Statistical Analysis of Investment Based on Income and Expenditure of Rural Areas of Kaithal and Panipat in Haryana

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Abstract: In today’s world income is a major factor in everyone's life. Capitalizing is one of the biggest problems for low-income families. The planning officer should be aware of all resource options available for this purpose. The risks and rewards of any resource option differ from one pattern to the next. Many factors influence stakeholder performance while making capitalizing decisions. Among other things, the stakeholder statistics profile is one of the factors influencing decisions. This research is significant since it focuses on the pattern of resource and performance. This publication will raise awareness among low-income individuals. The risks and rewards of any resource option differ from one pattern to the next. Many factors influence stakeholder performance while making capitalizing decisions. Among other things, the stakeholder statistics profile is one of the factors influencing decisions. In India, investors have many ways to invest in order to invest their money. The risks involved in each investment are different. Investors are ready to invest after examining key investment features such as key collateral, liquidity, income stability, easy transfers etc.

Keywords: Investment, statistical analysis, income and expenditure

Introduction: India is a developing country, and the national savings rate has been rising steadily since independence, but there has been a big change in the last year. Compared to other developing countries outside East Asia. India has a high income in global terms. When studying the rural economy in India, the defining characteristics of the economy, the structure of the economy, the methods of measuring savings, and the methods of savings should be considered. The purpose of this research is to explore the motivations and strategies used to maintain the importance of agriculture in Haryana. Incomes are generated at a faster rate in industrialized countries, which encourages people to save more and invest more. But in a place like India where the amount of revenue is unpredictable, the cost outweighs the savings. In many developing countries, especially the less developed countries bordering India, the social benefits of savings have outweighed their personal value by increasing aggregate savings. Like many developing countries, most households in India are poor and neglected. Rural savings should be used here to develop the economy. The economy of the entire economy is determined by some decision makers. The domestic sector as a whole is a large share of the Indian economy. The choice of a rural household about how to spend now or in the future will affect the fixed or current income. While there have long been concerns about individual savings choices and whether "each household's income will equal the amount saved," there are no similar concerns about the impact of change. In the relative costs of new sources of income to save and invest, economic benefits depend on several things. Age, gender, culture, heritage, social barriers and many other factors play an important role in determining the level of protection of any region, country or nation in our society today. Although wealth plays an important role in determining income differences between different groups, due to cultural, racial, and ethnic differences, it does not eliminate all barriers to opportunity. The corporate sector in the private sector includes joint stock companies, industrial credit, investment companies and cooperatives. Corporate sector income is a reliable source of income for this sector. Therefore, the income from this sector is related to the current surplus scheme of the Central Government, state administration, local authorities, various government departments and government agencies.

Research Methodology: Research design refers to the overall strategy you choose to integrate the various research components in a consistent and logical manner, thereby ensuring that you will effectively address the research problem; it is a plan for collecting, measuring and analyzing data. The strategy is used to make observations and gather data. Stratified sampling and multistage convenient sampling technique has been adopted for this study. The present study were conducted in Kaithal and Panipat districts of Haryana. There are seven blocks in Kaithal district e.g. Kaithal, Ghuila, Dhand, Pundri, Rajound, Kalayat and Siwan and six blocks in Panipat district e.g. Samalkha, Israna, Madlau, Bapoli and Sanauli Khurd, we all choose for our education. We selected some panchayats among the identified blocks where the survey was conducted. We select villages from selected panchayats. 450 households were selected for this study, all households in the village were divided into different groups and ordered according to the size of their holdings.

Statistical Tools and Techniques
Arithmetic Mean
A collection of observations' arithmetic mean is calculated by dividing the sum by the total number of observations. It has been used to research the possibilities for alternative tourism and the degree of visitor satisfaction in the studied location. The arithmetic mean was determined as follows:
In the current study, the mean was utilised to determine if respondents' replies were above or below the standard average and what their average view of both visitors and the host community.
The arithmetic mean has been used to determine the average of investments, savings, income from various sources, expenditure on various headings, etc. Additionally, the respondents' perceptions of various investment opportunities in terms of liquidity, safety, and capital growth were ascertained using the arithmetic mean.

\[ \bar{X} = \frac{\sum X}{N} \]

- \( \bar{X} \) = Arithmetic Mean
- \( \sum \) = Sigma or Summation
- \( X \) = Values
- \( N \) = Number of observations

**Standard Deviation**

It is the most significant and often applied measurement for examining dispersion. The average squared departure of the items from the mean is the standard deviation. It is symbolized by the character "\( \sigma \)". It gauges the distribution's overall variability. A small deviation indicates a high level of uniformity of the observation as well as homogeneity of the series, whereas a large standard deviation indicates a magnitude of divergence of the values from their arithmetic mean.

The following formula may be used to get the standard deviation:

\[ \sigma = \sqrt{\frac{\sum fx^2}{N}} \]

- \( \sigma \) = standard deviation
- \( \sum \) means total of, \( f \) is frequency,
- \( X \) = deviations of the items from the mean and \( N \) = total number of observations.

**T-test**: This is used in differentiating between two groups (independent groups) in terms of mean.

**Results and Discussion**

Demography is also used to define studies that can be identified in a certain population that characterizes that population at a certain time. Demographic profiling is basically an exercise in making generalizations about groups of people. Researchers usually have two goals in this problem: first, determine what segments or subgroups exist in the population, and second, create a clear and complete description of the characteristics of each segment. The analysis of the socio-economic and demographic background of the survey respondents has its own significance. This will allow a clear understanding of the various factors that affect the orientation of the respondent's value (their age, family structure and category, level of education, economic level of the respondent is an important variable in determining the social status of the community).

<table>
<thead>
<tr>
<th>Annual Income</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 300000 lac</td>
<td>144</td>
<td>32.0</td>
</tr>
<tr>
<td>300001-600000 lac</td>
<td>155</td>
<td>34.4</td>
</tr>
<tr>
<td>Above 600001 lac</td>
<td>151</td>
<td>33.6</td>
</tr>
<tr>
<td>Total</td>
<td>450</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Table 1.0: Distribution of the Respondents on the basis of Annual Income**

**Source:** Data Collected through Questionnaire

Table 1.0: shows that the distribution of the respondents on the basis of annual income. According to the annual basis below 300000 lacs- 32.0 percent, 300001- 600000 lacs were 34.4 percent and above 600001 were 33.6 percent respondents.

<table>
<thead>
<tr>
<th>Annual Expenditure</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 100000 lac</td>
<td>277</td>
<td>61.6</td>
</tr>
<tr>
<td>100001-200000 lac</td>
<td>115</td>
<td>25.6</td>
</tr>
<tr>
<td>200001-300001 lac</td>
<td>50</td>
<td>11.1</td>
</tr>
<tr>
<td>Above 300001 lac</td>
<td>8</td>
<td>1.8</td>
</tr>
<tr>
<td>Total</td>
<td>450</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 1.1: Distribution of the Respondents on the basis of Annual Expenditure

| Annual Expenditure | Total
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Below 100000 lacs</td>
<td>500</td>
</tr>
<tr>
<td>100001-200000 lacs</td>
<td>450</td>
</tr>
<tr>
<td>200001-300000 lacs</td>
<td>400</td>
</tr>
<tr>
<td>Above 300000 lacs</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td>500</td>
</tr>
</tbody>
</table>

Table-1.1 shows that the distribution of the respondents on the basis of annual expenditure. According to the annual expenditure basis below 100000 lacs- 61.6 percent, 100001- 200000 lacs were 25.6 percent, 200001 – 300001 lacs were 11.1 percent respondents and above 300001 lacs were 1.8 percent. The majority of the respondents were 61.6 percent annual expenditure below Rs. 100000 lacs.

References: