

## Original Research Article

# Consumption Expenditure Pattern of Different Sample Size Households

Manoj Singh, R.S. Singh\* and K.P. Singh

Department of Agricultural Economics, T.D. Post-graduate College, Jaunpur, U.P., India

\*MBAC, Agwanpur, Saharsa (BAU, Sabour, Bhagalpur), Bihar, India

*\*Corresponding author*

## ABSTRACT

Present investigation was conducted to understand the consumption expenditure pattern of marginal, small and large farms size households and observed that maximum 78.12 per cent expenditure was incurred by marginal farmers on food items followed by small farms and large farms with 73.20 and 66.24 per cent respectively. The next higher expenditure was made on social ceremonies, clothing and housing by marginal and small farmers, while large farmers made highest expenditure on education followed by social ceremonies, housing and clothing. Expenditure incurred on fuel, light, medicine and health was almost equal for all size groups of farms while it varied in a narrow range in case of housing and social ceremonies. The major share of expenditure (74.56 per cent) was made on food while only 25.44 per cent was spent on non-food items. This ratio came to 78.12 : 21.88 in marginal farms, 73.20 : 26.80 in small farms and 66.24 : 33.76 in large farms indicating decreasing trend of expenditure on food items and increasing trend in non-food items with increase in size of farm households. The family consumption expenditure ratio against total income for marginal farms was 100.24 per cent indicating higher consumption expenditure than total income. While small farms spent 66.77 per cent and large farms 32.56 per cent on family consumption to their respective total income.

## Keywords

Consumption,  
Expenditure  
pattern, Sample  
size, Household

## Introduction

Agricultural development of a country like India is of prime importance, because majority of the population depends on agriculture for main source of livelihood. Development of agriculture sector of the country needs creation of huge infrastructure in rural area and to supply basic inputs for the farming community. Around 31 per cent of rural households are purely engaged in agriculture as self-employed and 27 per cent as agricultural labour. Moreover, huge population i.e. 74 per cent farmers are having below one hectare farms size, 13 per cent are small (1-2 hectare) and only 12 per cent farmers bear more than 2 hectare farms

(NSS, 2012 and 2013). An increase in the income of the farmers will increase their saving potentialities, which will ultimately add the capital formation in agriculture.

The family consumption expenditure of a household is mainly influenced by the level of income and size of the family. The qualitative as well as quantitative domestic expenditure is the correct scale to judge the livelihood standard of household. District Azamgarh of Eastern U.P. is an important place in terms of fertility and agricultural advancement in India as out of total cultivated area, 74.20 per cent is under

irrigation having 157.94 per cent cropping intensity.

Thus, keeping in view the importance of income, saving and investment pattern in agricultural economy of the country, state and the study area, the present study was formulated to understand the consumption expenditure pattern of different sample size households. Findings of the study would be of great significance to the policymakers, administrators, economists and extension workers for making development plans for the improvement of agricultural sector in the study area.

## **Materials and Methods**

### **Sampling technique**

Total ten villages of two blocks (five from each) namely, Koelsa (sub-division Burhanpur) and Mohamadpur (sub-division Nizamabad), Azamgarh District (Uttar Pradesh) were selected following multistage stratified random sampling technique with help of village development officer and Lekhpals for study. The study area was selected purposely because investigator has deep knowledge about the people and their occupation to gather information for targeted endeavor. Farmers from selected villages were grouped in ascending order of farm holdings size i.e. below 1 hectare, 1-2 hectare, and more than 2 hectare. Samples of 100 farmers (50 from each block) were drawn from the universe of 10 villages in proportion of their numbers falling under different size groups and villages.

### **Method of Enquiry and Collection of Data**

The enquiry was conducted by survey method during two agricultural years i.e. 2004-2006 and primary data were collected

from sample farmers through direct personal interview with the help of already prepared and pre-tested questionnaires and schedules. During the period of enquiry, several visits were made to selected villages and sample farmers for collection of data keeping in view of the convenience of the respondents. All the possible care was taken in the collection of correct and reliable information through cross checking. The secondary data were collected from published materials i.e. journals, Books, Bulletins, technical reports etc. and records of the blocks, District headquarters, Tehsil headquarters, District Information Office, District Statistical Office, Lead Bank Office, records of Lekhpals etc. Observed informations were subjected for statistical analysis following first and second degree of statistics to draw accurate findings.

## **Results and Discussion**

During estimating household expenditure, farm-products consumed at home were valued at the current market prices. The important items over which sample farmers incurred expenditure were food items, clothing, fuel, light, housing, furniture, education, medicine, health, social ceremonies etc.

From the perusal of Table 1 it is clear that total family consumption expenditure, on an overall basis, for different size group of farm households was Rs. 37415.42 per annum per household. It showed an increasing trend with increase the size of farm holdings i.e. lowest was Rs. 31827.75 on marginal farms (below 1 hectare size group) and highest was Rs. 56503.42 on large farms (2 & above hectare) of size group of households. In the small size group of farms (1-2 hectare) it estimated Rs. 42645.51 per annum per household. This increasing trend in consumption expenditure was due to

increasing trend in size of family on one hand and due to better financial position of the large farm households on the other side.

The expenditure incurred on different items, on overall basis shows that food items alone accounted for as high as 74.56 per cent to the total expenditure. Next items in order of importance were social ceremonies and clothings which were accounted for 4.61 and 4.20 per cent respectively, while expenditure on housing, fuel, light and education ranged in between 3.68 to 3.73 per cent to the total average expenditure. Household consumer expenditure on food and non-food groups was also worked out by Sharma (2014) in Delhi and observed 39.22 per cent expenditure was spent on food items and 60.78 per cent on non-food items.

As regards different size group of farm households, the percentage expenditure made on food items was highest having 78.12 per cent in case of marginal farms followed by small farms and large farms where it come to 73.20 and 66.24 per cent respectively. In case of marginal and small farms, the next higher expenditure was made on social ceremonies, clothing and housing, while large farms made higher expenditure on education, followed by social ceremonies, housing and clothing. It is also evident from findings that per cent expenditure made on fuel, light, medicine and health was almost equal on all size group of farms, while it varied in a narrow range in case of housing and social ceremonies. Our results are also in corroboration of NSSO-2012. However, a wide range of investment in education was found amongst different size group of farms. The expenditure made on education was lowest in marginal farm households and was highest on large farm households. Similar

pattern was also observed by NSSO, 2005 and 2012.

### **Engel's ratio**

Engel Ratio refers to the expenditure on a particular item expressed as a proportion of total expenditure. Engel Ratios for different food items and non-food items of different size group of farms has been given in the Table 2

Observations depicted in Table 2 showed that a considerable change in the pattern of expenditure of food items was observed for different size group of farm households. The Engel ratio for food was highest (78.12 per cent) for marginal farm households, followed by small farm households (73.20 per cent) and large farm households (66.24 per cent). The same trend was also observed for cereals where it came highest for marginal farm households (37.48 per cent), followed by small farm household (30.33 per cent) and large farm households (22.26 per cent). It concludes from the above analysis that major share of expenditure (74.56 per cent) was made on food while only 25.44 per cent was spent on non-food items. This ratio came to 78.12 : 21.88 in marginal farms, 73.20 : 26.80 in small farms and 66.24 : 33.76 in large farms, indicating decreasing trend of expenditure on food items and increasing trend in non-food items with increase in size of farm households and ultimately positive contribution in the economy. National Sample Survey Report No. 538 (2011) said that milk and its products are a luxury for the greater part of the rural population is shown by the steady rise in the share of rural consumer expenditure from 3-4 per cent of the total expenditure.

**Table.1** Family consumption expenditure for two year under study, per annum on different size group of farms (in Rs. Per household)

Items of consumption expenditure	Size Group (in hectare)			Average
	Below 1 Hectare	1-2 Hectare	2 hectare & above	
<b>1. Food Items</b>				
2004-05	23974.20	29469.00	35585.00	26692.46
2005-06	25759.44	32968.80	39273.00	29102.26
<i>Average</i>	24866.82 (78.12)	31218.90 (73.20)	37429.00 (66.24)	27897.36 (74.56)
<b>2. Clothing</b>				
2004-05	1159.00	1758.00	3136.14	1547.80
2005-06	1216.00	1995.00	2793.00	1592.30
<i>Average</i>	1187.50 (3.73)	1876.50 (4.40)	2964.57 (5.25)	1570.10 (4.20)
<b>3. Housing</b>				
2004-05	1045.57	1520.47	2813.33	1379.85
2005-06	950.95	1569.02	3420.57	1407.97
<i>Average</i>	998.26 (3.14)	1544.74 (3.62)	3116.95 (5.52)	1393.91 (3.72)
<b>4. Fuel &amp; Light</b>				
2004-05	950.47	1805.00	2565.00	1348.35
2005-06	998.45	1852.50	2718.33	1409.92
<i>Average</i>	974.46 (3.06)	1828.75 (4.29)	2641.66 (4.67)	1379.13 (3.68)
<b>5. Education</b>				
2004-05	817.28	1672.00	3420.00	1343.67
2005-06	897.56	1805.38	3610.57	1449.97
<i>Average</i>	857.42 (2.70)	1738.69 (4.08)	3515.28 (6.22)	1396.82 (3.73)
<b>6. Medicine &amp; Health</b>				
2004-05	773.30	1271.10	1866.84	1024.97
2005-06	741.38	1434.50	1843.66	1037.16
<i>Average</i>	757.34 (2.38)	1352.80 (3.17)	1855.25 (3.28)	1031.06 (2.77)

<b>7. Social ceremonies</b>				
2004-05	1450.65	1805.00	3182.50	1753.74
2005-06	1330.95	1852.50	3230.00	1692.56
<i>Average</i>	1390.80 (4.37)	1828.75 (4.29)	3206.25 (5.67)	1723.15 (4.61)
<b>8. Miscellaneous</b>				
2004-05	772.92	1277.18	1838.72	1022.41
2005-06	817.38	1235.57	1710.20	1025.44
<i>Average</i>	795.15 (2.50)	1256.37 (2.95)	1774.46 (3.15)	1023.92 (2.73)
<b>Total</b>				
2004-05	<b>30943.39</b>	<b>40577.75</b>	<b>54407.53</b>	<b>36113.25</b>
2005-06	<b>32712.11</b>	<b>44713.27</b>	<b>58599.32</b>	<b>38717.58</b>
<i>Average</i>	<b>31827.75</b> <b>(100.00)</b>	<b>42645.51</b> <b>(100.00)</b>	<b>56503.42</b> <b>(100.00)</b>	<b>37415.42</b> <b>(100.00)</b>

Note: Figures in parenthesis give per cent to total.

**Table.2** Engel Ratio of different consumption items

Consumption Items	Size Group (in hectare)			Average
	Below 1 Hectare	1-2 Hectare	2 hectare & above	
1. <i>Cereals</i>	37.48	30.33	22.26	33.00
2. Pulses	6.23	6.13	6.56	6.25
3. Milk/ Milk product	11.61	14.34	13.10	12.41
4. Vegetable/Potato	4.93	4.46	4.21	4.73
5. Edible Oils	10.65	10.83	11.35	10.78
6. Sugar/Gur	5.13	4.19	3.96	4.77
7. Miscellaneous	2.09	2.92	4.80	2.62
All food items	78.12	73.20	66.24	74.56
All non-food items	21.88	26.80	33.76	25.44
<b>Total expenditure</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

**Table.3** Ratio of consumption expenditure to income (C/Y) for sample households

Particulars	Size Group (in hectare)			Average
	Below 1 Hectare	1-2 Hectare	2 hectare & above	
1. <i>Annual income per household</i>	31750.42	63865.30	173551.31	57249.80
2. <i>Annual Consumption expenditure per household</i>	31827.75	42645.51	56503.42	37415.42
3. <i>Ratio of Consumption to income (in percent)</i>	100.24	66.77	32.56	65.35

### Average propensity to consume

The propensity of consumption function expresses the relationship between income and consumption expenditure. If consumption is represented by C and income by Y, then propensity to consume =  $C/Y$ . The average propensity to consume (APC), expressed as  $C/Y$ , for various categories of the farmers of different size groups have been shown in the Table 3.

The data depicted in Table 3 revealed that overall average consumption expenditure ratio to income was 65.35 per cent. The highest consumption expenditure ratio (100.24 per cent) was of marginal farms indicating, they have to made a multi-sectoral integrated strategy for promoting agricultural and non-agricultural activities in the rural areas available in the local conditions (Singh, 2013). It was due to improper education, poor production, inefficient allocation of farm inputs and adopting non-agricultural occupation. While small farms and large farms spent 66.77 and 32.56 per cent respectively, for family consumption to their total income and improving their farm size and socio-economic status.

In conclusion, maximum 78.12 per cent expenditure was incurred by marginal

farmers on food items followed by small farms and large farms with 73.20 and 66.24 per cent respectively. The next higher expenditure was made on social ceremonies, clothing and housing by marginal and small farmers, while large farmers made highest expenditure on education followed by social ceremonies, housing and clothing. Expenditure incurred on fuel, light, medicine and health was almost equal for all size groups of farms while it varied in a narrow range in case of housing and social ceremonies.

The major share of expenditure (74.56 per cent) was made on food while only 25.44 per cent was spent on non-food items. This ratio came to 78.12 : 21.88 in marginal farms, 73.20 : 26.80 in small farms and 66.24 : 33.76 in large farms indicating decreasing trend of expenditure on food items and increasing trend in non-food items with increase in size of farm households.

The family consumption expenditure ratio against total income for marginal farms was 100.24 per cent indicating higher consumption expenditure than total income. While small farms spent 66.77 per cent and large farms 32.56 per cent on family consumption to their respective total income.

## References

- National Sample Survey Office (2011). Level and Pattern of Consumer Expenditure, Ministry of Statistics and Programme Implementation, Government of India. *NSS Report No. 538 (66/1.0/1)*.
- National Sample Survey Office (2012). Household Consumer Expenditure Across Socio-Economic Groups. Ministry of Statistics and Programme Implementation, Government of India. Report No. 544 (66/1.0/5).
- National Sample Survey Office (2005). Household Consumer Expenditure in India. Ministry of Statistics and Programme Implementation, Government of India. Report No. 505(60/1.0/1).
- Sharma B. K. (2014). Level and pattern of household consumer expenditure in Delhi. Government of National Capital Territory of Delhi Directorate of Economics and Statistics, Vikas Bhawan-II, III<sup>rd</sup> floor ,B--Wing, Bela Road,, Delhi—110054.
- Singh A.K. (2013). Income and Livelihood Issues of Farmers: A Field Study in Uttar Pradesh. *Agricultural Economics Research Review*. Vol. 26 pp 89-96.