The Patterns of Consumption Expenditure in Rural Households of Western Odisha of India: An Engel Ratio Analysis

Presented by
Dr. Narayan Sethi

Prepared by
Hemanta Kumar Pradhan and Dr. Narayan Sethi

Department of Humanities and Social Sciences
National Institute of Technology, Rourkela,
Odisha, India, Pin- 769008.
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Introduction

- Pattern of consumption expenditure is *an indicator* to show the frequent changes in both food and non-food expenditure due to the changes in income and occupation of the people.

- The *standard of living* of a household can be understood from the consumption pattern, and the qualities of consumption budget which clearly indicate the level of welfare of the household.

- Today’s consumption is *exacerbating inequalities*. And the dynamics of the consumption-poverty-inequality environment nexus are accelerating.

- Consumption must be (a) shared: ensuring basic needs for all, (b) strengthening: building human capabilities, (c) socially responsible: so the consumption of some does not compromise the well-being of others, and (d) sustainable: without mortgaging the choices of future generations.

- Consumption pattern of the rural households depends on *many factors* like assets, level of education, occupation and demographic characteristics.

- The *spending behaviour* of a household and its qualities of consumption budget clearly indicate the level of welfare of the people.
Consumption categories are formed mainly on the basis of the commodities involved. Broadly speaking there are two categories: *Food and non-food consumption*. Consumption to gratify hunger and thirst needs is food consumption. The consumption that is not related to the above but meant for satisfaction of health, education, travel and recreational needs is regarded as non-food consumption.

There is yet another classification purely based on the types of needs called *primary and secondary consumption*. Considering the basic nature, the needs for shelter clothing, health and education can also be included in the category of primary consumption; the secondary consumption comprises the gratification of a more sophisticated structure of physiological needs which relate to social, cultural and intellectual interests.
Factors Affecting Consumption Pattern

- Income
- Social Barriers
- Globalization
- Household Decision Making
- Time Use
- Information
- Availability of Infrastructure for Essential Goods and Services
Review of Literature

- **Rout (2009)** examined the variation in food consumption and nutritional status of women in the state of Orissa in rural and urban areas. He found that, 33 per cent of urban women and 48.6 per cent of rural women are in the low income group and urban women enjoy a better position in all the food items.

- Another study of **Gangopadhyay and Wadhwa (2004)** examined the changing pattern of household consumption expenditure. They have found a general growth in expenditure is sufficient to clear of poverty.

- A recent study by **Pavithra et al (2009) and Chudali et al (2011)** used primary data of five villages in Karnataka and Nepal. They found that, income elasticity of demand for food overall is 0.40 which means that the 0.41 per cent change in demand for food, if 1 per cent change in the income. The monthly per capita consumption of pulses was almost stable over the two periods in rural and urban areas of Karnataka.

- **Jones and Martin (1997) and Sooryamoorty (1993)** examined that patterns of consumption are affected by changes in economic status and domestic responsibility and found that there are different dimensions of consumption expenditure.
Jacoby and Skoufias (1998), and Andrew (2000) in their different study find that households in some villages are largely vulnerable to aggregate risk, in that the magnitude of their seasonal consumption changes varies significantly from year to year, while households in the other village seen better able to use credit markets and informal exchange to absorb aggregate shocks.

Fernandez et al. (2007) have reported from consumer expenditure survey data and stated that both expenditures on nondurables and durables have a sizable hump, around 50 per cent of which is accounted for by changes in household demographics.

Mukhopadyay (1987) and Gupta (1986) examined the aggregate consumption behavior and trends in consumer expenditure using C.S.O estimates of private final consumption expenditure for the time periods 1950-51 through 1978-80. They found that there is no surety that the influence of many socio-economic and religious factors will be enough to shift or to drift the consumption function upward at the rate necessary to give a long run proportionally between income and consumption.
Objectives of the Study

- To examine the impact of income and occupation on consumption expenditure among the rural population of Western Odisha.
- To analyze the factors influencing the rural consumption pattern.
Most of the studies on consumption pattern of rural people are based on *secondary data* and concentrate on their *educational and occupational structure* and deal with its effects on their welfare. While studies done on the consumption expenditure among rural and urban households for various expenditure classes, little effort has been made to study the consumption expenditure pattern within rural sector.

The study of pattern of consumption expenditure provides an important indicator of economic development. It helps to study the changes in both food and non-food consumption pattern in rural and urban areas of Odisha and to estimate the expenditure elasticity of demand for products in rural and urban regions. It also helps to define the factors influencing consumption expenditure and to analyse constraints in the consumption of products in rural and urban areas.
Jaratoli, Pahadtoli and Militoli villages from Sundargarh district of Odisha purposively selected for this study.

These three villages are belonging to the Santoshpur Panchayat of Bisra block of Sundargarh District.

The sample selected included 200 households. These villages are 10 km away from the industrial city Rourkela, where the number of small, medium and large scale industries are located.

Each of these villages has its own agro climatic and socio economic conditions and hence, the samples selected also tell these socio economic features.
The present study is mainly based on the primary data on income, expenditure, family size; occupational structure and consumption collected from the villages through interviewing the head of the selected household and used a separate questionnaire for each household. The household survey was conducted during December 2011 to February 2012 in the selected villages. The Monthly Per-capita Consumption Expenditure both on food and non-food were calculated on the basis of interview schedules and taken averages. Besides this, local team leaders of daily workers are also consulted to get more accurate and qualitative data.

An Engel ratio for each item of expenditure to total expenditure has been estimated for each item of food and non-food item separately. Then sample households have been grouped into different comparable expenditure class. Engel ratio for each item of food, non-food is estimated for each expenditure class.

Monthly Per Capita Consumption Expenditure (MPCE) and its categorization derived from total annual expenditure in all items. Sample households have been grouped into different expenditure classes and income classes for better understanding.
The significance of income is the most important determinant of consumption.

The rural households derive their income from various sources like agriculture, livestock and poultry, wages and other self-employed activities.
### Income Distribution

<table>
<thead>
<tr>
<th>MPCY Category</th>
<th>Number of Households</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3000</td>
<td>102</td>
<td>56.0</td>
</tr>
<tr>
<td>3001-6000</td>
<td>51</td>
<td>28.0</td>
</tr>
<tr>
<td>6001-9000</td>
<td>21</td>
<td>7.1</td>
</tr>
<tr>
<td>9001-12000</td>
<td>10</td>
<td>2.7</td>
</tr>
<tr>
<td>12001-15000</td>
<td>9</td>
<td>3.3</td>
</tr>
<tr>
<td>Above 15000</td>
<td>7</td>
<td>2.7</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Source: Survey Data and Author’s Calculation*
## Average Income and Consumption Expenditure of Occupation Groups

<table>
<thead>
<tr>
<th>Occupation Groups</th>
<th>Average Income</th>
<th>Average Consumption expenditure</th>
<th>Per capita income</th>
<th>Per capita consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Food</td>
<td>Non-food</td>
<td>Total</td>
</tr>
<tr>
<td>Cultivators</td>
<td>73650</td>
<td>26278</td>
<td>35942</td>
<td>62220</td>
</tr>
<tr>
<td>Agricultural Labour</td>
<td>35172</td>
<td>20997</td>
<td>19456</td>
<td>40453</td>
</tr>
<tr>
<td>Non Agricultural Labour</td>
<td>49483</td>
<td>21214</td>
<td>26185</td>
<td>473999</td>
</tr>
<tr>
<td>Business</td>
<td>105940</td>
<td>27042</td>
<td>48537</td>
<td>75615</td>
</tr>
<tr>
<td>Self Employed in non farm sector</td>
<td>120855</td>
<td>29049</td>
<td>46508</td>
<td>75557</td>
</tr>
<tr>
<td>Salaried</td>
<td>139679</td>
<td>26829</td>
<td>50291</td>
<td>77119</td>
</tr>
<tr>
<td>Total</td>
<td>74358</td>
<td>24854</td>
<td>34637</td>
<td>59491</td>
</tr>
</tbody>
</table>

*Source: Survey Data & Authors Calculation*
## Average income and consumption expenditure of income groups

<table>
<thead>
<tr>
<th>Income Class</th>
<th>Average Income</th>
<th>Average Consumption Exp.</th>
<th>Average Consumption Ratio/ APC</th>
<th>Per capita Income</th>
<th>Per capita Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25000</td>
<td>20619</td>
<td>17293</td>
<td>12613</td>
<td>29906</td>
<td>1.45</td>
</tr>
<tr>
<td>25000–35000</td>
<td>30051</td>
<td>19585</td>
<td>17744</td>
<td>37329</td>
<td>1.24</td>
</tr>
<tr>
<td>35000–50000</td>
<td>40728</td>
<td>21676</td>
<td>22602</td>
<td>44278</td>
<td>1.09</td>
</tr>
<tr>
<td>50000–75000</td>
<td>60869</td>
<td>25297</td>
<td>30303</td>
<td>55600</td>
<td>0.91</td>
</tr>
<tr>
<td>75000–100000</td>
<td>86674</td>
<td>26495</td>
<td>36398</td>
<td>62833</td>
<td>0.73</td>
</tr>
<tr>
<td>100000–150000</td>
<td>124365</td>
<td>29864</td>
<td>54969</td>
<td>84833</td>
<td>0.68</td>
</tr>
<tr>
<td>150000–200000</td>
<td>171815</td>
<td>33681</td>
<td>61918</td>
<td>95599</td>
<td>0.56</td>
</tr>
<tr>
<td>200000 &amp; Above</td>
<td>245862</td>
<td>37787</td>
<td>109686</td>
<td>147472</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Source: Survey Data & Authors Calculation
Size of the Households and their percentage

Source: Survey Data
## Size of the Family and Consumption Expenditure

<table>
<thead>
<tr>
<th>Size of the household</th>
<th>Average Income</th>
<th>Average Consumption Expenditures</th>
<th>APC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Food</td>
<td>Non-food</td>
</tr>
<tr>
<td>Up to 3</td>
<td>61524</td>
<td>19763</td>
<td>25246</td>
</tr>
<tr>
<td>Up to 4</td>
<td>66542</td>
<td>22781</td>
<td>30732</td>
</tr>
<tr>
<td>Up to 5</td>
<td>68836</td>
<td>25542</td>
<td>31781</td>
</tr>
<tr>
<td>Up to 6</td>
<td>82750</td>
<td>27834</td>
<td>38202</td>
</tr>
<tr>
<td>Up to 7</td>
<td>117366</td>
<td>31855</td>
<td>56793</td>
</tr>
<tr>
<td>above 7</td>
<td>108458</td>
<td>36011</td>
<td>67290</td>
</tr>
</tbody>
</table>

Source: Survey Data & Authors Calculation
Trend Line for Average Monthly Expenditure on Different Items (Engel Ratio)

Source: Authors Calculation
Conclusion

- Considering all expenditure classes the average MPCE of ST/SC’s is lower than that of general households, also lower than the Muslim class. MPCE on both food and non-food is higher for general households. Tribal class belonging to top expenditure class spend more on food items like cereals, fish and egg, chicken and non-food items like pan, tobacco and intoxicants. These groups spend less on food items like Milk and milk products, pulses, fruits, refreshments and non-food items like footwear, education, clothing etc.

- The availability of facilities and opening up of new markets nearer to village enforces the rural poor to spend more but not to standardise their spending behaviour. Their consumption pattern is still bad. Except income and poverty, their nature and lack of proper awareness also badly affects their consumption pattern. They should shift their consumption behaviour from lower indicators to standard indicators.
Policy Implications

- Educational concessions to rural people should be continued wherever necessary.
- For their economic improvement a change in occupational pattern is necessary. The minimum wage act in the case of working poor or labourers should be enforced.
- Govt. should try to provide water for agriculture to their lands throughout the year.
- Schemes for improving the health standards of women and children are necessary to improve their consumption standards.
- People should not delay in health check-up. Hence they are found to be addicted to alcoholic beverages, wine, pan, tobacco and drugs and intoxicants, which adversely affects not only their health but also hinders their economic progress. This also adversely affects the consumption standards of the other members of the households.
- Decision to spend should be from all members’ opinion in a household. They should choose more nutritious items in place of alcoholic items.
References


- Economic Survey (2009-10), Government of India.

Handbook of Statistics on Indian Economy (2010), Annual Publication, RBI.


Queries and Suggestions