. An average farm household spends 16.21 per cent of its total expenditure on marriages, 1.02 per cent on other social ceremonies and 0.99 per cent on religious ceremonies.

The Table also depicts that annual consumption expenditure of an average agricultural labour household is ₹ 90,897.37. The Table also reveals that for an average agricultural labour household, the non-durables consumption expenditure accounts for the major proportion of the total consumption expenditure, followed by services, socio-religious ceremonies and durable commodities. An average agricultural labour household spends 56.63 per cent on the non-durable items. Among the non-durables, foodgrains consumption is an important item of consumption; and an average agricultural labour household spends 14.06 per cent of

its total consumption expenditure on this item. This is followed by milk & milk products and clothing, i.e., 11.56 per cent and 5.58 per cent, respectively. An average agricultural labour household incurs 18.62 per cent of its total consumption expenditure on services. Among the services, a major share goes to healthcare accounting 8.72 per cent for an average agricultural labour household. This is followed by education expenditure, i.e., 4.39 per cent. Next in order of magnitude is the expenditure on conveyance, entertainment and communication. The socio-religious ceremonies account for 16.43 per cent of the total consumption expenditure for an average agricultural labour household. For an average agricultural labour household, 8.32 per cent of its total consumption expenditure is incurred on the durable items. Among the durables, a major share goes to house construction, addition of rooms and major repairs, accounting 5.67 per cent for an average agricultural labour household.

Since the family size of the different farm-size categories and agricultural labourers varies, it becomes relevant to study the per capita consumption expenditure of the different farm-size categories and agricultural labourers. Table 2 depicts that the per capita consumption expenditure of an average farm household is ₹ 62,678.78. However, there are considerable variations in the per capita consumption expenditure across the different farm-size categories. For example, per capita consumption expenditure is the highest for the large farm-size category which spends ₹ 1,60,329.34, followed by the medium (₹ 94,703.15), semi-

medium (₹ 69,964.09), small (₹ 53,712.68), and marginal farm-size (₹ 39,668.61) categories. The Table reveals that as the farm-size goes up, the per capita consumption expenditure on most of the non-durables items increases. In the case of per capita consumption expenditure on milk & milk products, the medium and large farm-size categories interchange their positions. In the case of per capita consumption expenditure on edible oils, vegetables, tea leaves and eggs, the semi-medium and medium farm-size categories interchange their positions. The per capita consumption expenditure of farm households on meat, mutton and fish is the lowest for the small farm-size category, followed by the marginal, semi-medium, medium and large farm-size categories. The Table also reveals that as farm-size goes up, the per capita consumption expenditure on most of the items of durables, services and socio-religious ceremonies also increases. Per capita consumption expenditure of an average agricultural labour household is ₹ 18,675.84.

The per capita consumption expenditure pattern of the farm households is closely related to the household consumption expenditure pattern across the different farm-size categories. Since the family size varies from one category to the other, there are some differences in the range of per capita and per household consumption expenditure. The per capita consumption expenditure of the large farmers is 4.75 times and per household consumption expenditure is 6.13 times of the marginal farm-size category. It is directly related to the farm-size; larger the farm-size, more is the per

capita consumption expenditure allocated to the non-durable items. On the other hand, in the case of large farm-size category, the highest proportion of expenditure is accounted for by the durable items, followed by socio-religious ceremonies, non-durables and services.

Average Propensity to Consume

Average propensity to consume, defined as the proportion of income spent on consumption is worked out for the farm and agricultural labour households in rural Punjab. The data exhibiting average propensity to consume are provided in Table 3. Average propensity to consume comes to 1.15 for an average farm household. It is the highest (1.35) for the marginal farm-size category

and decreases as farm-size increases. Since average propensity to consume is greater than one for the marginal, small, semi-medium and medium farm-size categories, this shows that an average household in the sample incurs an annual deficit of ₹ 43,940.95. The highest deficit of ₹ 64,459.08 is incurred by the small farm-size category, followed by the marginal, semi-medium and medium farm-size categories. The large farm-size category has a surplus of ₹ 66,533.35. It appears that the marginal, small, semi-medium and medium farm households try to maintain a minimum level of consumption whether they can afford it or not. The field survey has brought out that to overcome this problem, the farmers have to take loans from the various sources.

Table 3: Average Propensity to Consume

Categories	Average Income (₹)	Average Consumption (₹)	Average Propensity to Consume
Marginal farmers	139365.27	188523.14	1.35
Small farmers	222992.32	287451.40	1.29
Semi-medium farmers	369432.68	405573.08	1.10
Medium farmers	566407.60	598031.28	1.06
Large farmers	1202780.38	1136247.03	0.94
All sampled farmers	291798.19	335739.14	1.15
Agricultural labourers	81452.17	90879.34	1.12

Source: Based on Tables 1 and 2.

For an average agricultural labour household, average propensity to consume comes to 1.12. This shows that an average agricultural labour household in the sample incurs an annual deficit of ₹ 9,427.17. This implies that agricultural labour households try to maintain a minimum level of consumption

whether they can afford it or not. The field survey has revealed that to overcome this problem, the agricultural labourers have to take loans and most of the times from the non-institutional sources which charge exorbitant rates of interest.

Extent of Debt

The extent of debt among the different farm-size categories in the study area is shown in Table 3. The Table depicts that 85.90 per cent of the farm households in the State of Punjab are under debt. There are certain variations

across the different farm-size categories. As many as 89.06 per cent of the semi-medium farm households are under debt, while in the case of marginal, small, medium and large farm-size categories, these percentages are 83.33, 88.64, 84.09 and 82.61, respectively. Similarly,

Table 4: Extent of Debt among Farmers and Agricultural Labourers

Farm-size Categories	Indebted Households as Percentage of Sampled Households	Average Amount of Debt (₹)		Amount of Debt Per Acre (₹)	
		Per Sampled Household	Per Indebted Household	Debt Per Owned Acre	Debt Per Operated Acre
Marginal farmers	83.33	230699.75	276839.70	140670.58	65169.42
Small farmers	88.64	494051.29	557338.85	120794.93	55573.82
Semi-medium Farmers	89.06	609765.63	684649.12	81847.74	52839.31
Medium farmers	84.09	786761.36	935608.10	63244.48	45398.81
Large farmers	82.61	1352695.65	1637473.68	57512.57	50211.41
All sampled farmers	85.90	474215.99	552064.16	116801.97	71203.60
Agrl. labourers	80.07	54709.30	68329.88		

Source: Field Survey, 2014-15.

80.07 per cent of the agricultural labour households are under debt.

The average amount of debt per indebted sampled farm household in rural Punjab is ₹ 5,52,064.16, while the average amount of debt per sampled farm household is ₹ 4,74,215.99. The amount of debt per indebted household and per sampled household increases as farm-size, goes up. This reveals that the needs of farmers go on increasing with an increase in farm-size, because without investing in operational as well as fixed costs, the major share of income cannot be generated. The average amount of debt

per indebted agricultural labour household in rural Punjab is ₹ 68,329.88, while the average amount of debt per sampled agricultural labour households is ₹ 54,709.30.

The Table reveals that for an average farm household, the amount of debt per owned acre and per operated acre is ₹ 1,16,801.97 and ₹ 71,203.60, respectively. The category-wise amount of debt per owned acre decreases as farm-size goes up. The amount of debt per operated acre is the highest among the marginal farmers, followed by the small, semi-medium, large and medium farmers. It

is pertinent to note that the burden of debt is greater on the lower farm-size categories as compared to the upper farm-size categories. The upper farm-size categories partly finance their crop production operations from their own savings.

Conclusions and Policy Implications

The above analysis shows that an average sampled farm household earns ₹ 2,91,798.19, per annum in rural Punjab. It is evident that as the farm size increases, there is also an increase in the average income of the farm households. The farm business income is the most important component of household income, followed by income from milk & milk products and salaries. In absolute terms, these sources of income have shown a similar pattern across the different farm-size categories except the large farm-size category. In the large farm-size category, farm business income is the most important component of household income, followed by income from leased out land and milk & milk products. Income from hiring out labour in the agricultural sector is reported only by the marginal farm-size category. This fact implies that the farm business income of the marginal farm-size category is not sufficient to meet their minimum requirements; and farmers of this category earn some income from hiring out labour in the agricultural sector. An average agricultural labour household earns ₹ 81,452.17, per annum in rural Punjab. As the agricultural labourers are landless and they have no other choice than to sell their labour power in the

agricultural sector, the main source of income in the case of agricultural labourer households is the income from hiring out labour in the agricultural sector. In general, there is much similarity in the consumption expenditure pattern of the agricultural labourer, marginal, small, semi-medium and medium farm-size categories. The large farm-size category has a different pattern. The consumption expenditure pattern of the marginal, small, semi-medium and medium farm-size categories is of subsistence in nature. A large share of total consumption expenditure by these categories is allocated to the non-durable items. On the other hand, in the case of large farm-size category, the highest proportion of expenditure is accounted for by the durable items, followed by socio-religious ceremonies, non-durables and services. Average propensity to consume comes to 1.15 for an average farm household. It is the highest for the marginal farm-size category and decreases as the farm-size increases. Average propensity to consume is greater than one for the marginal, small, semi-medium and medium farm-size categories and for the agricultural labour households. More than four-fifths of the farm and agricultural labour households in the State of Punjab are under debt. The amount of debt per indebted household and per sampled household increases as farm-size goes up, but the amount of debt per owned acre decreases as farm-size goes up. It implies that the burden of debt is greater on the lower farm-size categories as compared to the upper farm-size categories.

The income levels of the farmers are positively correlated with land ownership. It is an utmost necessity to re-visit the land reforms in favour of the marginal and small farmers. The agricultural labourers, an important section of the farming community that has been ignored for ages, must be equally associated with re-visiting the land reforms. To raise the income levels of the farm households along with the land reforms, remunerative prices of different crops, suitable for the State of Punjab, must be announced and implemented. To reduce cost of production, subsidies must be given to the farmers and the government must spend the required amount on R & D activities. The basic R & D activities must be carried in the public sector. Social security measures need to be implemented particularly for the

benefit of these low income farmers and agricultural labourers. Further, distribution of essential goods, particularly cereals and pulses at subsidised rates may be undertaken for the benefit of poor farmers and agricultural labourers. A mass campaign should be launched against the use of intoxicants and the conservative social values which impose unbearable expenditure on unproductive purposes such as marriages and other socio-religious ceremonies. The government should provide interest-free loans to the marginal and small farmers, and agricultural labourers. The farmers and agricultural labourers should be given proper training according to the specific region's requirements, which will lead towards upgradation of their skills and capabilities.

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