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Income, employment and expenditure pattern of different farmers and income groups: Research conducted in West Bengal's Bardhaman district

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Abstract

Due to the concentration of income in a small number of families, there is some skewness in the distribution of income in the sample. Merely 4% of the populace earns more than Rs. 400000 annually and most of the population near about 45% have income level below Rs.100000/year. The reason behind low level income generation due to low level of employment generation. Within the research region, 37.08 percent of all family members are employed. Thus, higher numbers of people are totally dependent on others. So, here, very important analysis is required that is consumption patterns of the households which will be helpful for the analysis of savings-expenditure patterns. We, know that basic need of the household is food, cloth and shelters. Lower income group households fail to save their earning or very negligible savings. They almost use all of their earnings. There are two types of consumption food consumption and non-food consumption. This study reveals how consumption pattern for different categories is changed with the changes of income.

Keywords: Income, employment, food and non-food consumption, expenditure pattern

Introduction

For the previous few years, the agricultural sector's percentage contribution to India's GDP has been about 15%, and it is steadily. Although agriculture's share of the GDP is decreasing, it still contributes significantly to the Indian economy, employing 45.76% of the labour force ^[2] and having a positive ripple effect on the non-agricultural sector's economy due to its forward and backward linkage. The bulk of the people in the nation relies on agriculture to provide both employment and food security, therefore inclusive growth in this sector is crucial to the overall expansion of the Indian economy ^[3]. A quicker and more inclusive sustainable growth rate is contingent upon agricultural development, according to the 12th Five Year Plan Approach.

Real development and growth that is shared by all segments of the population—has not occurred in our nation. Poverty, unemployment, unequal access to healthcare, education, and other essential services are among the issues we face. Inequitable Our economy is also characterized by sectoral expansion ^[4]. Services drove the expansion that followed the reform. Compared to the 1980s, not much has been developed in the commodity sector expansion (agricultural and industry). The agriculture sector, which had growth of less than 2% annually from the mid-1990s to the mid-2000s, is a cause for particular concern ^[5]. Concerns about livelihoods and food security are also quite important. Increased life quality is a key measure of economic growth, and as life quality increases, so should purchasing patterns, demonstrating the importance of this relationship. The

characteristics of the consumption budget make the household's welfare level quite evident. With their limited revenue stream, it is expected of small and marginal farmers to spend most of their income on consumption.

Materials and Methods

For the present investigation four blocks of Purba Bardhaman district named Andal, Kalna-I, Katwa-I and Kalna-II were selected purposively. Fifty farmers from each block were selected and interviewed. Farmers are selected by Simple Random Technique Without Replacement Method (SRTWRM). To analyse the result simple tabular percentage calculation, comparisons, different ratios, average mean, cost of cultivation, returns from different sources and income were calculated. A total of 200 farmers were selected for research of the study.

In order to calculate the cost of cultivation and returns of different crops in the locale of research the method used by Esar and Sachdeva (2023) was adopted ^[6].

Income and employment options on the farm

The following calculations were used to determine the farmers' or producers' return on income:

1. Yield times average selling price equals gross return. The weighted average of the prices at which the produce has been sold is the average selling price.
2. Net Return is equal to Gross Return less Cultivation Cost.
3. Net Return above Cost A1 equals to Gross Return - Cost A1.

- Net return compared to the total Cost is equal to Gross Return less Total Cultivation Cost.
- When it came to labour force employment, the number of hired and family labourers per unit area was computed.
- Total number of labourers engaged in the entire cultivated area divided by the total cultivated area is the number of labourers, both owned and hired, used in a certain crop per unit area.

Employment and revenue from sources other than farms

Fixed Cost: The fixed investment is covered. It covers the price of purchasing or renting a room, furnishings, equipment, electrification, machinery, and other items. After subtracting depreciation, the entire fixed cost's value has been split into years based on its economic life. The fixed cost has been calculated year-by-year using this amount.

Variable Cost

- It comprises the yearly fixed costs for buying the inputs.
- The sum of the annual fixed and variable costs is the total cost.
- Total Return: The total amount of sales revenues, or turnovers, determined by multiplying the product's yield by its price.
- Net Return for the Non-Farm Sector: Gross Annual Return - Total Annual Cost
- The number of non-farm sector workers per unit of output is computed by dividing the entire number of workers in the specified area who are employed in a certain total production unit by the total number of total production units.

The structure of income and expenses

The per capita income, per capita consumption, consumption income ratio, average income, and average consumption expenditure have all been examined in order to meet the goals of earnings and family spending habits.

To get a more accurate comparison, the employment and scope of employment patterns, in addition to the consumption habits of medium- and large-sized farmers in the study region, which have also been examined and contrasted.

Results and Discussion

Table 1 indicates that with 828 members overall, 307 of

them are income earners, meaning that earners to non-earning dependents are distributed 1:1.70. There are just 1.54 earning members per family. The number of household wage earners influences the family's income level to some amount. More earning members will affect the income distribution and, in turn, the pattern of consumption in rural areas where employment opportunities are few and pay rates are lower.

Table 1: The sample's earning and non-earning members

Particulars	Unit	Value
Number of overall members	Numbers	828
Earnings Members	Numbers	307
Non-earning members	Numbers	521
Earning to non-earning members ratio	Ratio	1:1.70
Percentage of earnings members compared to all members	Percent	37.08
Earning members per household	Numbers	1.54
Families with a single wage earner	Percent	46.50
Families with two wage earners	Percent	37.00
Families with three or more earners	Percent	16.50

Majority, 83.50% of households only have one or two earners since most families are tiny ones. In certain families, people from various generations live together, which results in a higher number of earners. The percentage of households with more than two earners is 16.50 percent. More or less similar types of study was found by

Table 2: Household's Annual Income Category

Income Level	No of Family Household	Per cent
≤100,000.00	39	19.50
100,000.01-200,000.00	89	44.50
200,000.01-400,000.00	64	32.00
>400,000.00	8	4.00
Total	200	100.00

Due to the concentration of income in a small number of families, the sample's income distribution is a little skewed. Table 2 shows that in terms of annual family income, just 4% earn more than Rs. 400000.00. The annual income of 19.50 percent of households is less than Rs 100,000.00. The majority of households, or 44.50 percent, have an annual income between Rs. 100000.01 and Rs. 200000.00, while the remaining 32.0 percent have an income between Rs. 200000.01 and Rs. 400000.00.

Table 3: Occupation groups' average annual income and consumption expenditures

Occupation Groups	Average Income	Average Consumption cost			Consumption/income	Per capita revenue	Per capita consumption
		Food	Non-food	Total			
Cultivators	95697.5	32905.82	48536.27	81442.09	0.85	22464.20	19117.86
Agricultural Labour	46689.23	25915.57	21889.62	47805.19	1.02	11090.08	11355.15
Non-Agricultural Labour	61667.32	28132.67	30380.59	58513.26	0.95	14859.59	14099.58
Business Man	272578.43	58386.40	106176.35	164562.80	0.60	66972.59	39653.67
Service-man	307482.37	57315.62	112754.29	170069.90	0.55	76678.89	41683.80
Total	156822.97	40531.22	63947.42	104478.6	0.80	38413.07	25182.01

Table 3 displays the average yearly income of various occupational categories together with their consumption spending. The cultivators' group in this table is the sole group engaged in farming; the other groups are also

involved in farming with some other activities. Groups are categorized based on criteria other than farming operations. Here, the research area's average annual family income is Rs. 156822.97. For all families combined, the average

amount spent on food consumption is 40531.22, the average amount spent on non-food items is 63947.42, and the average amount spent overall is 104478.60. The ratio of consumption to revenue is 0.80 for each family. Every family makes Rs. 38413.07 per person and consumes Rs. 25182.11 per person.

The various occupational groupings do differ in terms of average income, average consumption spending, and consumption-revenue ratio. Comparing the houses of agricultural labourers with an average salary of Rs. 95697.50, the farmers are well off. On average these families spend of Rs. 81442.09 on food and Rs. 48536.27 on non-food items. Their Average Propensity to Consume (APC) is 0.85.

Only 48.79 percent of the revenue of cultivator households is made up of the average family income of agricultural labourers is Rs. 46689.23. They spend Rs. 25915.57 and Rs. 21889.62 a year on food and non-food products, respectively. This group's total consumption spending is greater than their total income, at Rs. 47805.19. The agricultural labour group's consumption income ratio is 1.13, indicating that these households are living over their means.

They have gone back to borrowing money or selling off current assets in order to cover the excess of expenses over income. Compared to agricultural labour families, non-agricultural labour households have a higher average income, whereas farmers' households have a lower average income. These families spend an average of Rs. 30380.59 for non-food items and Rs. 28132.67 for food, for a total cost of Rs. 58513.26. Their ratio of income to consumption is 0.95. Their average income is Rs. 61667.32.

Compared to the preceding three classes, the business class has a higher average yearly income of Rs. 272578.43. The business class has an average yearly consumption spend of Rs. 164562.80 and a consumption-revenue ratio of 0.60.

The amount spent on food and non-food items is Rs. 106176.35 and Rs. 58386.40, respectively.

In comparison to the other three groups, there are considerably greater per capita income and consumption figures. With an average salary of Rs. 307482.37, the service-man class has the greatest income among the other occupation categories. These families have the lowest consumption income ratio, at 0.55. For this category, the consumption spending on non-food products accounts for the largest share of overall expenditure.

The business and service sectors have the biggest absolute consumption costs for both food and non-food items, respectively. The labour class that does not work in agriculture is the least compassionate. However, households with agricultural labourers spend the most on food in terms of income. The amount spent on non-food products is smaller than the amount spent on food items, just for this group.

Household consumption patterns change with income. The lower income groups typically have a propensity to spend more than they make. Many households have poor incomes, which may prevent them from meeting all of their demands. They either take out loans or sell assets they already own to make up the difference between their excess expenditure and income. Table 4 displays the average annual income of the various income categories together with their consumption spending.

When comparing the average revenue and consumption expenditures of various income level for both food and non-food products, it is evident that the APC is greater for lower income level than for higher income ones. At an income per household of Rs. 79210.71 and an average total consumption cost of Rs. 71414.07, the consumption-income ratio of lowest level of income group is 0.90. 43.47 percent of consumption expenditures go toward food, with the remaining portion going toward non-food products.

Table.4: Income Groups' Average Annual Income and Consumption Spending

Income Level	Average level of Income	Average Cost of Consumption			Consumption/income	Income per capita	Consumption per capita
		Food	Non-food	Total			
< 1 lakh	79210.71	31047.13	40366.94	71414.07	0.90	18725.94	16882.76
100001-200000	148855.63	41081.97	60786.57	101868.54	0.68	35190.46	24082.40
200001-400000	277823.28	56094.14	106649.70	162743.84	0.59	65679.26	38473.72
More than 4 lakhs	440246.79	66756.13	156452.12	223208.25	0.51	104077.25	52767.91
Total	236534.10	48744.84	91063.83	139808.68	0.67	55918.23	33051.70

Within the income category of Rs. 100001 to Rs. 200000, the average income is Rs. 148855.63, the average spending on consumption is Rs. 101868.54, and the average ratio of consumption to income is 0.68. The entire cost of food is Rs. 41081.97, or 40.33 percent of the overall cost of consumption. Despite having a per capita consumption that is around 1.5 times lower than the earlier categories, this group's per capita income is almost twice as high. The consumption income ratio is 0.59 with an average household income of Rs. 277823.28 and consumption expenditures of Rs. 162743.84 in the Rs. 200001-400000 income group. 34.46% of the total amount spent on consumption, or Rs. 56094.14, is spent on food goods; the rest amount is spent on non-food items. The PCI and PCC for this group are significantly higher than those of the two groups that came before it, at Rs. 65679.26 and Rs. 38473.72, respectively.

With an average income of Rs. 440246.79, households in the highest income class spend 29.90% of their total consumer spending, or Rs. 223208.25, on consumption. Food items comprise just 25.62 percent of the total consumption. The per capita income for this group is Rs. 104077.25, while the per capita consumption is Rs. 52767.91. Consequently, when income levels grow, the fraction of spending for food articles drops even as the percentage of expenses for non-food products increases.

As income levels rise, there is a negative tendency observed in both the consumption income ratio and per capita consumption. The proportion of consumption expenditures that are not related to food rises as a result of higher income groups spending more on consumer durables and other pointless consumption products.

Discussion

In the study titled "Beyond Consumption Expenditure: Income Inequality and Its Sources in India," Agrawal and Agrawal (2022) noted that much of the existing research on inequality in India has primarily addressed consumption inequality. Their analysis compares inequality in both consumption expenditure and income. They found that income inequality experienced a slight increase, while consumption expenditure inequality remained unchanged. Additionally, their study broke down income inequality by its sources, revealing that wage and agricultural incomes are the main contributors to inequality in rural areas, whereas in urban areas, wage and business incomes are the principal factors driving inequality^[7]. Similar results were identified in the present study that the sample's income distribution is a little skewed. In terms of annual family income, just 4% earn more than Rs. 4 lakhs per annum.

In the study "Per Capita Consumption Expenditure and Personal Disposable Income in India: An Econometric Analysis," Mallik *et al.* (2012) examined how per capita personal consumption expenditure adjusts in response to changes in personal disposable income over an extended period. The research revealed that a 1% change in per capita disposable income results in a 16% change in per capita personal consumption expenditure. This indicates that a significant portion of income in India is allocated to consumption rather than savings, with only a small fraction reserved for saving^[8]. In the present study similar findings were identified a decreasing trend with increase in income. The average propensity to savings is increasing with the increase in income. Household consumption patterns also change with income. The lower income groups typically have a propensity to spend more than they make. Many households have poor incomes, which may prevent them from meeting all of their demands. They either take out loans or sell assets they already own to make up the difference between their excess expenditure and income. Table 4 displays the average annual income of the various income categories together with their consumption spending.

Conclusion

The percentage of the people in the study region who does not make a living is larger than that of those who do. As a result, a larger proportion of the unemployed rely on their earning family members. The majority of earner families consist of one or two employed earners, whereas the number of families with more than two or multiple earners is very small. Due to the concentration of income in a small number of families, the sample's income distribution is a little skewed. In terms of annual family income, just 4% earn more than Rs. 400000.00. The annual income of 19.50 percent of households is less than Rs 10,000.00. Most households make an average annual income of less than Rs. 2,000,000.00. The average income of each occupational category influences the differences in the consumption income ratio and average consumption spending. The average inclination to consume food products declines and non-food products increases with an increase in wealth, and vice versa. Conversely, the average willingness to save is inversely correlated with consumption spending and directly correlated with income. Consequently, when income levels

grow, the fraction of spending for food articles drops even as the percentage of expenses for non-food products increases. As income levels rise, there is a negative tendency observed in both the consumption income ratio and per capita consumption. The proportion of consumption expenditures that are not related to food rises as a result of higher income groups spending more on consumer durables and other pointless consumption products.

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