

**INCOME AND EXPENDITURE PATTERN OF
DIFFERENT CATEGORIES OF RURAL HOUSEHOLDS IN
SOUTHERN KARNATAKA: AN ECONOMIC ANALYSIS**

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**DEPARTMENT OF AGRICULTURAL ECONOMICS
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BENGALURU - 560 065**

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in

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*Affectionately
Dedicated to
My Beloved
Parents, Sisters,
Brothers, Friends
& Farmers*

**DEPARTMENT OF AGRICULTURAL ECONOMICS
UNIVERSITY OF AGRICULTURAL SCIENCES
GKVK, BENGALURU - 560 065**

CERTIFICATE


This is to certify that the thesis entitled “INCOME AND EXPENDITURE PATTERN OF DIFFERENT CATEGORIES OF RURAL HOUSEHOLDS IN SOUTHERN KARNATAKA: AN ECONOMIC ANALYSIS” submitted by Mr. SRINATHA, T. N. ID No. PALB 6120 in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE (AGRICULTURE) in AGRICULTURAL ECONOMICS to the University of Agricultural Sciences, GKVK, Bengaluru is a record of *bona-fide* research work done by him during the period of his study in this University under my guidance and supervision and the thesis has not previously formed the basis for the award of any other degree, diploma, associateship, fellowship or other similar titles.

Bengaluru
July, 2018


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(Srinatha, T. N)

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SRINATHA, T. N.

ABSTRACT

The study was undertaken in Kolar and Chickballapur districts of Karnataka to analyze the income and expenditure pattern of different categories of rural households. The required data was collected from randomly selected 160 rural households, 80 each from Kolar and Chickballapur districts which consists of non-cultivators, small and marginal farmers, medium farmers, and large farmers. The results revealed that the average annual income of large farmers was more compared to other categories of rural households. The average annual income of large farmers, medium farmers, small and marginal farmers, and non-cultivators was ₹ 372782.18, ₹ 198751.22, ₹ 143867.57 and ₹ 123959.99 respectively. The major sources of income for farm households were crop production and sericulture followed by livestock and for non-cultivators, wages (43.94 %) were the major source of income followed by non-farm business (35.92 %). Average annual expenditure of non-cultivators, small and marginal farmers, medium farmers and large farmers was ₹ 114511.92, ₹ 118674.96, ₹ 141162 and ₹ 164438 respectively. The consumption pattern of the rural households showed that monthly per household expenditure on food items was 51.29 per cent and non-food items was 48.71 per cent. Share of food items in total monthly expenditure decreases with increase in income and vice-versa. Agriculture income- consumption ratio of farm households was 1.34 and farmer category wise analysis revealed that the income-consumption ratio of small and marginal farmers was 0.69 which indicates that the agricultural income alone was not adequate enough to meet the expenditure.

July, 2018

Department of Agricultural Economics
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(G. S. Mahadevaiah)

Major Advisor

ದಕ್ಷಿಣ ಕರ್ನಾಟಕದಲ್ಲಿನ ಗ್ರಾಮೀಣ ಕುಟುಂಬಗಳ ವಿವಿಧ ವರ್ಗಗಳ ಆದಾಯ ಮತ್ತು ವೆಚ್ಚದ ಮಾದರಿ: ಅರ್ಥಿಕ

ವಿಶ್ಲೇಷಣೆ

ಶ್ರೀನಾಥ, ಟಿ. ಎನ್.

ಪ್ರಬಂಧದ ಸಾರಾಂಶ

ಈ ಅಧ್ಯಯನವನ್ನು ವಿವಿಧ ಬಗೆಯ ಗ್ರಾಮೀಣ ಕುಟುಂಬಗಳ ಆದಾಯ ಮತ್ತು ವೆಚ್ಚದ ಮಾದರಿಯನ್ನು ವಿಶ್ಲೇಷಿಸಲು ಕರ್ನಾಟಕ ರಾಜ್ಯದ ಕೋಲಾರ ಮತ್ತು ಚಿಕ್ಕಬಳ್ಳಾಪುರ ಜಿಲ್ಲೆಗಳಲ್ಲಿ ಕೈಗೊಳ್ಳಲಾಯಿತು. ಈ ಅಧ್ಯಯನಕ್ಕಾಗಿ ಬೇಕಾಗಿರುವ ದತ್ತಾಂಶವನ್ನು ಕೋಲಾರ ಮತ್ತು ಚಿಕ್ಕಬಳ್ಳಾಪುರ ಜಿಲ್ಲೆಗಳ ಕೃಷಿಯೇತರರು, ಸಣ್ಣ ಮತ್ತು ಅತಿ ಸಣ್ಣ ರೈತರು, ಮಧ್ಯಮ ರೈತರು ಮತ್ತು ದೊಡ್ಡ ರೈತರನ್ನು ಒಳಗೊಂಡ ೧೬೦ ಗ್ರಾಮೀಣ ಕುಟುಂಬಗಳಿಂದ ಯಾದೃಚ್ಛಿಕವಾಗಿ ಸಂಗ್ರಹಿಸಲಾಗಿದೆ. ಫಲಿತಾಂಶಗಳನ್ನು ಗಮನಿಸಿದಾಗ ದೊಡ್ಡ ರೈತರ ಸರಾಸರಿ ವಾರ್ಷಿಕ ವರಮಾನವೂ ಇತರ ವರ್ಗಗಳ ಗ್ರಾಮೀಣ ಕುಟುಂಬಗಳಿಗಿಂತ ಹೆಚ್ಚಿದೆ. ದೊಡ್ಡ ರೈತರು, ಮಧ್ಯಮ ರೈತರು, ಸಣ್ಣ ರೈತರು, ಅತಿ ಸಣ್ಣ ರೈತರು ಮತ್ತು ಕೃಷಿಯೇತರರ ಸರಾಸರಿ ವಾರ್ಷಿಕ ಆದಾಯವೂ ಅನುಕ್ರಮವಾಗಿ ರೂ. ೩೨೨೮೨.೧೮, ರೂ. ೧೯೮೭೫೦.೨೨, ರೂ. ೧೪೩೮೬೭.೫೭ ಮತ್ತು ರೂ. ೧೨೩೯೫೯.೯೯ ಇರುವುದು ಕಂಡುಬಂದಿದೆ. ಕೃಷಿ ಕುಟುಂಬಗಳಿಗೆ ಬೆಳೆ ಉತ್ಪಾದನೆ, ರೇಷ್ಮೆ ಕೃಷಿ ಮತ್ತು ಜಾನುವಾರು ಸಾಕಣೆಯೂ ಆದಾಯದ ಪ್ರಮುಖ ಮೂಲಗಳಾಗಿವೆ ಅದೇ ರೀತಿ ಕೃಷಿಯನ್ನು ಅವಲಂಬಿಸಿದ ಕುಟುಂಬಗಳಿಗೆ ದಿನಗೂಲಿ (ಶೇ. ೪೩. ೯೪) ಮತ್ತು ಕೃಷಿಯೇತರ ವ್ಯಾಪಾರವೂ (ಶೇ. ೩೫.೯೯) ಪ್ರಮುಖ ಆದಾಯದ ಮೂಲಗಳಾಗಿವೆ. ಕೃಷಿಯೇತರರು, ಸಣ್ಣ ಮತ್ತು ಅತಿ ಸಣ್ಣ ರೈತರು, ಮಧ್ಯಮ ರೈತರು ಮತ್ತು ದೊಡ್ಡ ರೈತರ ಸರಾಸರಿ ವಾರ್ಷಿಕ ವೆಚ್ಚವೂ ಅನುಕ್ರಮವಾಗಿ ರೂ. ೧೧೪೫೧೦.೯೨, ರೂ. ೧೧೮೬೭೪.೯೬, ರೂ. ೧೪೧೧೬೨ ಮತ್ತು ರೂ. ೧೬೪೪೩೮ ಇರುವುದು ಕಂಡುಬಂದಿದೆ. ಗ್ರಾಮೀಣ ಕುಟುಂಬಗಳು ತಮ್ಮ ಮಾಸಿಕ ವೆಚ್ಚದಲ್ಲಿ ಸರಾಸರಿ ಶೇ. ೫೦.೨೯ ರಷ್ಟನ್ನು ಆಹಾರಕ್ಕಾಗಿ ಮೀಸಲಿಟ್ಟರೆ, ಶೇ. ೪೮.೭೧ ರಷ್ಟನ್ನು ಆಹಾರೇತರ ವಸ್ತುಗಳಿಗಾಗಿ ಮೀಸಲಿಟ್ಟಿವೆ. ಒಟ್ಟು ಮಾಸಿಕ ಖರ್ಚಿನಲ್ಲಿ ಆಹಾರೇತರ ಹಂಚಿಕೆಯೂ ಆದಾಯ ಹೆಚ್ಚಾದಂತೆ ಹೆಚ್ಚಾಗುವುದು ಕಂಡುಬಂದಿದೆ. ಕೃಷಿ ಆದಾಯ ಮತ್ತು ಕೃಷಿ ಆದಾಯ ಬಳಕೆಯ ಅನುಪಾತವು ಕೃಷಿ ಆಧಾರಿತ ಕುಟುಂಬಗಳಲ್ಲಿ ೧.೩೪ ಇದ್ದರೆ, ಸಣ್ಣ ಮತ್ತು ಅತಿ ಸಣ್ಣ ರೈತರಲ್ಲಿ ಅದು ೦.೬೯ ಇದೆ ಎಂದು ರೈತರ ವಿಂಗಡಣೆಯಾಧಾರಿತ ವಿಶ್ಲೇಷಣೆಯಲ್ಲಿ ತಿಳಿದುಬಂದಿದೆ. ಕೃಷಿ ಆದಾಯವು ಸಣ್ಣ ಮತ್ತು ಅತಿ ಸಣ್ಣ ರೈತರ ವೆಚ್ಚವನ್ನು ಪೂರೈಸಲು ಸಾಕಾಗುವುದಿಲ್ಲ ಮತ್ತು ಅವರು ಇತರ ಅಂಗಸಂಸ್ಥೆ ಚಟುವಟಿಕೆಗಳು / ಕೃಷಿಯೇತರ ಚಟುವಟಿಕೆಗಳಿಂದ ಆದಾಯವನ್ನು ಪಡೆಯುವುದು ಅವಶ್ಯವಾಗಿದೆ ಎಂದು ಹೇಳುತ್ತದೆ.

ಜುಲೈ 2018

ಕೃಷಿ ಅರ್ಥ ಶಾಸ್ತ್ರ ವಿಭಾಗ

ಗಾ. ಕೃ. ವಿ. ಕೆ., ಕೃ. ವಿ. ವಿ. ಬೆಂಗಳೂರು-560065.

(ಜಿ. ಎನ್. ಮಹದೇವಯ್ಯ)

ಪ್ರಧಾನ ಸಲಹೆಗಾರರು

Consumption Pattern of Rural Households in Eastern Dry Zone of Karnataka

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Introduction

- Consumption is the major constituent of aggregate demand in an economy.
- Study on Consumption pattern and share of expenditure of various food and non food items in total expenditure are very important as it serves as an indicator of poverty and standard of living in a region.
- There are several studies on consumption pattern in urban areas but, in rural areas only few studies were done and hence this study focuses on the consumption pattern in rural areas of Kolar and Chikkaballapur districts.

The present study was under taken with the following specific objective,

Objective

- To analyze the consumption pattern of rural households in Kolar and Chikkaballapur districts of Karnataka.

Methodology

Study Area: The study was carried out in Chikkaballapur and Kolar districts.



Sampling framework and data source: Simple random sampling procedure was employed to select the sample rural households. Two taluks were selected from each district based on highest and lowest per capita income and two villages were selected from each taluk. Totally 160 rural households were selected for the study which comprised of 80 households each from Chikkaballapur and Kolar districts of Karnataka. The primary data was collected from the rural households using pre-tested well structured schedule during January-February 2018.

Analytical tools:

1. Descriptive statistics

Measures of central tendency and percentages were used to analyze the data.

Results

Table 1: Share of different food and non food items in average monthly expenditure.

Product Category	Expenditure (Rs.)	% Share
I. Food Items		
Cereals	1729.73	15.41
Pulses	374.20	3.33
Fruits and Vegetables	993.00	8.85
Meat and Animal Products	1477.50	13.16
Beverages and Intoxicants	452.38	4.03
Snacks, Confectionary and Other food items	729.47	6.50
II. Non Food Items		
Clothing	614.95	5.48
Education	1976.77	17.61
Medical	847.10	7.55
Gas, Petrol and Electricity	816.19	7.27
Entertainment	1089.13	9.70
Other Nonfood	123.14	1.10
Total	11223.56	100.00

- Note: 1. Other food items includes sugar and jaggery, edible oil, dry fruits and nuts etc.
 2. Other non food items includes house tax, water bill, news paper and miscellaneous expenses.
 3. Entertainment includes movies, outing and also celebration of festivals and other social ceremonies.

Table 2: Average monthly expenditure of rural households on food and non food items.

Sl. No	Particulars	Expenditure (Rs.)		
		Food	Non Food	Total
1	Per household monthly expenses	5757	5467	11224
2	Per capita monthly expenses	1193	1103	2296

Discussion

- From table 1, it can be noticed that education occupies the major share in expenditure on non food items which is because of growing priority of educating children and privatization of education in rural areas.
- It is evident from the table 2 that per capita monthly expenses on food items (Rs.1193) is more than that of the non food items (Rs.1103) and the average monthly expenses per household on both food and non food items is Rs. 11224.
- Figure 1 shows that cereals occupies major share in total expenditure on food items followed by meat and animal products and education constitute a major share in expenditure on non food items followed by entertainment which includes celebration of festivals and other social ceremonies.
- From figure 3, it can be noticed that share of monthly expenditure on food items is 51.29 per cent which is more than the share of monthly expenditure on non food items i.e. 48.71 per cent.

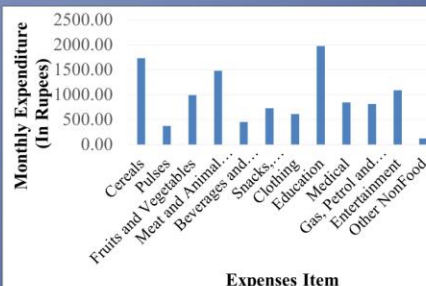


Fig. 1: Distribution of Expenses on individual food and non food items.

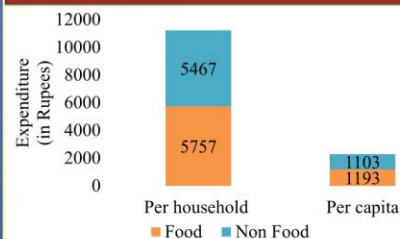


Fig. 2: Per household and per capita monthly expenses on food and non food items

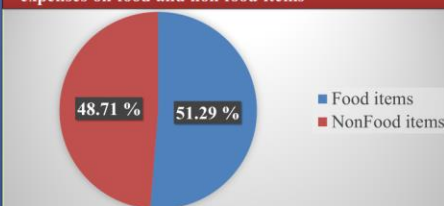


Fig. 3: Share of food and non food items in average monthly expenditure.

Summary

- Share of food items in total expenditure is more than that of the non food items.
- Among the different food and non food items, education constitute the larger share in average monthly expenditure on nonfood items. Cereals occupies major share in average monthly expenditure on food items followed by meat and animal products.
- There is a need to formulate policies to reduce the consumption expenditure and improve the standard of living in the study area.

Advisory Committee

Chairman : Dr. G. S. Mahadevaiah
Members : Dr. B. V. ChinnappaReddy
 Dr. H. M. Jayadeva
 Mr. V. Manjunath

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I INTRODUCTION

India is a country of villages as the majority of the population (68.84 % of the total population) and 73 per cent of the total households live in rural India. Development of rural India depends on the development of people living in rural areas and it has been the main focus of the Government even today as there are 17.97 crore rural households in the country of which majority (51.18 %) of the households derive their income from manual casual labour followed by 30.10 per cent of the total rural households in the country depends on cultivation of land for their livelihood (Socioeconomic and caste census, 2011).

India being a rapidly developing and agrarian dominant country has been bringing many changes in the socioeconomic characteristics of the country's population over a period of time. Improvement of socio-economic conditions of the rural households has been receiving the greater attention because of two important reasons firstly, majority of the population live in rural areas and there cannot be any development as long as rural areas remain backward and the backwardness of rural India would be the main impediment to the overall growth of the Indian economy.

Present status of rural India

“India lives in villages” were the golden words of Mahatma Gandhi many decades ago which holds true even today as majority of the country's population live in the villages' even though there is considerable amount of rural population migrating to urban areas still almost 68 per cent of the country's population continues to live in rural areas.

There are 243.95 million households in the country, 179.70 million or nearly three-fourths are in rural areas. With respect to the rural livelihood and employment, the income of highest earning member 74.49 per cent of the rural household's is less than ₹ 5000 per month and more than half (56.00 %) of the rural households of the country do not own any land and more than half of the landless rural households work as casual labour. The literacy rate of the rural male and female is 77.15 and 57.93 percent respectively, which is much lower than the urban areas (Socioeconomic and caste census, 2011).

Status of rural Karnataka

There are 13.35 million households in the state and the average size of the household is 4.6 and more than two-third of the population of Karnataka i.e. 37.40 million persons live in rural Karnataka. The Literacy rate of the state has increased from 66.64 per cent in 2001 to 75.36 per cent in 2011 and the work participation rate in rural areas is 49.40 per cent which is higher than the state average 45.60 per cent. The total number of workers in the state are 27.87 million of which 6.58 million people are cultivators and 7.15 million are agricultural labourers. Cultivators and agricultural labourers constitute a major share (49.30 %) in total number of workers in the state. The state has 14.40 per cent of rural households that are considered as deprived which is more than national average (8.90 %). The income of highest earning member of 69.08 per cent of households is less than ₹ 5,000 per month. Illiteracy percentage of rural Karnataka is 31.00 per cent which is less than the national average (35.70 %)(Socioeconomic and caste census, 2011).

Socioeconomic characteristics are the important indicators of the measurement of the standard of living and extent of human development as it measures the economic and social position of an individual's or family's or group of people's based on level of education, age, family size, family type, income, health condition and occupation etc.

According to Dutton and Levine (1989), socioeconomic status is "a composite measure that typically incorporates economic status, measured by income; social status, measured by education; and work status, measured by occupation". The healthy and balanced growth of any region or society depends on the proper socio-economic development. In recent years, increasing level of education and perception of education has been bringing considerable changes in the socioeconomic status of the rural households.

Household income and consumption expenditure are two direct monetary measures used in assessing the economic well-being of the population. However, consumption expenditure is preferred to income as it reflects the long-term economic status of the household, particularly in low-income countries (Friedman, 1957).

The main sources of income for the rural households are crop cultivation, livestock, agricultural and wage labour and other non-farm occupations. Apart from the cultivation of crops which is the major constituent of income of the rural households in India, livestock and agricultural labour income also has a considerable share in the rural household's total income which are dependent on farming. In spite of the existence of many programmes and policies aimed at improving the socioeconomic condition of the rural households, people of rural India could not develop equally in a region as reflected by existence of different economic classes within a small village.

Estimation and analysis of household income from different sources is important as it can be used for policy analysis as the best proxy for the economic well-being of individuals and households as it contributes to the economic well-being of individuals by increasing their potential to consume or to save. Analyzing the consumption pattern in a country like India is also important as it explains the economic development and standard of living in the particular region. Analysis of consumption expenditure pattern in relation to various socio-economic conditions will help to forecast of the future demand for various commodities and which in turn helps planning and formulation of different socio-economic policies. In addition to the formulation of different socio-economic policies, it will also help in the formulation of various fiscal policies for imposing commodity taxes and which also helps in reducing the consumption of hazardous commodities.

Apart from the estimation of income of rural households from different sources and consumption expenditure on different items, the foremost thing is to estimate the adequacy of income to meet their expenditure as it serves as a better indicator of the socioeconomic development of the households in a particular region.

The adequacy of income of a household may be defined as the ratio of its income to the income level required to achieve the conventional standard of living in the socio-economic group to which the household belongs. This concept has greater relevance than that of income for the study of consumer behaviour (e.g. propensity to save) and other social behaviour. Income and need for income in a country do not necessarily rise proportionately over time, thus resulting in periods of declining, as well as periods of rising income adequacy (Tabbarah, 2007).

Consumption pattern of different categories of rural households is a good indicator of the economic status and their standard of living and which also helps in assessing the relative importance of each food/ nonfood items in the consumption basket. Different categories of rural households have different structures of consumption. In general, high-income groups spend more on each class of items in absolute terms, but they spend a low percentage of income for food and basic needs and poor people spend a higher percentage of income on food and other basic needs. In short, the propensity to consume will be higher for poor and the propensity to save will be higher for rich (Glenn and Kenneth, 1987).

Consumption elasticity is also as important as studying various socioeconomic conditions as it is influenced by various socio-economic factors and it also gives the gist of people's well-being and economic status in a particular region. It can be measured with the help of the coefficients of elasticity of consumption which is usually calculated on the basis of the level of income. It is the ratio of percentage change in the consumption of a particular group of commodities to the percentage change in price/ income.

The present study examines the relationship among various socioeconomic characteristics of different categories of rural households and the income, consumption expenditure and also the adequacy of income level.

Need for the present study

Low-income levels and the large disparity between the income of the farm and non-farm households is the important reason for the existence of agrarian distress, which is quite serious problem that the country is facing in recent years. The country also witnessed a sharp increase in the number of rural youths migrating to urban areas and farmers' suicides in the recent years which is because of uncertain and low farm income. This can adversely affect the future of the agrarian economy and also the whole economy of the country. Hence, there is a need to develop strategies to reduce the disparity between the income of the farm and non-farm households.

Therefore, the purpose of the study is to collect background information that is essential to determine the requirements for planning and implementation of programmes. The baseline data is very important in the context of doubling of farmers income to draw meaningful measures as well as to serve as a base for enhancing farm

income. It is therefore necessary to assess the baseline income of various categories of rural households in the study area.

Consumption pattern and share of expenditure on various food and nonfood items in total expenditure are very important as it serves as an indicator of poverty and standard of living in a region. There are several studies on consumption pattern in urban areas but, in rural areas only a few studies were done and hence this study focuses on the consumption pattern in rural areas.

In view of this, there is a scope for making a comprehensive study on the income and expenditure pattern of different categories of rural households. Against this backdrop, the present study was undertaken with the following specific objectives.

1.1 Specific Objectives of the study

1. To document the socio-economic profile of different categories of farm and non-farm households in Southern Karnataka.
2. To estimate the household income of farm and non-farm families from different sources.
3. To assess the adequacy of the current income levels to meet current expenditure of rural households.
4. To estimate the consumption pattern and elasticities of different categories of rural households.

1.2 Hypotheses

1. Agriculture is the major source of income than non-farm sources for farm households
2. The share of agriculture income increases with increase in the size of landholding.
3. Income of the households is inadequate enough to meet the expenditure
4. Consumption elasticity for cereals is low compared to other food items.
5. As the income increases proportion of income spent on non-food items increases.

1.3 Limitations of the study

The study is completely dependent on primary data. The primary data was collected from rural households through personal interview method using a pre-tested well-structured schedule. Therefore, some amount of recall bias is bound to be associated with the collected data since the farmers did not maintain any record of the different cultivation expenses, application of inputs and returns. Similarly data on expenditure on different items also may have some recall bias. The period of data collection was also too short to generalize and draw the conclusions. There may be a general tendency of farmers reporting more expenditure than actual incurred and less income than what they actually obtained. However, efforts were made to minimize them through crosschecks at the time of data collection.

1.4 Presentation of the study

The study has been organized into several chapters.

- I – It deals with the present status of rural households, need and scope of the present study, objectives and hypotheses.
- II – It includes review of previous studies relating to the topic of the present study.
- III – Deals with methodology covering description of the study area, sampling design, sources of data, methods of data collection and different analytical tools used in the study.
- IV – Deals with presentation of the major findings of the study through tables, figures and description and also discussion of the results of the study in the light of plausible reasons.
- V – This chapter provides summary, conclusion and also suggests the policy implications arising from the findings of the study.
- VI – This chapter lists literature referred for the present study.

II REVIEW OF LITERATURE

A review of the past research work done pertaining to the present study helps in identifying gaps in conceptual and methodological issues and research output relevant to the proposed study. This will help in relevant data collection, developing suitable models for analysis and drawing meaningful conclusions. Studies pertaining to the socio-economic conditions of the rural households, income from different sources, adequacy of income to meet the expenditure and consumption expenditure on different items have been presented, keeping in view the objectives of the present study. The review of literature is presented under the following sub headings.

2.1 Socio-economic status of rural households

2.2 Income of rural households from different sources

2.3 Adequacy of income to meet the expenditure

2.4 Consumption pattern and consumption elasticities of rural households

2.1 Socio- economic status of rural households

Chittedi and Dommati (2010) undertook a study on socio-economic conditions of agricultural women labour in Andhra Pradesh: a case study of Karimnagar district and found that among the total female workforce, agricultural labour occupied a larger proportion followed by cultivators and workers employed in small-scale household industry. It indicates that the main source of livelihood for the majority of the sample respondents in Karimnagar district was agriculture. More number agricultural women labourer belongs to the age group of 20 – 40 years and the number of income earners in majority of the sample households were two.

Parvin and Akteruzzaman (2012) were conducted a research on factors affecting farm and non-farm income of Haor inhabitants of Bangladesh. It was evident from the study that 80 per cent of the farmers were middle aged (15- 49 years) and 43.33 per cent of the sample respondents had studied up to primary School. The average family size in the study area was 6.07 which was higher than the national average of 4.53. Besides farming, boating (8.33 %), business (6.67 %), fish trading (6.67 %) and non-agricultural labour (8.33 %) were the dominant subsidiary occupations for the households. About 63 per cent of the farmers were small holders whereas large farmers accounted for only 3.33 per cent of total. The average farm size per household

was 2.20 acre. Farm income of the respondents was higher which occupied 64.66 per cent of the total household income than the non-farm income which occupied only 35.34 per cent of their total household income.

Ramesh *et al.* (2012) conducted a study on Socio-economic status of small ruminant farmers in different Agro-Climatic Zones of Karnataka and found that small ruminants were most suitable livestock for small and landless farmers. Majority of the farmers belonged to backward castes, who were illiterates. Study also found that majority of households belongs to small family size and gaining handful of income from small ruminants.

Nandini (2013) assessed the socio-economic status of the rural households in Dharwad district of Karnataka and found that 44.17 per cent of the household heads were illiterates, 53.33 per cent of the respondents were living in nuclear family system and the remaining 46.67 per cent of the respondents were live in joint family system. The average family size in study area was 6.43 and it was also evident from the results that 56.67 per cent of the sample respondents belonged to the Other Backward Caste, followed by 33.33 per cent belong to General Category, only 10 per cent of the respondents belong to Scheduled Caste and none of the respondents belonged to the Scheduled Tribe.

Ananthnag *et al.* (2014) in their study on socio-economic status of farmers practicing organic farming in Easter Dry Zone of Karnataka found that only 1.67 per cent of the respondents were illiterate and no respondent had post-graduate education. It was also evident from the study that more than half of the respondents (51.67 per cent) were medium farmers, majority of the respondents (66.67 per cent) were belonged to OBC category and 95.00 per cent of the respondents were living in small family with family size up to five members.

Kumuha Jajuo (2014) undertaken a study on socio-economic condition of MAO NAGA farmers in Senapati district of Manipur and it was evident from the study that 89 per cent of the families were nuclear and only 11 per cent were joint family. He also found that 49 per cent of the head of the households were illiterate and majority of the sample households i.e 69.30 per cent are farmers, 27.30 per cent worked as wage labourers. Only two per cent of the households performed the work of artisan particularly bamboo baskets and mats making. He also found that 13.7 per cent of the respondents do not own any individual agricultural land.

Islam and Mustaquim (2014) analyzed the socio-economic status of rural population in Udaypur village of Malda district, West Bengal and the author opined that overall socio-economic status of households in the study area was not good. It was evident from the results that the proportion of sample population having monthly income below ₹ 500 is 44.8 per cent and only 4.34 per cent of the population is having monthly income above ₹ 2000. The lower income groups of people are those who are engaged in agriculture, rice mills and mainly wage labourers.

Desai and Sumangala (2014) studied the socio-economic status of the organic and conventional farm families in north Karnataka. It was evident from the study that the average age of the sample farm women ranges between 41-44 years, 14.68 per cent of the respondents studied up to pre-university education. It was also revealed from the study that more than one-third of the respondents were working as agricultural labourers.

Raveesha *et al.* (2016) conducted a study on socio-economic analysis of women's participation in sericulture in four districts namely Mysuru, Tumakuru, Kolar and Chikkaballapur and found that 60 per cent of the respondents involved in sericulture activities and it was also found that 10 per cent of the respondents depends on livestock and other major occupation of the respondents was petty trade and working in service sector.

Odoh and Nwibo (2017) analyzed the socio-economic determinants of rural non-farm households income diversification in Southeast Nigeria and it was evident from the results that the 47 per cent of the respondents belongs to the age group of 41-55 years and the percentage of respondents above 70 years is only 4.2 per cent. Majority of the head of the household were male and 93.1 per cent of the respondents were living in families having 1-12 members. The proportion of illiterate respondents was only 6.1 per cent and 35.8 per cent of respondents had primary school education.

Singh *et al.* (2017) undertook a study on socio-economic status and attitude of farmers of Santhal Pargana Division of Jharkhand, Eastern India - A benchmark analysis and found that agriculture was the main occupation for majority (51.7 %) of the respondents followed by business for 17.20 per cent of the respondents. It was also found that 76.90 per cent of the respondents live in joint family system and majority of respondents belong to other backward castes.

The above studies revealed that majority of the farmers belong to the middle age group (15-49 years) and more number of respondents studied upto primary level and only few respondents had higher education. It was also evident from the studies that majority of the farmers were living in the nuclear family system and more number of respondents belongs to the caste group of other backward class.

2.2 Income of rural households from different sources

Bhakaret *et al.* (2007) in their study on Income and employment pattern in rural areas of Chattisgarh found that farm income was directly related with farm-size, while income from off-farm and non-farm activities was inversely related with farm-size. The total as well as per capita income of non-farm households was higher than those of marginal farmers because the marginal farmers were dependent on crop farming, whereas the landless households earned wages in the non-farm sector.

Carletto *et al.* (2007) conducted a study on rural income generating activities in developing countries: re-assessing the evidence and found that in majority of cases there was a positive trend between household welfare status and participation in non-agricultural activities. That is, as we move across the wealth quintiles from poorer to wealthier, an increasing share of households have participated in nonagricultural activities. Within non-farm activities, the strongest positive relationship was observed for wage labour; in virtually all countries, better-off households were more likely to participate in non-agricultural wage labour. Conversely, higher participation in agricultural wage employment is generally associated with lower income levels and low wealth status, confirming this sector's role as a coping or survival mechanism for poor households in rural areas when more income generating activities were not accessible.

Kamal Vatta *et al.* (2008) undertaken a study on rural employment and income: The inter-household variations in Punjab and estimated that the average annual income increases with increase in landholding size. It was evident from the study that the major source of income for non-farming households was non-farm sector (59.0 %) followed by rental income (17.8 %) and livestock (8.3 %). For the marginal cultivating households crop farming followed by livestock and non-farm sector. The ratio of total income for marginal, small, medium and large farmers was 1.0:1.1:2.0:5.4 respectively.

Narayan and Kumar (2012) estimated the patterns of consumption expenditure in rural households of western Odisha of India and found that the average annual income of the cultivators was ₹ 73649 which is more than the average annual income of the agricultural labour household's i.e. ₹ 35172. The average income of the non-agricultural labour households exceeds that of agricultural labour households by ₹ 14310.

Hemalatha *et al.* (2013) analyzed the Socio-economic profile of millet growers in Karnataka. Results revealed that the annual income for the households was mainly from the sources other than agricultural operations like working in industries as wage labour and petty business. Earnings from jobs in some cases were up to ₹ 74,479 per annum and ₹ 44,907 from agriculture. The major expenditure was towards purchase of agriculture inputs followed by food, education, clothing and other essential things. Ninety per cent of the farmers expressed that millets were cultivated to meet feed and fodder requirements for cattle.

Singh (2013) undertook a field study on income and livelihood issues of farmers in Uttar Pradesh and the results revealed that the marginal farmers have earned only 37 per cent of income from agriculture. This proportion goes up to 56 per cent for small farmers, to 63 per cent for medium farmers and 73 per cent for large farmers. Livestock and fishery contribute 15 per cent of income in marginal and small farms and only 5.3 per cent in large farms. This shows that as land size increases, agricultural income increases, while livestock income decreases. Non-agricultural sources contribute about half to the income of marginal farmers. This share reduces with increase in farm size; it is around 28.7 per cent for small farmers, 26.6 per cent for medium farmers and 21.9 per cent for large farmers. Wage earnings also contribute a much larger share of income in case of marginal farmers as compared to the other three categories.

Anonymous (2013) conducted a survey in 4529 villages of rural India covering 35200 households and estimated that per household average monthly income was ₹ 6426 and average monthly consumption expenditure was ₹ 6223. The average monthly receipts of households involved in crop production and non-farm business were ₹5542 and ₹ 5290 during the agricultural year July 2012- June 2013.

Pratap *et al.* (2014) estimated the sources of income of farm households in India and found that the non-farm sources contribute 44 per cent to household income. The share of non-farm income declines with landholding size but has a positive relationship with total income.

Ranganathan (2014) analyzed farmers' income in India and results showed that the farm households deriving income from different sources, the farm households deriving non-farm incomes earned the most ₹1, 04,593 in July 2012- June 2013. But, these households constitute only 4.7 per cent of total farm households. Households with wage/salaried employment as principal income source earned ₹ 92,132 in the same period and which constitute 22 per cent of total farm households. More than 63 per cent of farm households had crop cultivation as their primary source of income and earned on average ₹74, 977 in the same period. Households with livestock as primary income source constitute 3.7 per cent of total farm households and earned ₹ 76,639 in the period.

Chakravorty *et al.* (2016) undertaken a study on Income Generation and Inequality in India's Agricultural Sector: The Consequences of Land Fragmentation and found that Cultivation was the principal source of Income for about 63.5 per cent of the rural households followed by wage / salaried employment (22 %), Non-agricultural enterprises (4.7 %), livestock (3.7 %), other agricultural activity (1 %).

David (2016) conducted a study on Income trends for Iowa Farms and Farm families and found that falling commercial farm incomes and rising debt are causes for concern, especially among mid-size farms, but are not yet at crisis levels because of substantial off-farm incomes. He also opined that producers of all farm sizes are engaged in belt-tightening measures of reducing production costs and living expenses, as well as seeking off-farm income opportunities.

Singh (2016) undertook a study on Income and employment of marginal and small farmers in South-Western Punjab and it was evident from the study that the net annual family income from all sources was ₹ 167874 for small and marginal farmers. On an average annual income of marginal farmers and small farmers was ₹ 134848 and ₹ 200900 respectively. The net income obtained from crop farming and dairy farming contributed about 33 and 18 per cent to the total annual net income and remaining 49 per cent of the total net income was generated from nonfarming

activities. It was also clear from the study that the share of income earned from non-farming sector was very higher among marginal farmers (58.36%) as compared to small farmers (40.70%).

Gururaj *et al.* (2017) undertaken a study on Doubling of small and marginal farmers income through rural non-farm and farm sector in Karnataka and found that the average monthly income of marginal, small and medium farmers was ₹ 9676, ₹ 14011 and ₹ 27313. It was revealed from the study that share of income from cultivation in total income for marginal, small and medium farmers was 12 %, 52 % and 81 % respectively. It was evident from the study that share of income from cultivation increases with increase in size of land holding and share of non-farm activities decreases with increase in size of land holding.

Sharma *et al.* (2017) analyzed the Nonfarm based Livelihood in Rural Sikkim and opined that the main important non-farm activities of respondents of Sikkim were petty business, owning transport, small-scale household enterprises, unskilled wage labourers, different government and private services etc. It was evident from the study that 23.33 per cent of the households earned income ₹ 0-25000, 18.3 per cent of respondents earned annual income of ₹ 25000-50000 and about 65.3 per cent of total households annual income ranged between ₹ 50000- 100000.

The previous studies reviewed showed that the agriculture is the main occupation for the majority of the respondents and crop cultivation and livestock constitute the major share in the income of the farmers. It was also clear from the studies that the wage labourer, petty business and working in the service sector were the other major sources of income for the respondents. The proportion of income derived from agriculture was more in case of large and medium farmers compared to the small and marginal farmers.

2.3 Adequacy of Income to meet the expenditure

Singh (2013) made an attempt to work out the income and livelihood issues of farmers in Uttarpradesh and found that agricultural income was inadequate to meet the household expenditure in case of small and marginal farmers. He suggested a multi-sectoral integrated strategy of promoting agricultural and non-agricultural activities in the rural areas.

Narayan and Kumar (2012) analyzed the patterns of consumption expenditure in rural households of western Odisha of India and found that consumption income ratios of the Cultivator and Agricultural labourers were 0.84 and 1.13 respectively, which implies that the income of the cultivator households was adequate enough to meet the consumption expenditure but it was inadequate in case of agricultural labourers.

KumuhaJajuo (2014) had undertaken a study on socio-economic condition of MAO NAGA farmers in Senapati district of Manipur. It was observed from the study that income from agriculture alone was not sufficient to meet the family expenditure.

Gururajet *al.* (2017) undertook a study on Doubling of Small and Marginal Farmers Income through Rural Non-Farm and Farm Sector in Karnataka and compared average monthly income from different sources and average monthly expenditure. It was clear from the study that income from crop enterprise alone was inadequate to meet the expenditure for marginal and small farmers and income of medium farmers was adequate enough to meet the expenditure.

The previous studies revealed that the income from the agriculture alone was not adequate enough to meet the expenditure and consumption-income ratio was more in case of agricultural labourers compared to small and marginal cultivators.

2.4 Consumption Pattern and elasticities of different categories of rural households.

Mehta (1971) analyzed the consumption expenditure elasticity of different commodities of different income groups in both rural and urban areas of Rajasthan and found that the consumption elasticity of food grains decreases with increase in total expenditure in the urban areas.

Joher *et al.* (1982) conducted a study on consumption pattern to consumption elasticities for different commodity groups in Punjab. The study showed that the consumption expenditure elasticities of demand for non-food items was more than those of food items. Among different food items relatively high consumption elasticities were observed for meat and fish. Within the different non-food items the expenditure elasticities for clothing is relatively more than the fuel and light.

Pradhan *et al.* (1998) studied on Income, Expenditure and Social Sector Indicators of Households in Rural and Urban India and analysed the data collected

from 35000 households in 1703 villages spread across the country. The results indicate that the share of Food consumption in total consumption expenditure by agricultural wage-earning households was highest was (61 %) whereas it was 55 per cent in case self-employed farm and non-agricultural wage-earning households. The share of education expenditure was lowest in agricultural wage earners and highest in salaried households.

Browne *et al.* (2007) undertook a study on expenditure elasticities for rural households in the Embo ward, Umbumbulu, KwaZulu-Natal and the results of the study revealed that the expenditure elasticity for whole food group was highly inelastic and negative. It was positive and elastic for durables compared to food items.

Pavithra *et al.* (2009) analysed consumption pattern in Karnataka using published data of NSSO. The results revealed that expenditure elasticities for different food items were less than unity in urban areas with elasticity for vegetables was 0.96 being the highest value among all. The lowest consumption expenditure elasticity was observed for cereals i.e. 0.70 in rural areas and the author opined that this was because food was basic necessity of life.

Geetha (2011) had undertaken a study on consumption patterns among selected rural and urban households in Coimbatore city. The results revealed that consumption elasticity for cereals was low compared to other food items and she suggested that to improve the consumption pattern of rural households there is a need for the development of judicious mix of beneficiary-oriented programmes, human resource and infrastructural development in rural areas.

Sharma (2011) analysed the food consumption pattern in rural and urban India and had estimated the expenditure elasticities of demand for food in rural and urban India. The expenditure elasticities had derived by using log-linear model. This study utilizes the secondary data on monthly per capita consumption expenditure collected from the National Sample Survey Organization publication. The results revealed that out of total cereals consumption, the rice followed by the wheat was the major cereal consumed in rural areas and expenditure elasticity of all food groups was positive. The expenditure elasticity for all food groups was less than unity in urban areas with the highest value being 0.85 for pulses and beverage and the low expenditure elasticity was observed for cereals (0.51 in rural and 0.53 in urban India). The highest

expenditure elasticity was observed for pulses and beverage (0.85) in urban and beverages in rural India.

Rao and Saheb (2012) had undertaken a study on consumption expenditure pattern in rural households in Guntur district of Andhra Pradesh and results revealed that the annual average per capita consumption expenditure for all sample rural households was ₹ 5643.24. It varied among different categories of households. It was ₹ 6020.33 for cultivator households, ₹ 4223.57 for agricultural labourers, ₹ 5469.00 for other rural households. The share of food expenditure in the total expenditure was 63 per cent for cultivators, 86 per cent for agricultural labourers, 61 per cent for other rural households and 65 per cent for all sample rural households.

Vaishnav (2013) had done comparison of consumption pattern of rural families in India based on various rounds NSSO data and it was evident from the analysis that there was a significant shift in the share of total per capita monthly expenditure from food items to non-food items. The total percentage share of per capita monthly expenditure on food items decreased from 63.18 per cent to 48.63 per cent during the period 1993 to 2012. On the contrary, the percentage share of per capita monthly expenditure on non-food items increased from 36.82 per cent in 1993-94 to 51.37 per cent in 2011-12.

Patel and Rami (2015) had done a study on expenditure elasticities of selected food items for different class of families in India. The results revealed that the expenditure elasticities for different food items except for cereals were more than one among poor families and the expenditure elasticities of different food items like pulses, milk, edible oil, meat and fish were found to be more than one and it is less than one for cereals, vegetables and sugar among non-poor families.

Sreeja (2016) analyzed the food consumption expenditure pattern in rural Kerala and estimated that out of every rupee spent for consumption by a rural household, 40 paise was spent on food, of these 10 paise was spent on cereals and cereals substitutes, 7 paise on egg, fish, meat, 6 paise on beverages and processed food.

Thasnimol *et al.* (2016) conducted a study on consumption pattern in Karnataka with reference to high-value agriculture commodities and estimates showed that average monthly per capita consumption expenditure was ₹1561 in rural

areas and they also found that among the food items, expenditure on cereal and cereal substitute was higher in rural areas while expenditure on beverages was higher in urban areas.

Gururaj *et al.* (2017) undertaken a study on doubling of small and marginal farmers income through rural non-farm and farm sector in Karnataka and found that the monthly consumption expenditure of different categories of farm households. Monthly per household consumption expenditure of marginal, small and medium farmers was ₹ 8547, ₹ 12250 and ₹ 14500 respectively.

Results of the previous studies reviewed showed that the percentage share of food items in consumption expenditure was more compared to non-food items and the consumption elasticity for the many of food groups was less than unity and it was less for cereals compared to other high-value commodities like vegetables, meat and other animal products.

III METHODOLOGY

Formulating sound research methodology with appropriate tools of analysis is essential to draw a meaningful inference from research study and for the generalization of the findings. Hence, this chapter presents the general characteristics of the study area, the methods adopted in selecting the sample, the concepts and analytical techniques employed for the study.

3.1 Selection and description of study area

3.2 Sampling procedure

3.3 Nature and sources of data

3.4 Analytical tools and techniques

3.1 Selection and description of study area

The study was conducted in Chikkaballapur and Kolar districts of Karnataka. The utility of research can be better appreciated only when the results are analyzed with the background information of the study region such as physical, social and economic conditions.

Undivided Kolar district had eleven taluks prior to 2007-08. For administrative convenience, it was divided into two districts, namely Chikkaballapur and Kolar. Kolar district comprises of five taluks namely, Bangarpet, Kolar, Malur, Mulbagal and Srinivaspura. Chikkaballapur district comprises of six taluks viz., Bagepalli, Chikkaballapur, Chintamani, Gowribidanur, Gudibande and Sidlaghatta. Chikkaballapur and Sidlaghatta taluks were selected from among six taluks of Chikkaballapur district. Among five taluks of Kolar district, Kolar and Malur were selected for the present study.

Chikkaballapur district profile

The total geographical area of Chikkaballapur district is 4, 244 sq. kms. of which 12 per cent area was under forest cover. The district has six taluks with 1598 inhabited villages with total population of 12.55 lakhs, (2011 census) of which 77.74 per cent of the total population live in rural area covering 2.26 lakhs of farmers.

Agriculture is the predominant economic activity in the district and the gross domestic product of the district in 2012-13 is ₹ 3, 525 crores. The average rainfall of

the district is 677 mm and is considered as one of the drought prone district in Karnataka as it witness drought in at least 2-3 years during a period of five years.

The area under agriculture is 1.72 lakh hectares out of total geographical area of which 27 per cent of area is under irrigation. The major crops grown in the district are Ragi, Maize, Groundnut, Grapes, Mango and other vegetables. Cocoon production and livestock rearing are two major established economic activities in the district as majority of the farmers depends on the same for their livelihood. Papagni, Chitravathi and Pinakini are the major rivers which flows in the district.

The district is hub of silk industry and stands second in cocoon production with a production more than the state average cocoon production. The total area under mulberry cultivation is 16361 hectares and which covers 25531 families out of 2.84 lakh families in the district. The district also one of the leading producer of milk in the state with a production of 0.70 million litres of milk a day.

Kolar district profile

Kolar district is known as land of milk and silk as it occupies top position in the leading producers of milk and silk in the state. The district is located in south-eastern part of Karnataka and which comes under eastern dry zone of Karnataka. The district is surrounded by Bengaluru rural district in the west, Chikkaballapur district in the north, Chittoor district of Andhra Pradesh in the east and Krishnagiri and Vellore districts of Tamil Nadu in south. Total geographical area of the district is 3989 sq. kms. of which six per cent of the total area is covered by forests. The total population of the district (2011 census) was 15.40 lakhs with 10.56 lakhs residing in rural areas.

Kolar is also one of the drought prone district in the state and which receives an average rainfall of 739 mm, 70 per cent of which is received during southwest monsoon. The net sown area was 3.54 lakh hectares of which only 24 per cent of the area is having irrigation facilities. The major crops grown in the study area are Ragi, Maize, Grapes, Tomato and other vegetables. Mulberry cultivation and Sericulture is also the predominant activity in the study area. The productivity of cocoon in the district is 900 Kilograms per hectare which is more than the state average productivity i.e. 610 kilograms per hectare.

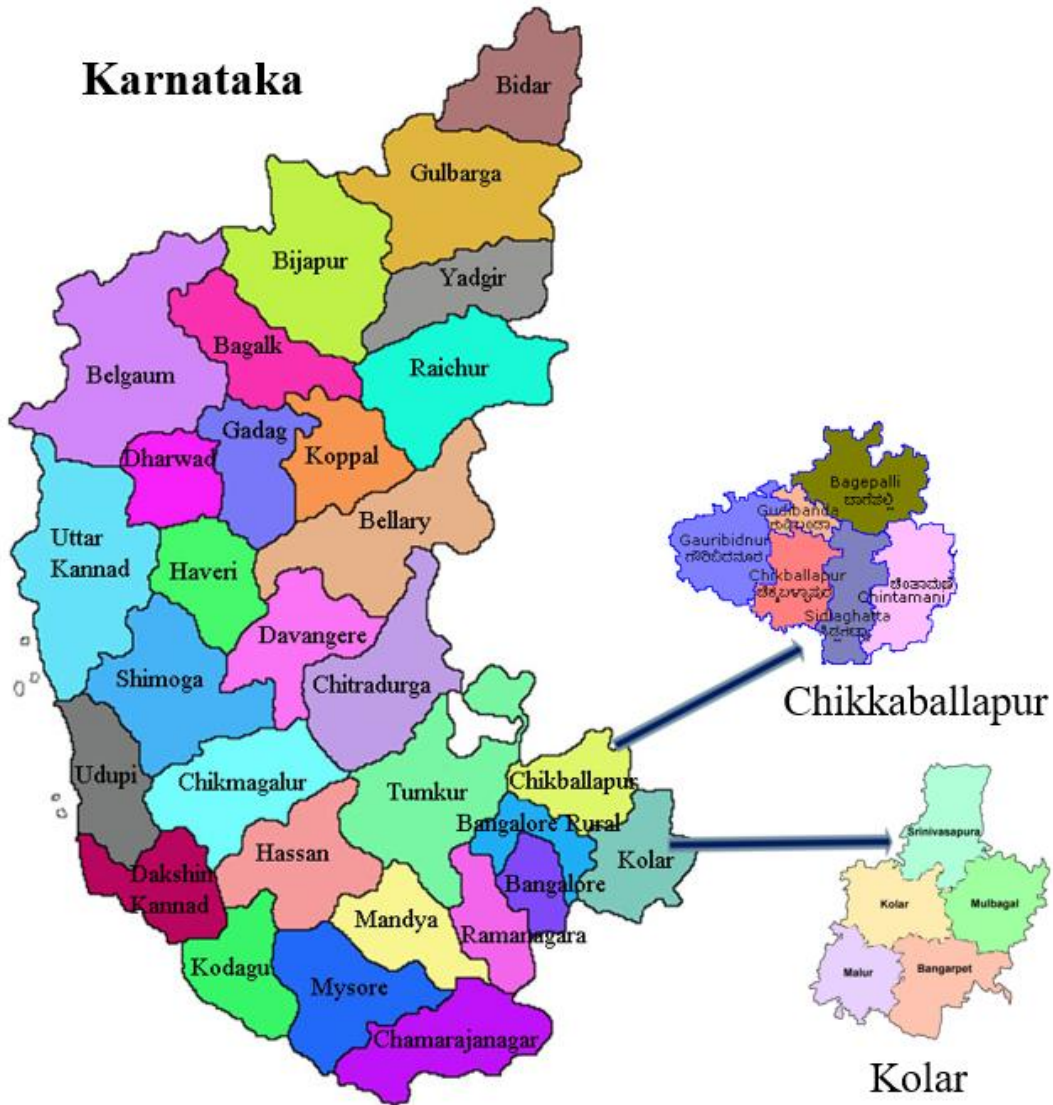


Fig. 3.1: Map showing the location of the study area.

The soils of Kolar district ranges from red loamy soil to red sandy soil and lateritic soil. Palar, South Pennar, Uttara and Dakshina Pinakini are the major rivers which flows in the district. There are no perennial rivers in the district as all the rivers which flows in the district are small and seasonal.

3.2 Sampling procedure

Simple random sampling method was employed for the selection of rural households and data was collected from both farm and non-farm families through personal interview method by using pre-tested well-structured schedule. Kolar and Chikkaballapur district were selected for the study. From among the six taluks of Chikkaballapur, Sidlaghatta and Chikkaballapur taluks were selected purposively based on taluks having lowest and highest per capita Income. In Sidlaghatta taluk, Kempanahalli and Yannanguru villages were selected randomly. In Chikkaballapur taluk, Bommanahalli and Hosahudya villages were randomly selected. From among the five taluks of Kolar, Kolar and Malur taluks were selected. In Kolar, Chowdadenahalli and Medihala villages were selected and Banahalli and Huladenahalli villages were selected from Malur taluk. Primarily, data pertaining to various socio-economic indicators, different sources of income and expenditure was collected from sample rural households.

A total of 160 sample households which comprises of small and marginal farmers, medium farmers, large farmers and also non-farm households were selected. The rural households were classified into four categories, viz. marginal and small (upto 2 ha), medium (2-4 ha), large (> 4 ha) and non-farm based on the size of operated area.

The distribution of sample respondents is presented in Tables 3.2 and 3.3.

Table 3.1.: Demographic indicators of the study area

Sl. No.	Particulars	Karnataka State	Chikkaballapur	Kolar
1	Geographic area (km ²)	191791	4244	4012
2	Taluks (No.)	227	6	5
3	Number of households (lakh)	133.57	2.84	3.33
4	Rural population (lakh)	375 (61.33)	9.74	10.56
5	Urban population (lakh)	236 (38.67)	2.81	4.80
6	Population (lakh)	611	12.55	15.40
7	Number of farmers (lakh)	65.80	2.26	1.83
8	Number of agricultural labourers (lakh)	71.55	1.54	2.01
9	Decadal population Growth rate (%)	15.68	9.23	10.77
10	Density of population (per Km ²)	319	295	387
11	Literacy ratio (%)	75.4	69.76	74.39
12	Sex ratio	973	972	976
13	Average rainfall (mm)	1165	677	739
14	Cultivable land (lakh ha)	133.2	1.71	NA
15	Net Irrigated Area (lakh ha)	36.6	0.50	NA

Source: Chikkaballapur district at a glance 2014-15, Karnataka at Glance 2013-14, Census of India 2011.

Table 3.2: Composition of sample respondents of the study

Sl. No.	District	Taluk	No. of Households
1	Chikkaballapur	Chikkaballapur	40
		Sidlaghatta	40
2	Kolar	Kolar	40
		Malur	40
		Total	160

Table 3.3: Details of respondents, villages and taluks selected for the study in Chikkaballapur and Kolar districts

Sl. No.	Taluk	Village	No. of Households
1	Chikkaballapur	Bommanahalli	20
		Hosahudya	20
2	Sidlaghatta	Kempanahalli	20
		Yannanguru	20
3	Kolar	Chowdadenahalli	20
		Medihala	20
4	Malur	Banahalli	20
		Huladenahalli	20
		Total	160

3.3 Nature and source of data

The sample rural households were interviewed personally using a pre - tested schedule. The data on various socioeconomic characteristics, land holdings, cropping pattern, farm inventory and household assets, cost involved in different activities, income from different sources, information of expenditure on various food and non-food items etc. was collected.

3.3.1 Period of study

The required data pertaining to year 2017-18 was collected through personal interview of the rural households in the study area during December 2017 to March 2018.

3.4 Analytical tools and techniques

To analyze the data and fulfil the specific objectives of the study, based on the variables in the study, nature and extent of data, the following analytical tools and techniques were used.

3.4.1 Socio-economic condition of rural households

To study the socio-economic characteristics different categories of rural households, tabular analysis and percentages were used. Different socio-economic characteristics considered in the study are presented in this section.

3.4.1. Socio-economic characteristics considered are

- a. Age of the head of the households
- b. Education level of the head of the households
- c. Family type in which the respondents were living
- d. Family size of the sample respondents
- e. Caste of the respondents

Measures of central tendency i.e. mean and percentages were used to analyze the various socio-economic indicators.

3.4.2 Cropping pattern and Crop diversity index

To know the extent of diversification of crops across different categories of rural households in the study area Simpson Index was used.

Simpson Index is calculated by the equation:

$$SI = 1 - \sum_{i=1}^N P_i^2$$

Where, $P_i = A_i / \sum A_i$ is the proportion of the i^{th} activity in acreage.

If the value of Simpson index is near to zero which indicates the farm households in the study are specialized in growing a particular crop and if it is close to one, which indicates the particular category of rural households following diversification of crops.

3.4.2 Income from different sources

To calculate the income from the crop cultivation, livestock and other sources different cost concepts were considered and returns were calculated using tabular analysis.

The total costs were divided into three broad categories:

- a. Variable costs
- b. Fixed costs
- c. Marketing costs

a. Variable costs:

Variable costs include cost of seeds/seedlings, farmyard manure, fertilizers, plant protection chemicals, wages of human, bullock and machine labour used in various cultivation practices etc.

i. Seed/ Seedlings:

It is the actual amount paid by the respondents for the purchase of seeds/seedlings/ saplings was considered.

ii. Farmyard manure:

The prevailing market price per tractor load in the area concerned was used to impute the value of farmyard manure produced on the farm and also cost of transportation of the same is considered.

iii. Fertilizers and plant protection chemicals:

It is actual price of the fertilizes and plant protection chemicals and also cost of transportation of the same is considered.

iv. Labour:

The cost of hired labour was calculated at the prevailing wage rates paid per day (8 hours) in the study area for men, women, bullock pairs and machine labour. The imputed value of family particularly in terms of human, animal and machinery was calculated considering the prevailing market rate in this region.

vi. Interest on working capital:

The working capital consists of the expenditure on labour, seedlings, manure, fertilizers, plant protection chemicals, irrigation etc. Interest on operational capital was calculated at the rate of 7 per cent per annum.

b. Fixed costs:

It includes rental value of land, land revenue and depreciation on farm assets used in production process.

Fixed cost components includes

i. Interest on fixed capital:

Interest charges on fixed capital were at 10 per cent.

ii. Land revenue:

It is the actual amount of land revenue paid by farmers.

iii. Rental value of land:

It is based on the rent paid/received for leasing in or leasing out is considered.

c. Marketing costs:

It includes cost of packing, loading and unloading charges, hamali charges, transportation costs, market cess and miscellaneous charges.

d. Cost of cultivation:

It is the sum of variable costs and fixed costs and expressed on per acre basis.

e. Total cost (TC):

Total cost is the sum of cost of cultivation per acre including cost of marketing the produce.

3.4.1.2 Output and returns:

i. Gross returns: Gross returns per acre were calculated as follows

$$\text{Gross Returns (GR)} = \text{yield} * \text{price}$$

ii. Net returns over variable costs: It is the gross returns minus variable costs.

$$\text{Net returns over variable costs} = \text{GR} - \text{TVC}$$

iii. Net returns over cost of cultivation: It is the gross returns minus variable costs plus fixed costs.

$$\text{Net returns over cost of cultivation} = \text{GR} - (\text{TVC} + \text{TFC})$$

iv. Net returns over total cost: It is the gross returns minus cost of cultivation plus marketing cost.

$$\text{Net returns over total cost} = \text{GR} - (\text{TC} + \text{MC})$$

v. Net returns per rupee of investment: Worked out by taking the ratio of net return to total cost.

$$\text{Net return per rupee of investment} = \text{Net returns} / \text{Total cost}$$

Net returns over the total cost/ expenditure incurred in particular enterprise was considered as income from that particular enterprise.

3.4.3 Adequacy of Income to meet expenditure

To know the adequacy of income to meet the expenditure, income and expenditure was taken into account and the Income –consumption ratio is calculated as follows.

$$\text{Income –consumption ratio} = \text{Average annual income} / \text{Average Annual expenditure}$$

If the income-consumption ratio is more than one it indicates income is adequate enough to meet the expenditure and vice-versa.

Agriculture income- Consumption ratio was also calculated to know the adequacy of agriculture income to meet the expenditure (Singh, 2013).

Agriculture Income- Consumption ratio= Annual agriculture income/Annual expenditure

If the agriculture income-consumption ratio is more than one which indicate the agriculture income alone is adequate enough to meet the expenditure. It is calculated only for farm households.

3.4.4 Consumption Pattern and Consumption Elasticity

Consumption pattern and Expenditure elasticity

Consumption expenditure on different food and nonfood items was analyzed using tabular analysis. Mean and percentages were used to compare the expenditure on different items by different categories of rural households.

The expenditure elasticities (E_c) for each food/nonfood items is calculated using formula

$$E_c = (dC/dY) * (Y/C)$$

Where,

E_c = Consumption elasticity

C = Consumption expenditure on particular food/nonfood items (₹)

Y = Income (₹)

(dC/dY) = Ratio of change in consumption to the change in income

Marginal Propensity to Consume

It is the ratio change in consumption to the change in income. It was calculated through regression analysis using consumption function

$$C = a + bY$$

Whereas,

C = Consumption (₹)

b = Marginal propensity to consume

Y = Income (₹)

3.5 Concepts and Definitions

Household: A group of persons living together excluding temporary visitors.

Family size: It is the total number of persons living in a family.

Categories of Rural Households

- i. Non-cultivators: Households dependent mainly on non-farm activities for their livelihood.
- ii. Small and Marginal farmer: Household having a land holding up to 5 acres.
- iii. Medium farmer: The household having a land holding of more than 5 acres but up to 10 acres.
- iv. Large farmer: The household having a land holding of more than 10 acres.

Sources of Income

- i. Agriculture: It included income from the cultivation of cereals, pulses, oilseeds, fibres, sugarcane, fruits, vegetables, floriculture, spices, medicinal and aromatic plants and plantation crops.
- ii. Livestock: It included value of output from the dairy, poultry, sheep, goats and also piggery.
- iii. Wages and Salaries: These covered farm and non-farm wage earnings and salaries.
- iv. Non-farm Business: It included income from petty business, artisans, repairing and other public and private services.
- v. Transfer payments includes different types of pension.

Consumption Pattern

- i. Consumption expenditure: It is the expenditure incurred on different food and nonfood items during reference period.
- ii. Food items includes cereals, pulses, vegetables, fruits, meat, fish, egg, milk and milk products, edible oil, sugar and jaggery, beverages and intoxicants etc.
- iii. Nonfood expenditure includes expenditure on clothing, education, medical expenses, fuel and electricity, entertainment, celebration of festivals and other social obligations etc.
- iv. Monthly per capita expenditure (MPCE): It is the total monthly expenditure divided by family size.

IV RESULTS AND DISCUSSION

The data collected from the different categories of rural households in the study area was analyzed using various statistical tools and the major findings of the study are presented under the following headings in consonance with the specific objectives of the study.

- 4.1 Socio-economic characteristics of the different categories of rural households.
- 4.2 Farm inventory, household assets and livestock inventory
- 4.3 Cropping pattern of different categories of rural households
- 4.4 Income of rural households from different sources.
- 4.5 Adequacy of income to meet the expenditure.
- 4.6 Consumption pattern of rural households.
- 4.7 Consumption elasticities of different categories of rural households.

4.1 Socio-economic characteristics of the different categories of rural households.

The socio-economic characteristics of the sample rural households is a pre-requisite to have a sound impact on the decision-making process which influences the income and expenditure pattern of different categories of rural households. Different socio-economic characteristics such as age, education status, family size, family type, caste, land holding etc. are presented under following section under different sub-headings.

The distribution of sample rural households by age, education level, family size, family type and caste were furnished in Table 4.1 to Table 4.6.

4.1.1 Distribution of rural households by age

Age wise distribution of sample respondents revealed that majority of head of the household (50 %) belongs to the old age group (More than 47 years), 28.75 per cent of the respondents belongs to the age group of young (Less than 40 years) and 21.25 per cent were aged between 40-47 years (middle age).

Category wise analysis indicated that among non-cultivators majority of the respondents belongs to young age group (47.37 %) followed by old age group (34.21 %). Among small and marginal and medium farmers more than half of the respondents belongs to the old age group. Among large farmers, half of the

respondents belongs to the middle age group (50 %) followed by old age group (28.75 %) and only 16.67 per cent of them belongs to young age group (Table 4.1).

Table 4.1: Age wise distribution of different categories of rural households.

Sl. No.	Age Category	Non cultivators	Small and marginal	Medium farmers	Large farmers	Total
1	Young (<40 years)	18 (47.37)	22 (26.19)	4 (15.38)	2 (16.67)	46 (28.75)
2	Middle (40-47 years)	7 (18.42)	14 (16.67)	7 (26.92)	6 (50.00)	34 (21.25)
3	Old (> 47 years)	13 (34.21)	48 (57.14)	15 (57.69)	4 (33.33)	80 (50.00)
	Total	38 (100)	84 (100)	26 (100)	12 (100)	160 (100)

Note: Figures in parentheses represent the percentage of particular category households belong to particular age group.

4.1.2 Distribution of rural households by education level

Education is the important factor which influence the managerial and technical ability of the rural households which in turn influences the income and expenditure pattern of the households.

With respect to the education level of sample households, 33.75 per cent of the respondents were studied up to Secondary education level (up to SSLC), followed by 22.50 per cent of them are illiterate and 22.50 per cent of the respondents had primary education. About 11.80 per cent of the sample respondents had studied upto pre-university course (11 to 12th standard) and only 9.38 per cent of sample rural households were studied up to degree and no sample households had acquired post graduate degree (Table 4.2).

Distribution of different categories of rural households by education level (Table 4.2) showed that among non-cultivators, 28.95 per cent of the respondents had studied up to secondary education level, majority of the small and marginal farmers also studied up to secondary education level. Among medium farmers, 26.92 per cent of the respondents studied up to secondary level and another 26.92 per cent of the respondents had studied up to degree. Among large farmers, more than half of the

respondents studied up to secondary education. It is important to note that extent of illiteracy was more in case of non-cultivators (26.32 %) followed by small and marginal farmers (22.19 %), medium farmers (15.38 %) and large farmers (0.00 %) which is mainly because the non-cultivators were mainly engaged in unskilled sectors like construction, black smith and few were working in hotels which do not demand education.

Table 4.2: Distribution of rural households by education level

Sl. No.	Education Level	Non-Cultivators	Small and marginal	Medium farmers	Large farmers	Total
1	Illiterate	10 (26.32)	22 (26.19)	4 (15.38)	0 (0.00)	36 (22.50)
2	Primary	11 (28.95)	19 (22.62)	5 (19.23)	1 (8.33)	36 (22.50)
3	Secondary	11 (28.95)	29 (34.52)	7 (26.92)	7 (58.33)	54 (33.75)
4	PUC	4 (10.53)	10 (11.90)	3 (11.54)	2 (16.67)	19 (11.87)
5	Degree	2 (5.26)	4 (4.76)	7 (26.92)	2 (16.67)	15 (9.38)
6	PG	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	Total	38 (100)	84 (100)	26 (100)	12 (100)	160 (100)

Note: Figures in parentheses represent the percentages.

4.1.3 Distribution of rural households by family type

Majority of the rural households were living in nuclear family system (82.50 %) followed by joint family type (17.50 %). It was evident from the study that more than three-fourth of the respondents (82.50 %) were living in nuclear family. It shows that the nuclear family system was more prevalent in the study area. This could be observed widely in lower socio-economic society particularly in rural India (Table 4.30).

Category wise analysis showed that among non-cultivators, small, marginal and medium farmers more than three-fourth of the respondents live in nuclear family system. The number of respondents living in joint family system were more in large farmers followed by small and marginal farmers. The number of respondents living in

nuclear family system are more in medium farmers (92.41 %) followed by Non-cultivators (89.47 %).

The minimal number of joint families in the rural area is because of the more and more of rural young population were migrating to the urban areas in search of jobs and to give better education to their children (Table 4.3).

Table 4.3: Distribution of rural households by family type

Sl. No.	Family Type	Non-Cultivators	Small and Marginal	Medium farmers	Large Farmers	Total
1	Nuclear	34 (89.47)	67 (79.76)	24 (92.31)	7 (58.33)	132 (82.50)
2	Joint	4 (10.53)	17 (20.24)	2 (7.69)	5 (41.67)	28 (17.50)
	Total	38 (100)	84 (100)	26 (100)	12 (100)	160 100

Note: Figures in parentheses indicate the percentage.

Table 4.4: Distribution of rural households by family size

Sl. No.	Family Size	Non-Cultivators	Small and Marginal	Medium	Large Farmers	Total
1	Small (Up to 4 members)	16 (42.11)	39 (46.43)	10 (38.46)	1 (8.33)	66 (41.25)
2	Medium (5-8 members)	22 (57.89)	34 (40.48)	13 (50.00)	7 (58.33)	76 (47.5)
3.	Large (> 8 members)	0 (0.00)	11 (13.10)	3 (11.54)	4 (33.33)	18 (11.25)
	Total	38 (100)	84 (100)	26 (100)	12 (100)	160 (100)

Note: Figures in parentheses represent the percentage.

4.1.4 Family size of the different categories of rural households

Regarding the size of the family, about 41.25 per cent of the rural households had 1-4 members in their family which comes under the category of small family. About 47.50 per cent of the sample households were living in medium size family having 5-8 members in the family and it was clear that only 11.25 per cent of the sample respondents were living in large family (more than 8 members).

Among all the categories of rural households, number of respondents living in small size family found to be highest in small and marginal farmers (46.43 %) followed by non-cultivators (42.11 %). The respondents belonging to medium size family were highest in large farmers (58.33 %) followed by non-cultivators (57.89 %). It was also evident from the study that 33.33 per cent of the large farmers are living in a family having more than 8 members which was highest among all the categories and no respondents in non-cultivators belongs to large size family (Table 4.4)

4.1.5 Distribution of rural households by caste

Majority of the respondents (65.63 %) belongs to the Other Backward Classes (OBC) followed by Scheduled Caste (23.75 %), General (8.13 %) and only 2.50 per cent of the sample respondents belongs to the category of Scheduled Tribes (ST). These results are in line with the findings of the study done by Nandini (2013).

Category wise analysis showed that the majority (57.89 %) of the non-cultivators belongs to Scheduled caste followed by OBC (28.95 %). Among small and marginal farmers, 76.19 per cent of the households belongs to the Other Backward Classes followed by Scheduled caste (14.29 %). Among medium and large farmers majority of farmers belongs to the caste group of Other Backward Classes followed by Scheduled caste group (Table 4.5).

Table 4.5: Distribution of rural households by caste

Sl. No.	Caste group	Non-Cultivators	Small and marginal	Medium	Large	Total
1	General	4 (10.53)	5 (5.95)	2 (7.69)	2 (16.67)	13 (8.13)
2	OBC	11 (28.95)	64 (76.19)	21 (80.77)	9 (75.00)	105 (65.63)
3	SC	22 (57.89)	12 (14.29)	3 (11.54)	1 (8.33)	38 (23.75)
4	ST	1(2.63)	3 (3.57)	0 (0.00)	0 (0.00)	4 (2.5)
	Total	38 (100)	84 (100)	26 (100)	12 (100)	160 (100)

Note: Figures in parenthesis represent the percentages.

4.1.6 Average land holding of different categories of rural households.

Even though non-cultivators depend mainly on non-farm activities for their livelihood, on an average non-cultivators own 0.32 acres of land which is leased out to farmers and they were also involved in agricultural labour work. Average land holding of the small and marginal, medium and large farmers was 2.46, 5.64 and 12.79 acres respectively (Table 4.6). Overall average land holding of the sample rural households was 5.34 acres. It was also evident from the study that among farm households more than half (52.50 %) of the households were small and marginal followed 23.75 per cent were non-cultivators (fig. 1). These results are in line with the findings of study conducted by Kamal Vatta *et al.* (2008).

Table 4.6: Average land holding of different categories of rural households

Sl. No.	Household category	Sample size	% to total households	% to farm households	Land Holding (Acres)
1	Non- Cultivators	38	23.75	-	0.32
2	Small and Marginal	84	52.50	68.85	2.46
3	Medium Farmers	26	16.25	21.31	5.64
4	Large Farmers	12	7.50	9.84	12.79
	Total	160	100.00	100.00	5.34

4.2.1 Farm inventory and household assets possessed by rural households

Farm inventory and household assets also one of the indicator of socioeconomic status of the rural households and hence possession of farm inventory and household assets by different categories of rural households is furnished in Table 4.7.

It was evident from the study that 15.57 per cent of the farm households owned tractors and 13.93 per cent of farm households owned cultivators. About 59.84 per cent of the farm households owned spade/pickaxe as they were essential implements for different agricultural operations. About 46.72 per cent of the respondents owned cattle/buffalo shed as livestock rearing was the major economic activity apart from agriculture.

Household assets includes 98.13 per cent of the total households own television and 67.50 per cent of the total households own motor cycle and only 20 per

cent of the total households own refrigerator and 10 per cent of total households own car/jeep (Table 4.7).

4.2.2 Livestock inventory across different categories of rural households

With respect to the draught animal/ Bullock pair possession, Highest number of large farmers (17 %) followed by small and marginal farmers (6 %) and medium famers (4 %) owned draught animal, whereas only small and marginal and medium farmers are owning local cows. With respect to cross breed cow, 54 per cent of the medium farmers followed by 51 per cent of small and marginal famers and 42 per cent of the large farmers owned cross breed cow. The percentage of non-cultivators, small and marginal farmer, medium and large farmers owning buffalo are 3, 11, 15 and 17 per cent respectively and 3 per cent of non-cultivators, 13 per cent of small farmers, 8 per cent of medium and 17 per cent of large farmers are owning sheep. The percentage of non-cultivators, small and marginal farmer, medium and large farmers owning goat are 5, 6, 4 and 8 per cent respectively. About 3 per cent of the non-cultivators, 4 per cent of the small and marginal and 17 per cent of the large farmers are owning poultry birds (Table 4.8).

4.3 Cropping pattern

4.3.1 Small and marginal farmers

The cropping pattern of small and marginal farmers in the study area showed that the crop with the highest area under cultivation was ragi in kharif with 61.79 per cent (119.28 acres) followed by maize with 5.18 per cent (10 ac), tomato with 2.59 per cent (5 acres) and pulses and vegetables with 2.85 per cent (5.5 acres). Simpson's Index of diversity was 0.58 which indicates that there was low level of diversification of crops among small and marginal farmers in the study area as farmers cultivating around 7 crops spread over two seasons with ragi as a major crop (Table 4.9).

4.3.2 Cropping pattern of medium farmers

The cropping pattern of medium farmers in the study area indicated that the crop occupied highest area under cultivation with an area of 48.50 acres followed by mulberry and grapes with a share of 31.36 per cent and 11.02 percent in gross cropped area. Other crops like maize and tomato with 2.87 per cent and 5.20 per cent of gross cropped area respectively. The Simpson's Index of diversity showed 0.71 which

implies that there was a considerable rate of diversification of crops in the study area, as farmers cultivated around eight crops spread over two seasons.

Table 4.7: Farm Inventory and household assets of rural households

I. Farm Inventory				
Sl. No.	Particulars	No.	% to total	% to Farm households
1	Tractor	19	11.88	15.57
2	Cultivator	17	10.63	13.93
3	Land Leveller	5	3.13	4.10
4	Weeder	5	3.13	4.10
5	Power tiller	13	8.13	10.66
6	Sprayers	22	13.75	18.03
7	Iron/ Wooden Plough	39	24.38	31.97
8	Blade Harrow	2	1.25	1.64
9	Hoe	14	8.75	11.48
10	Bullock cart	14	8.75	11.48
11	Seed drill	1	0.63	0.82
12	Spade/ Pickaxe	73	45.63	59.84
13	Axes	53	33.13	43.44
14	Cattle/ buffalo Shed	57	35.63	46.72
15	Store House	5	3.13	4.10
II. Household assets				
16	Television	157	98.13	100.00
17	Refrigerator	32	20.00	26.23
18	Car/ Jeep	17	10.63	13.93
19	Motor Cycle/ Bike	108	67.50	88.52
20	Other	47	29.38	38.52

Note: Other assets includes cycle, mobile, other household equipment's etc.

In case of Farm inventory % to farm households was considered and in case of household assets % to total households was considered.

Table 4.8: Livestock inventory across different categories of rural households

Sl. No.	Particulars	Non-cultivators		Small and marginal farmers		Medium Farmers		Large farmers	
		No.	%	No.	%	No.	%	No.	%
1	Draught Animal	2	3	10	6	2	4	4	17
2	Local cow	0	0	2	1	3	4	0	0
3	Crossbred Cow	13	16	92	51	33	54	29	42
4	Buffalo	4	3	14	11	5	15	4	17
5	Sheep	4	3	138	13	10	8	10	17
6	Goat	11	5	20	6	8	4	2	8
7	Poultry Bird	5	3	6	4	0	0	14000	17

Note: 1. No. represent the number of animals or poultry birds

2. % indicates the Percentage of farmers owning livestock.

Table 4.9: Cropping pattern of small and marginal farmers (n=84)

Season	Crops	Area (acres)	Proportion of GCA
Kharif	Ragi	119.28	61.79
	Maize	10.00	5.18
	Tomato	5.00	2.59
	Pulses	2.00	1.04
	Other Vegetables	3.50	1.81
	Subtotal of Kharif	139.78	72.41
Rabi	Tomato	3.50	1.81
	Other Vegetables	3.50	1.81
	Subtotal of rabi	7.00	3.63
Perennials	Mulberry	32.25	16.71
	Grapes	11.00	5.70
	Other Perennials	3.00	1.55
	Subtotal of Perennials	46.25	23.96
	Gross Cropped area	193.03	
	Simpson's Index	0.58	

Table 4.10: Cropping pattern of medium farmers (n=26)

Season	Crops	Area (acres)	Proportion of GCA
Kharif	Ragi	48.50	41.10
	Maize	3.50	2.97
	Tomato	4.50	3.81
	Pulses	2.00	1.69
	Other Vegetables	2.00	1.69
	Subtotal of Kharif	60.50	51.27
Rabi	Tomato	1.50	1.27
	Other Vegetables	4.00	3.39
	Subtotal of rabi	5.50	4.66
Perennials	Mulberry	37.00	31.36
	Grapes	13.00	11.02
	Other Perennials	2.00	1.69
	Subtotal of Perennials	52.00	44.07
	Gross Cropped area	118.00	
	Simpson's Index	0.71	

4.3.3 Cropping pattern of large farmers

The details of cropping pattern followed by large farmers furnished in table 4.11.

The cropping pattern of large farmers in the study area indicated that the crop with the highest area under cultivation was ragi with an area of 48.50 acres followed by mulberry and maize with a share of 31.36 per cent and 11.02 percent in gross cropped area. Other crops like maize and tomato with 2.87 per cent and 5.20 per cent of gross cropped area respectively. The Simpson's Index of diversity showing 0.74 and it was evident that large farmers follow a considerable rate of diversification of crops in the study area, as farmers cultivated around eight crops spread over three seasons. Most popular crops grown by medium farmers were ragi among cereals, tomato among vegetables and mulberry and grapes among perennial crops. (Table 4.11). Overall large farmers follow more diversification compared to medium and small farmers.

Table 4.11: Cropping pattern of large farmers (n=12)

Season	Crops	Area (acres)	Proportion of GCA
Kharif	Ragi	46.50	42.96
	Maize	4.00	3.70
	Tomato	2.00	1.85
	Pulses	2.00	1.85
	Other Vegetables	1.00	0.92
	Subtotal of Kharif	55.50	51.27
Rabi	Tomato	3.00	2.77
	Other Vegetables	6.00	5.54
	Subtotal of rabi	9.00	8.31
Perennials	Mulberry	20.75	19.17
	Grapes	4.00	3.70
	Other Perennials	19.00	17.55
	Subtotal of Perennials	43.75	40.42
	Gross Cropped area	108.25	
	Simpson's Index	0.74	

4.4 Sources of Income

Even though agriculture is the predominant economic activity in the study area, the rural households were also deriving considerable amount of income from many other activities like livestock rearing, petty business and other non-farm activities.

4.4.1 Sources of income and participation rate of different categories of rural households

Even though non-farm income was the major source of livelihood for the non-cultivators, 26.32 per cent them were deriving 4.34 per cent of their total income from agricultural activities through leasing out of land and they also derive 14.52 per cent of their total income from livestock activities. For small and marginal farmers agriculture was the major source of income followed by non-farm activities as the majority of the small and marginal farmers involved agricultural labour and wage labour. Medium and large farmers derive more than 3/4th of their income from the agriculture and livestock was the second major source of income. Among all the categories of rural households share of transfer payments in their total income was

highest for non-cultivators (1.28 %) followed by small and marginal farmers (1.06 %).

With respect to the participation rate of rural households in different activities, among all the households, livestock participation rate was highest in case of small and marginal farmers (51.19 %) followed by large farmers (50 %) and lowest for non-cultivators (28.95 %). Participation rate in non-farm activities among farm households was also highest in case of small and marginal farmers (26.16 %) followed by large farmers (16.67 %). The number of households benefitted from transfer payments was highest in case of non-farm activities followed by large farmers (Table 4.12)

4.4.2 Distribution of non-cultivators across different activities

Among non-cultivators 26.32 per cent of households were working in public/private sector followed by 23.68 per cent of non-farm rural households depends petty/small scale business. Agricultural labour constitute 21.05 per cent of the total non-cultivators and 18.42 per cent of the total non-farmers work as casual wage labour and only 4 per cent of the respondents are artisans (Table 4.13). The distribution of non-cultivators across different activities was depicted in fig. 4.2.

Table 4.13: Distribution of non-cultivators across different activities

Sl. No.	Particulars	Number	Percentage
1	Agricultural labour	8	21.05
2	Non-agricultural labour	7	18.42
3	Petty Business	9	23.68
4	Artisans	4	10.53
5	Others public and Private Services	10	26.32
	Total	38	100.00

Note: Other public and private service includes government employees such as attender, postman, teacher etc. and private sector includes driver, working in private companies

4.4.3 Annual income of non-cultivators from different sources

Total income of the non-cultivators in the study area was ₹ 123959.99 of which 43.94 per cent of income was derived from wage and salaries as majority of non-farmers work as agricultural labourer and casual wage labourer followed by non-

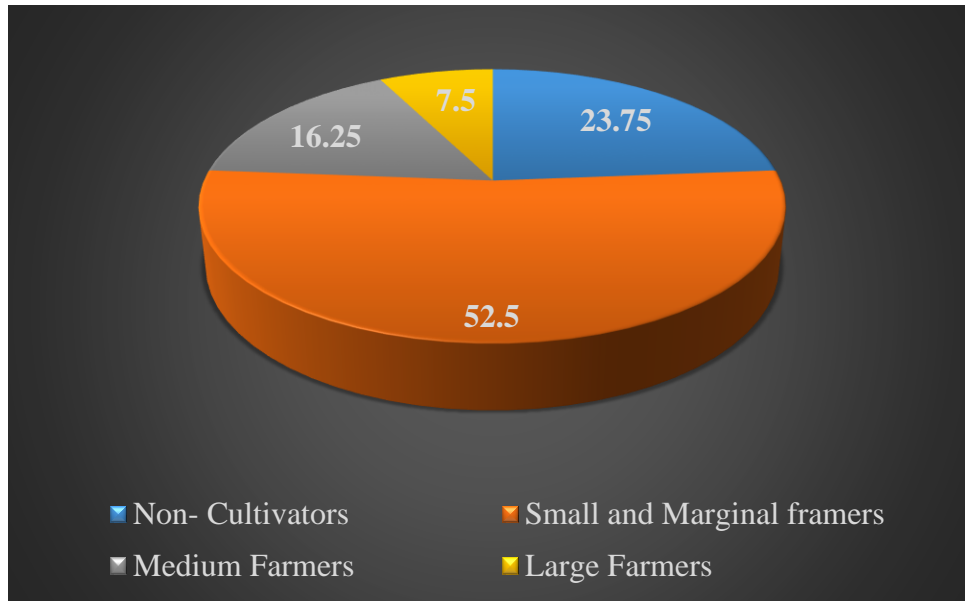


Fig.4.1: Distribution of rural households by size of land holding.

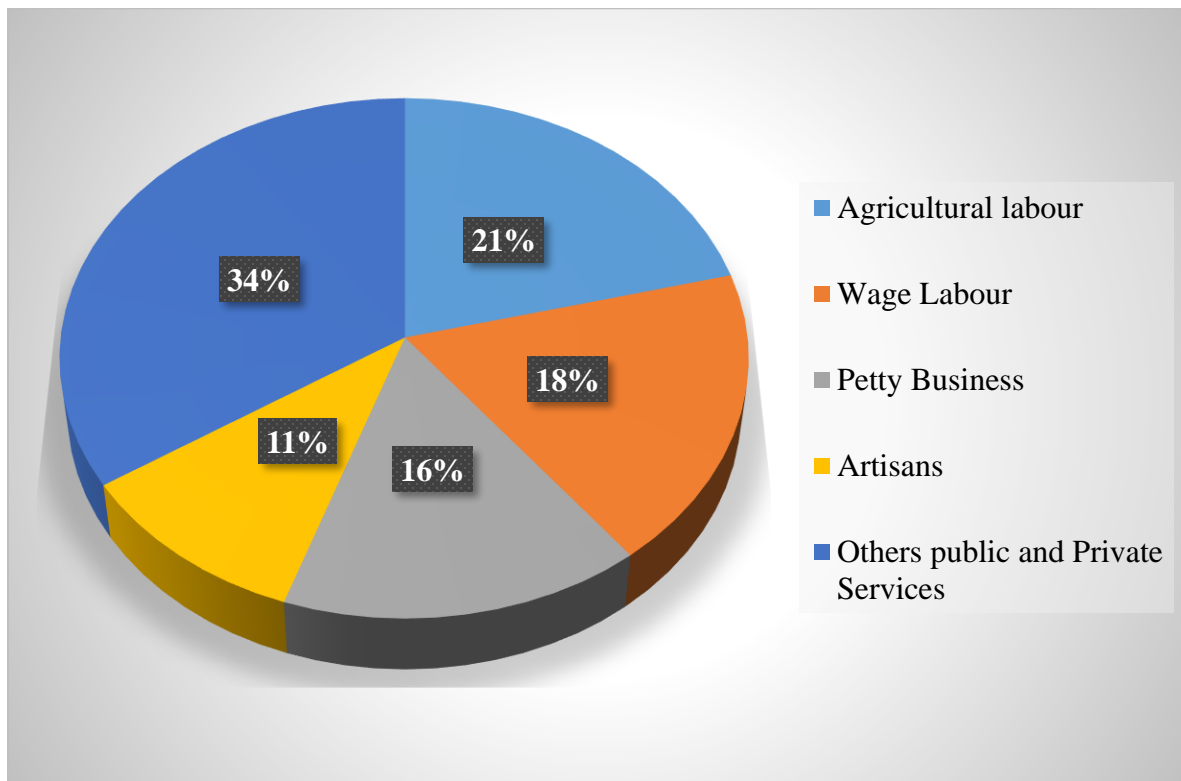


Fig. 4.2: Distribution of Non-farmers across different activities

farm business (35.92 %) which includes petty business and other small-scale activities and they also derive 14.52 per cent of their total income from livestock rearing. The share of crop cultivation was only 4.34 per cent and the non-cultivators also derive a small amount of income in the form of transfer payments (1.27 %) (Table 4.14).

Table 4.14: Annual income of non-cultivators from different sources

Sl. No	Particulars	Income (₹)	Percentage
1	Income from leasing out the land	5384.21	4.34
2	Livestock	17996.84	14.52
3	Wages	54473.68	43.94
4	Non-Farm Business	44526.32	35.92
5	Transfer payments	1578.94	1.27
	Total	123959.99	100.00

Note: 1. Transfer payments includes pension (old age, widow pension), scholarship etc.
2. Non-farm business includes petty business/ small scale enterprises, public/ b private service etc.

4.4.4 Annual Income of small and marginal farmers from different sources

Annual income of the small and large farmers in the study was ₹ 143867.57 and the agriculture constitute the major share in income of the small and marginal farmers (56.80 %) followed by non-farm income (28.81 %) as the majority of the small and marginal farmers work as wage labourer in the off-season. Income from cocoon production (49.635) constitute a major share in total income from the agriculture which is because the majority of small and marginal farmers are involved in sericulture activities and net returns are more in case of sericulture compared to the other crop production activities. Share of livestock in total income of the small and marginal farmers was 13.33 per cent and that of transfer payments was 1.06 per cent (Table 4.15).

4.4.5 Annual Income of medium farmers from different sources

Annual income of the medium farmers was ₹ 198751.22 and the agriculture constitute the major share in income of the medium farmers (88.92 %) followed by livestock as they derive 6.67 per cent of their total income.

Table 4.12: Income Sources of rural households by land holding size

Sl. No	Household category	Sample size	% to total households	Income Sources							
				Agriculture		Livestock		Non-Farm Income		Transfer payments	
				Participati on rate (%)	Share in total Income (%)	Participati on rate (%)	Share in total Income (%)	Participati on rate (%)	Share in total Income (%)	Benefic iary (%)	Share in total Income
1	Non-Cultivators	38	23.75	26.32	4.34	28.95	14.52	100.00	79.86	23.68	1.28
2	Small and Marginal framers	84	52.50	100.00	56.80	51.19	13.33	26.19	28.81	17.86	1.06
3	Medium Farmers	26	16.25	100.00	88.92	46.15	6.67	11.54	3.60	15.38	0.81
4	Large Farmers	12	7.50	100.00	83.03	50.00	14.51	16.67	1.79	33.33	0.67
	Total	160	100.00	81.58	58.27	44.07	12.26	38.60	28.52	22.56	0.96

Note: 1. Participation rate percentage represent the proportion of households involved particular income generating activity.

2. Beneficiary percentage represent the proportion of households benefitted from Transfer payments.

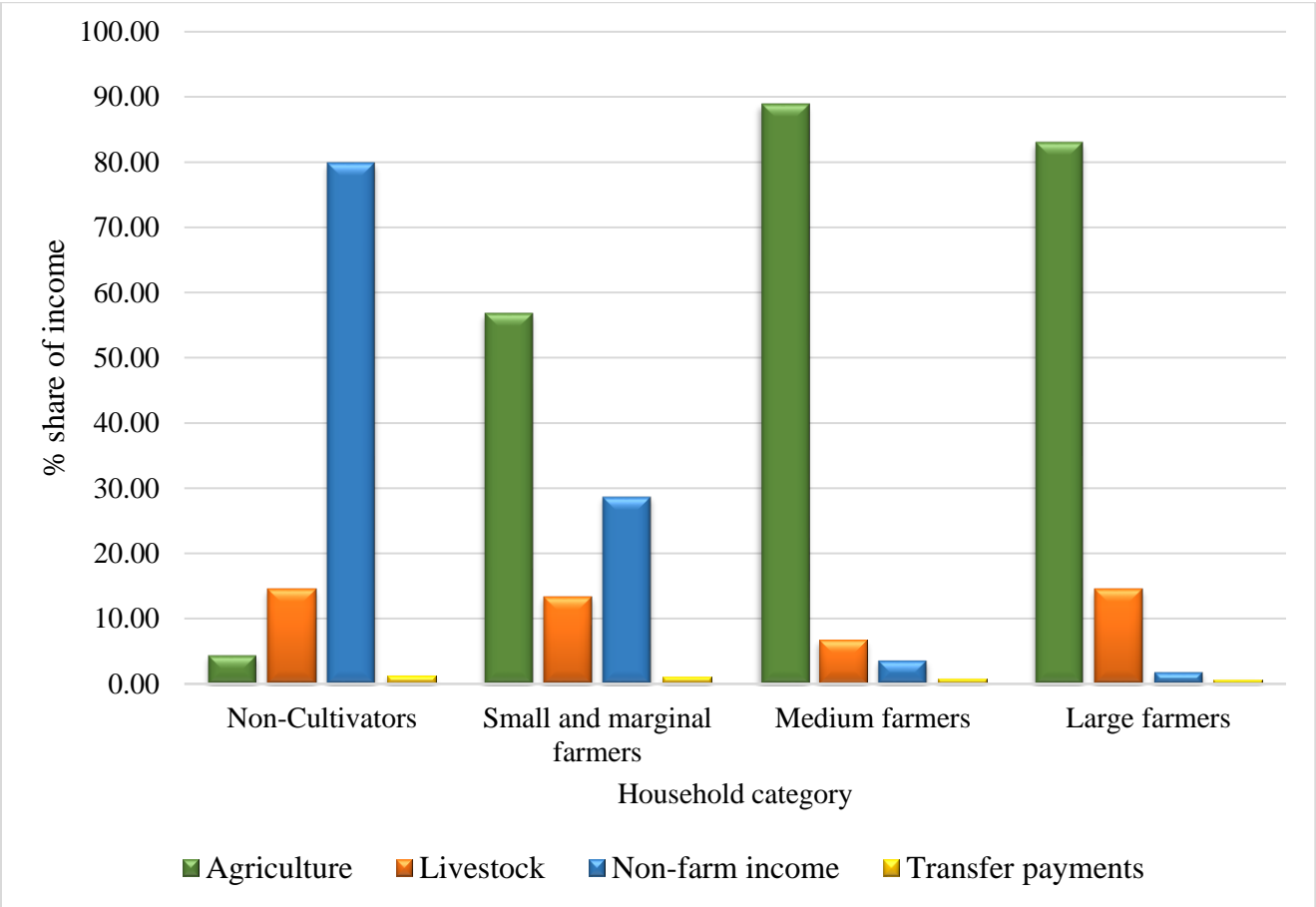


Fig. 4.3: Share of different sources of income across different categories of rural households.

Income from cocoon production constitute a major share in total income from the agriculture which is because of high unit price and more net returns in case of sericulture compared to the other crop production activities. Share of nonfarm income and transfer payments was only 3.60 and 0.81 per cent (Table 4.16).

Table 4.15: Annual Income of small and marginal farmers from different sources

Sl. No.	Particulars	Average Annual Income (₹)	% Share
1	Crop Cultivation	10314.83	7.17
2	Sericulture	71404.76	49.63
3	Livestock	19183.69	13.33
4	Non- farm Income	41446.21	28.81
5	Transfer Payments	1518.07	1.06
	Total Income	143867.57	100.00

Note: 1. Transfer payments includes pension (old age, widow pension), scholarship etc.

2. Non-farm income includes income of petty business/ small scale enterprises, wages and salaries, public/ private service etc.

Table 4.16: Average annual income of medium Farmers from different Sources

Sl. No.	Particulars	Average annual Income (₹)	% Share
1	Crop Cultivation	57297.37	28.83
2	Sericulture	119423.08	60.09
3	Livestock	13261.54	6.67
4	Non-farm income	7153.85	3.60
5	Transfer payments	1615.39	0.81
	Total	198751.22	100.00

Note: 1. Transfer payments includes pension, scholarship etc.

2. Non-farm income includes income of petty business/ small scale enterprises, wages and salaries, public/ private service etc.

4.4.6 Annual Income of large farmers from different sources

Annual income of the large farmers was ₹ 372782.18 and the agriculture constitute the major share in income of the medium farmers followed by livestock as they derive 14.51 per cent of their total income. Income from crop production constitute a major share in total income (49.61 %) because majority of large farmers

are involved in diversified crop production and also they realized economies of scale. The share of income from sericulture was 33.42 per cent. The Share of non-farm income was only 1.79 per cent in total income as majority of the large farmers do not involve in any non-farm activities (Table 4.17).

Among all the farm households share of transfer payments in the total income was lowest for large farmers as majority of them were not eligible for transfer payments.

Share of non-farm income in the total income decreases with increase in the size of land holding and share of crop cultivation in total income of farm households increases with increase in the size of land holding which is because of economies of scale in production and diversification of crops. Share of transfer payments also decreases with increase in size of land holding.

Table 4.17: Average annual income of large Farmers from different sources

Sl. No.	Particulars	Average annual Income (₹)	% Share
1	Crop Cultivation	184933.35	49.61
2	Sericulture	124583.33	33.42
3	Livestock	54098.83	14.51
4	Non-farm	6666.67	1.79
5	Transfer payments	2500.00	0.67
	Total	372782.18	100.00

Note: 1. Transfer payments includes pension, scholarship etc.

2. Non-farm income includes income of petty business/ small scale enterprises, wages and salaries, public/ private service etc.

4.5 Adequacy of Income to meet the expenditure

To assess the adequacy of income to meet the expenditure, Average annual income and average annual expenditure are compared and Income consumption ratio was calculated.

4.5.1 Adequacy of total income to meet the expenditure

Income- consumption ratio of all the rural households in the study area was 1.56 which implies that income is more compared to expenditure indicating the

adequacy of income. The income-consumption ratio was highest in case of large farmers i.e. 2.27 and lowest in case of non-cultivators i.e. 1.08. The income consumption ratio was more than one in all the categories of rural households indicating the adequacy of the income to meet the expenditure. It was evident from the study that among farm households, income- consumption ratio increases with increase in size of land holding (Table 4.18). The results obtained are contrary to the findings of the study undertaken by Narayan and Hemanta Kumar (2012)

Table 4.18: Income consumption ratio across different categories of rural households

Sl. No.	Household category	Average Annual Income (₹)	Average annual Household Expenditure (₹)	Income-expenditure Ratio
1	Non-cultivators	123959.99	114511.92	1.08
2	Small and marginal	143867.57	118674.96	1.21
3	Medium farmers	198751.21	141162.00	1.41
4	Large Farmers	372781.67	164438.50	2.27
	Total Households	209840.11	134696.85	1.56

4.5.2 Adequacy of agriculture income to meet the expenditure

It was important to know the adequacy of agriculture income to meet the expenditure as the majority of the rural households in the study area depends on agriculture for their livelihood. Agriculture income and average annual expenditure are compared and Income consumption ratio was calculated.

Agriculture income- consumption ratio of farm households was 1.34 and farmer category wise analysis revealed that the income-consumption ratio of small and marginal farmers is 0.69 which indicates that the agricultural income alone was not enough to meet the expenditure and small and marginal farmers need to derive the income to meet the excess of expenditure over the agricultural income from other subsidiary activities/ non-farm activities.

Agriculture income was adequate enough to meet the expenditure in case of medium and large farmers as indicated by the more than one agriculture income-consumption ratio viz., 1.25 and 1.88 respectively (Table 4.19).

Table 4.19: Adequacy of Agricultural Income to meet the expenditure of farm households

Sl. No.	Particulars	Small and marginal Farmers	Medium farmers	Large Farmers	Total Farmers
1	Average Annual Income	81719.60	176720.44	309516.68	189318.91
2	Average annual Expenditure	118674.96	141162.00	164438.50	141425.15
3	Income-expenditure Ratio	0.69	1.25	1.88	1.34

4.5.3 Average propensity to consume of different categories of rural households

The average consumption of rural households and average income of different categories of rural households was presented in table 4.3.3. The average propensity to consume was less than one for all the categories of rural households which implies budget surplus. Budget surplus of non-cultivators, small and marginal farmers, medium and large farmers was ₹ 9448.07, ₹ 25192.61, ₹ 57589.21 and ₹ 208343.17 respectively. Average propensity to consume of all the rural households was 0.64 and it was highest for non-farmers (0.92) and lowest for large farmers (0.44). The Average propensity to consume for different categories was presented in table 4.20.

Table 4.20: Average propensity to consume of different categories of rural households

Sl. No.	Household category	Average consumption (₹)	Average Income (₹)	APC	Budget Surplus (₹)
1	Non-cultivators	114511.92	123959.99	0.92	9448.07
2	Small and marginal	118674.96	143867.57	0.82	25192.61
3	Medium farmers	141162	198751.21	0.71	57589.21
4	Large Farmers	164438.5	372781.67	0.44	208343.17
	Total Households	134696.85	209840.11	0.64	75143.26

4.6 Consumption pattern of rural households

The table 4.21 depicts that the average per household monthly expenditure on different food and non-food items and share of the different items in expenditure on food/non-food items. The table also represent the percentage share of different food and non-food items in total expenditure.

It was observed from the table that the share of food items (51.29 %) was more than the non-food items (48.71 %) in total expenditure (figure 4.7). The average monthly household expenditure on food items was ₹ 5757.62 and non-food items was ₹ 5467.13. Among different food items, cereals occupies major share i.e. 30.40 per cent followed by meat and animals products (20.37 %), vegetables (12.55 %), beverages and intoxicants (7.86 %), pulses (6.50 %), edible oil (5.34 %), milk and milk products (5.29 %), Fruits (4.70 %), Sugar and jaggery (3.04 %) in total average monthly household expenditure on food items and dry fruits and nuts occupies lowest share (0.57 %) (fig. 4.3).

Figure 4.5 depicts that education constitute a major share (36.16 %) in per household average monthly expenditure on non-food items followed by entertainment and celebration of Social ceremonies and festivals (19.92 %). Medical expenses constitutes 15.49 per cent, Gas/fuel/ petrol (11.65 %), clothing (11.25 %) and Electricity and other miscellaneous expenses constitutes 5.53 per cent of total monthly expenditure on non-food items (Table 4.21)

4.6.2 Per Capita and per household average monthly expenditure

It was depicted in the table that the monthly expenses per household and per capita on food items was ₹ 5758 and ₹ 1193 respectively which was more than that of the monthly expenses per household and per capita on non-food items viz. ₹ 5467 and ₹ 1103 respectively. It was also showed in the table that the Average monthly expenses per household on both food and non-food items was ₹ 11225 and per capita Average monthly expenses was ₹ 2296 (Table 4.22).

Table 4.21: Average monthly household consumption expenditure and share of different food and non-food items in total expenditure

Sl. No.	Product Category	Average monthly expenditure (₹)	% to expenditure on food/ non food	% of Total expenditure
1	Cereals	1729.73	30.04	15.41
2	Pulses	374.20	6.50	3.33
3	Vegetables	722.59	12.55	6.44
4	Fruits	270.41	4.70	2.41
5	Sugar and Jaggery	175.05	3.04	1.56
6	Dry fruits and nuts	32.63	0.57	0.29
7	Meat and Egg	1172.69	20.37	10.45
8	Milk and Milk Products	304.81	5.29	2.72
9	Edible Oil	307.54	5.34	2.74
10	Beverages and Intoxicants	452.38	7.86	4.03
11	Snacks/ Confectionary and other food items	215.60	3.74	1.92
	Food items	5757.62	100.00	51.29
12	Clothing	614.95	11.25	5.48
13	Education	1976.77	36.16	17.61
14	Medical	847.10	15.49	7.55
15	Gas/ Fuel/ Petrol	636.88	11.65	5.67
16	Electricity	179.31	3.28	1.60
17	Entertainment/ Social obligations	1089.13	19.92	9.70
18	Miscellaneous/ other non-food Expenditure	123.00	2.25	1.10
	Non-food items	5467.13	100.00	48.71

Note: 1. Entertainment/ social obligations includes expenditure for movies, outing, celebration of festivals/ social ceremonies, mobile bill, television bill etc.

2. Other non-food expenditure includes water charges, house tax etc.

Table 4.22: Per capita and per household average monthly expenditure on food and non-food items

Sl. No.	Particulars	Expenditure (₹)		
		Food items	Non Food	Total
1	Monthly Expenses per household	5758	5467	11225
2	Monthly Expenses per capita	1193	1103	2296

4.6.3 Food consumption pattern across different categories of rural households

Category wise analysis of consumption pattern revealed that the non-cultivators spent 34.14 per cent of their total expenditure on cereals followed by 18.92 per cent on meat and egg. Small and marginal farmers spend 32.94 per cent of their expenditure on cereals followed by 19.01 per cent on meat and egg and 10.05 per cent on vegetables. Medium farmers spend 28.05 per cent on cereals followed by 17.74 per cent on meat and egg and 12.06 per cent on vegetables. Cereals constitute 26.35 per cent of the total expenditure on food items by large farmers. Per household monthly expenditure of non-cultivators, small and marginal, medium and large farmers was ₹ 5204.09, ₹ 5239.63, ₹ 5849.72 and ₹ 6737.02 respectively. Average per household monthly expenditure on food items was ₹ 5757.62 (Table 4.23).

Among all the categories cereals constitute the major share in expenditure on food items followed by meat and egg. Cereals constitute the major share because the rural households in the study area were highly dependent on cereal based diet. Meat and egg constitute the second largest share in expenditure on food items which is because of high consumption of meat and chicken and also high prices of the same. Share of cereals in monthly expenditure on food items decreases as land holding size increases as depicted in the table. Share of cereals is highest for non-cultivators, pulses is highest in case of small and marginal farmers, vegetables for large farmers, meat and egg is highest for large farmers. Share of beverages and intoxicant is highest for small and marginal farmers followed by non-cultivators.

4.6.4 Share of food and non-food item in per household monthly expenditure across different categories of rural households

Share of food and non-food items in monthly per household expenditure of non-cultivators was 54.54 and 45.46 respectively and it was 52.98 and 47.02 for small

and marginal farmers. Share of food items in monthly expenditure of medium farmers was 49.73 which is less than the non-food items 51.27 percent and in case of large farmers also share of food items (49.16 %) is less than the non-food items (50.84 %) as depicted in figure 4.6.

It is revealed from the study that the share of food items is more in case of non-cultivators and small and marginal farmers. The share of non-food items is more in case of medium and large farmers. It was also evident from the study that as the size of land holding increases share of food items decreases and visa-versa as high income groups spend more non-food items (Table 4.24).

4.6.5 Share of expenditure on different non-food items across different categories of rural households

Share of expenditure on different non-food items across different categories of rural households is furnished in Table 4.25.

Categories wise analysis of expenditure on non-food items revealed that non-cultivators education constitute the major share in total expenditure on non-food items (25.56 %) followed by entertainment (21.97 %) which includes celebration of festivals and other social obligations, medical expenses constitute 19.30 per cent, clothing (12.92 %), Gas/ fuel (12.92 %). Share of education was 28.85 per cent for small and marginal farmers followed by entertainment (20.05 %) and medical expenses (18.79 %). Medium farmers spend 46.08 per cent of their total expenditure on non-food items for education followed by celebration of festivals and other entertainment activities (16.73 %), medical (12.83 %) and clothing (10.13 %). Large farmers spent 21.27 per cent on education followed by entertainment or celebration of festivals (21.27 %) and medical (13.19 %). Overall share of expenditure on clothing was highest among non-cultivators, education was highest for medium farmers, medical for small and marginal farmers, share of expenditure on entertainment was highest for non-cultivators (21.97 %) followed by large farmers (21.27 %).

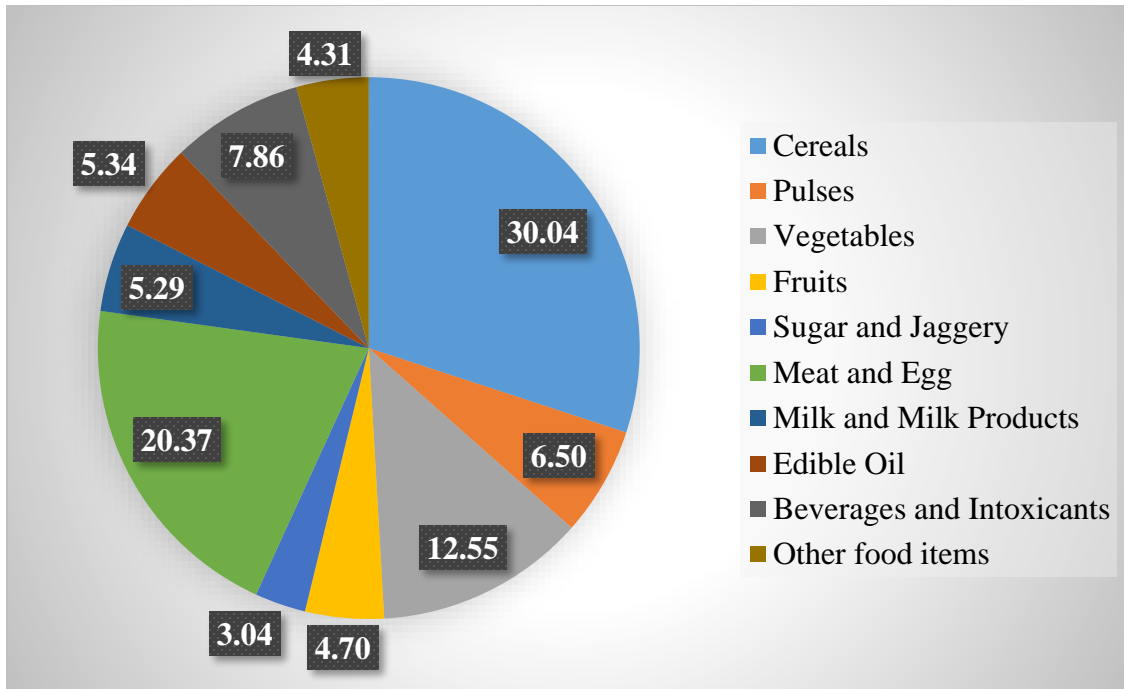


Fig. 4.4: Share of different food items in average monthly expenditure on food.

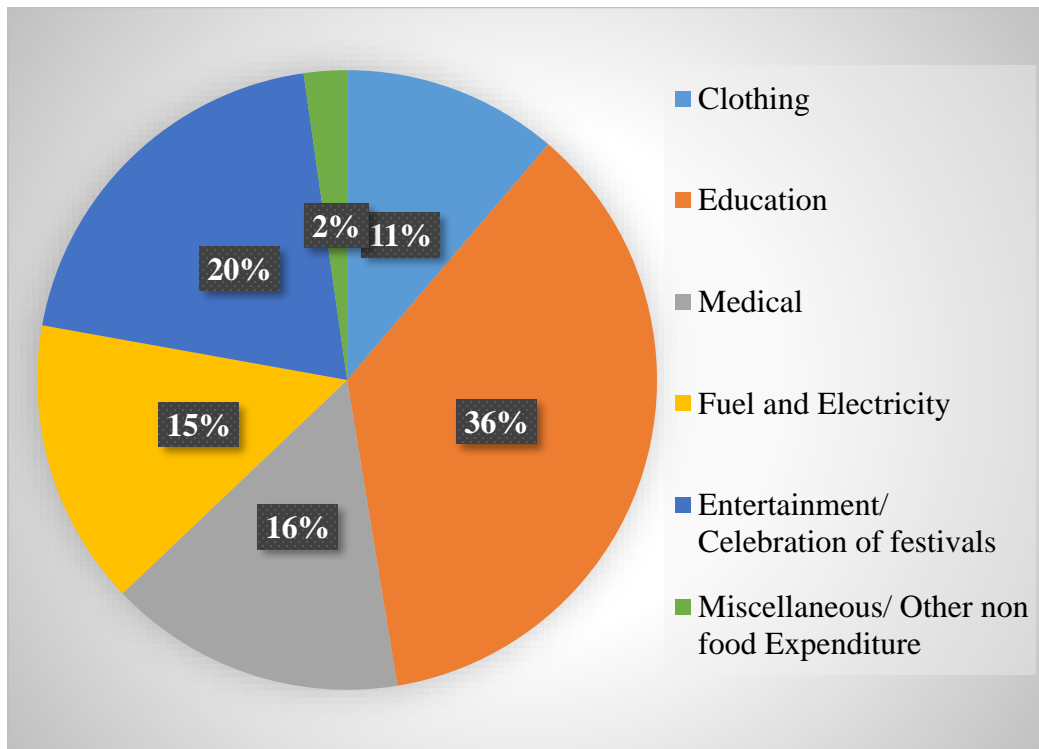


Fig. 4.5: Share of different non-food items in average per household monthly non-food expenditure

Table 4.23: Food consumption pattern across different categories of rural households

Sl. No.	Product Category	Non-Cultivators		Small Farmers		Medium farmers		Large farmers		Total	
		Expenditure (₹)	% share	Expenditure (₹)	% share	Expenditure (₹)	% share	Expenditure (₹)	% share	Expenditure (₹)	% share
1	Cereals	1776.78	34.14	1726.05	32.94	1640.88	28.05	1775.21	26.35	1729.73	30.04
2	Pulses	309.86	5.95	370.53	7.07	392.25	6.71	424.17	6.30	374.20	6.50
3	Vegetables	592.35	11.38	526.33	10.05	705.65	12.06	1066.03	15.82	722.59	12.55
4	Fruits	251.09	4.82	271.72	5.19	291.82	4.99	267.01	3.96	270.41	4.70
5	Sugar and Jaggery	155.47	2.99	157.64	3.01	203.64	3.48	183.45	2.72	175.05	3.04
6	Dryfruits and nuts	9.11	0.18	16.34	0.31	42.53	0.73	62.53	0.93	32.63	0.57
7	Meat and Egg	984.74	18.92	995.97	19.01	1037.53	17.74	1672.52	24.83	1172.69	20.37
8	Milk and Milk Products	293.81	5.65	300.68	5.74	300.19	5.13	324.57	4.82	304.81	5.29
9	Edible Oil	274.84	5.28	281.95	5.38	355.06	6.07	318.31	4.72	307.54	5.34
10	Beverages and Intoxicants	408.91	7.86	447.77	8.55	495.53	8.47	457.31	6.79	452.38	7.86
11	Snacks/ Confectionary and other food items	147.14	2.83	144.65	2.76	384.65	6.58	185.91	2.76	215.59	3.74
	Total	5204.09	100	5239.63	100	5849.72	100	6737.02	100	5757.62	100

Table 4.24: Share of food and non-food item in monthly household expenditure across different categories of rural households

Sl. No.	Product category	Non-Cultivators		Small and marginal farmers		Medium farmers		Large farmers		Total Rural households	
		Expenditure (₹)	% Share	Expenditure (₹)	% Share	Expenditure (₹)	% Share	Expenditure (₹)	% Share	Expenditure (₹)	% Share
1	Food Items	5204.09	54.54	5239.63	52.98	5849.72	49.73	6737.03	49.16	5757.62	51.29
2	Non-Food Items	4338.57	45.46	4649.95	47.02	5913.78	50.27	6966.18	50.84	5467.12	48.71
3	Total	9542.66	100.00	9889.58	100.00	11763.50	100.00	13703.21	100.00	11224.74	100.00

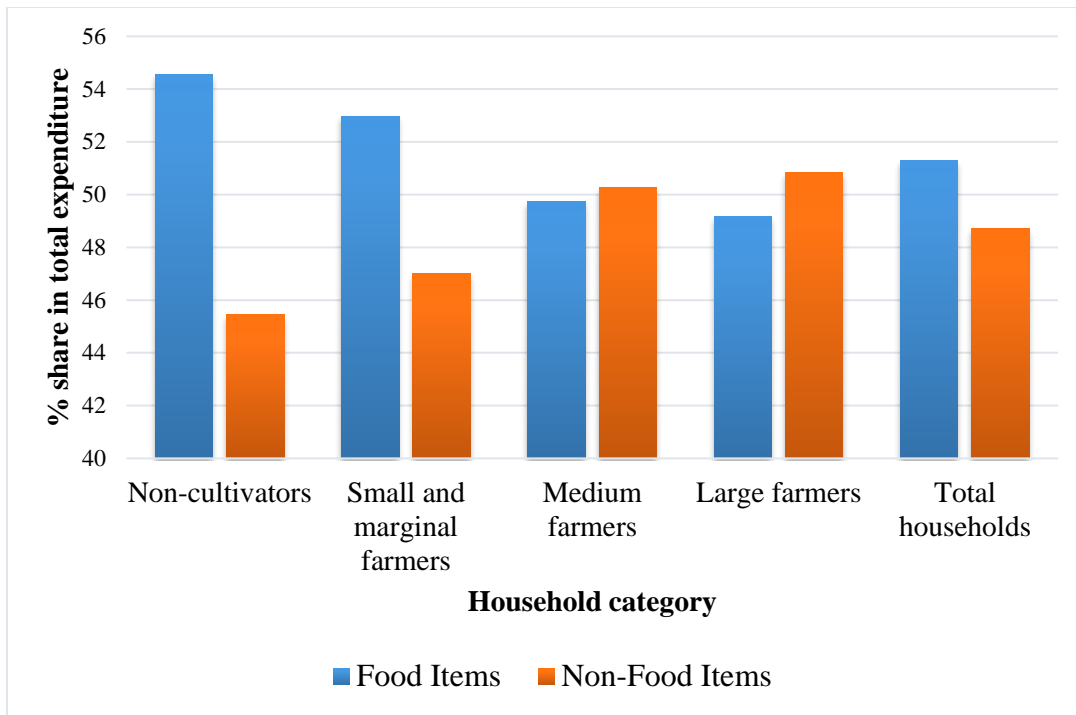


Fig. 4.6: Share of food and non-food items in total per household monthly expenditure across different categories of rural households

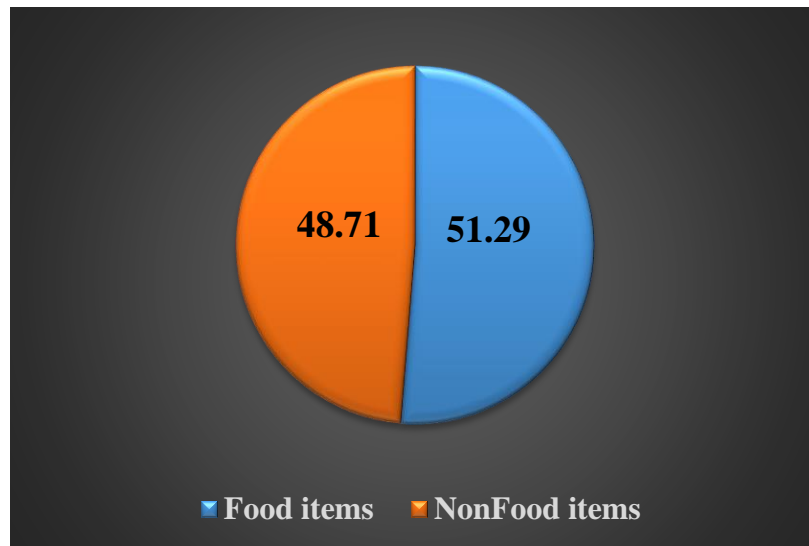


Fig. 4.7: Share of food and non-food items in total expenditure among all the rural households

Table 4.25: Share of different non-food items in total expenditure on non-food items across different categories of rural households

Sl. No.	Product category	Non-cultivators		Small and marginal		Medium		Large		Total	
		Expenditure (₹)	% Share	Expenditure (₹)	% Share	Expenditure (₹)	% Share	Expenditure (₹)	% Share	Expenditure (₹)	% Share
1	Clothing	564.25	13.01	586.56	12.61	598.88	10.13	710.11	10.19	614.95	11.25
2	Education	1109.01	25.56	1341.62	28.85	2725.00	46.08	2731.66	39.21	1976.82	36.16
3	Medical	837.46	19.30	873.61	18.79	758.49	12.83	918.84	13.19	847.10	15.49
4	Gas/ Fuel/ Petrol	560.53	12.92	618.57	13.30	580.00	9.81	788.42	11.32	636.88	11.65
5	Electricity	184.87	4.26	170.00	3.66	151.54	2.56	210.83	3.03	179.31	3.28
6	Entertainment	953.38	21.97	932.08	20.05	989.58	16.73	1481.48	21.27	1089.13	19.92
7	Miscellaneous/ other non-food Expenditure	129.08	2.98	127.51	2.74	110.29	1.86	124.84	1.79	122.93	2.25
	Average Expenditure on Non-food items	4338.57	100.00	4649.95	100.00	5913.78	100.00	6966.18	100.00	5467.12	100.00

Expenditure on non-food items of non-cultivators, small and marginal farmers, medium farmers and large farmers was ₹ 4338.57, ₹ 4649.95, ₹ 5913.78 and ₹ 6966.18 which indicates that expenditure on non-food items increases with increase in size of land holding. Among all households education constitute major share followed by entertainment or celebration of festivals, social ceremonies and other social obligations. Overall average expenditure on non-food items was ₹ 5467.12 of which education and celebration of festivals constitute more than half of the expenditure on non-food items (Table 4.25).

4.7 Marginal propensity to consume and expenditure elasticities of different categories of rural households

Non-cultivators

The expenditure elasticity of all the food items was positive and which indicates that all the food items were normal goods. Cereals were the essential food items and they were staple food in the study area. Among all the food items, expenditure elasticity of cereals was lowest i.e. 0.21. The lowest expenditure elasticity of cereals indicates that the non-cultivators would shift to other commodities if the income changes. The expenditure elasticity of all the food items was less than unity and it is highest for meat and egg (0.83) followed by pulses (0.71), edible oil (0.59), fruits (0.57) and snacks and confectionary items (0.52). Since the lowest expenditure elasticity was found in case of cereals which is because of necessity. If the income increases the non-cultivators will tend to shift the consumption from cereals to fruits and other snacks and confectionary items as indicated by high expenditure elasticity (Table 4.26). Thus there was greater demand for fruits and confectionary items as the income of the household increases. Similar results were reported in the study conducted by Pavithra *et al.* (2009).

Among non-cultivators, marginal propensity to consume was highest for meat and egg (0.08) and which was found significant at one per cent level of significance indicating that the non-cultivators spend higher proportion of their increased income on meat and egg rather than spending on cereals, vegetables, sugar and jaggery as indicated by lower marginal propensity to consume.

Table 4.26: Marginal Propensity to consume and expenditure elasticities of non-cultivators

Sl. No.	Food items	MPC	Expenditure elasticity
1	Cereals	0.02 (1.50)	0.21
2	Pulses	0.04 (2.19) **	0.71
3	Vegetables	0.002(0.44)	0.05
4	Fruits	0.013 (2.69)**	0.57
5	Sugar and jaggery	0.005 (1.85)	0.38
6	Meat and egg	0.08 (4.35)*	0.83
7	Milk and milk products	0.011(2.85)**	0.43
8	Edible Oil	0.015 (3.72)*	0.59
9	Beverages and intoxicants	0.009 (0.78)	0.25
10	Snacks, confectionary and other food items	0.008 (2.34)**	0.52

Note: Figures in parenthesis represents the t value

** indicates significance at 5 per cent.

* indicates significance at 1 per cent.

Small and Marginal Farmers

Positive expenditure elasticity of all the food items indicates that all the food items were normal goods for small and marginal farmers in the study area. Cereals were the essential food items and regarded as staple food in the study area. Highest expenditure elasticity was found for meat and egg (0.52) followed by edible oil (0.46), snacks and confectionary (0.45) and sugar and jaggery (0.41). The lowest elasticity was found for cereals as they serves as staple food in the study area (Table 4.27). Thus there was greater demand for fruits and confectionary items as the income of the household increases. Similar results were reported in the study conducted by Pavithra *et al.* (2009).

Marginal propensity to consume for cereals was highest (0.04) followed by meat and egg (0.02) and snacks and confectionary items (0.02) and it was lowest for sugar and jaggery (0.004) which implies the small and marginal farmers tend spent relatively more

proportion of their additional income for cereals, meat and egg and also on snacks and confectionary items (Table 4.27).

Table 4.27: Marginal propensity to consume and expenditure elasticities of small and marginal farmers

Sl. No.	Food items	MPC	Expenditure elasticity
1	Cereals	0.04 (2.50)**	0.32
2	Pulses	0.01 (2.27)**	0.34
3	Vegetables	0.01 (4.07)*	0.33
4	Fruits	0.005 (2.37)**	0.32
5	Sugar and jaggery	0.004 (3.14)*	0.41
6	Meat and egg	0.02 (6.23)*	0.52
7	Milk and milk products	0.005 (2.37)**	0.24
8	Edible Oil	0.008 (4.15)*	0.46
9	Beverages and intoxicants	0.01 (0.96)	0.35
10	Snacks, confectionary and other food items	0.02 (3.60)*	0.45

Note: Figures in parentheses represents the t value

** indicates significant at 5 per cent level of significance

* indicates significance at 1 per cent level of significance.

Medium farmers

Lowest expenditure elasticity was found for cereals (0.34) followed by pulses (0.37), vegetables (0.40) and fruits (0.45) in case of medium farmers. The highest expenditure elasticity was found for milk and milk products (0.75) followed by sugar and jaggery (0.60), beverages (0.59) and snacks and confectionary (0.52), which indicates that as the income of the medium farmers increases farmers tend to spend more on milk and milk products, beverages and intoxicants and snacks and confectionary items as indicated by the expenditure elasticities (Table 4.28).

Marginal propensity to consume was highest for beverages and intoxicants (0.02) and which is found significant at one per cent level of significance followed by cereals

(0.01), vegetables (0.01), meat and egg (0.01), milk and milk products (0.01), edible oil (0.01) and snacks and confectionary items (0.01). The results clearly indicate that the medium farmers spent more proportion of their additional income on beverages and intoxicants compared to cereals, pulses and other food items (Table 4.28).

Table 4.28: Marginal propensity to consume and Expenditure elasticities of medium farmers

Sl. No.	Food items	MPC	Expenditure elasticity
1	Cereals	0.01 (6.01)*	0.34
2	Pulses	0.007(2.35)**	0.37
3	Vegetables	0.01 (2.75)**	0.40
4	Fruits	0.007(2.70)**	0.45
5	Sugar and jaggery	0.005(5.10)*	0.60
6	Meat and egg	0.01 (4.60)*	0.47
7	Milk and milk products	0.01 (6.17)*	0.75
8	Edible Oil	0.01 (5.21)*	0.56
9	Beverages and intoxicants	0.02(3.07)*	0.59
10	Snacks, confectionary and other food items	0.01(4.23)*	0.52

Note: Figures in parentheses represents the t value

** indicates significant at 5 per cent level of significance

* indicates significance at 1 per cent level of significance.

Large farmers

The lowest expenditure elasticity was found for milk and milk products followed by cereals (0.49) in case of large farmers. The expenditure elasticity of beverages and intoxicants was more than two, which indicates that as the income of the large farmers increases farmers tend to spend more on beverages and intoxicants and snacks and confectionary items as indicated by the expenditure elasticities. The expenditure elasticity for pulses and sugar and jaggery was 1.15 and for edible oil (0.95). It was clear from the table that the large farmers spend more on pulses, beverages and intoxicants and sugar and jaggery as income increases.

The expenditure elasticities for cereals, vegetables, fruits, meat and egg, milk and milk products, edible oil and snacks and confectionary were less than one which indicates that as the income increases the expenditure on these food items also increases but less than proportional.

In case of large farmers marginal propensity to consume was highest for meat and egg (0.05) followed by beverages and intoxicants (0.03) and snacks and confectionary (0.02) hence it was clear from the study that the large farmers spent more of their additional income on meat and egg, beverages and intoxicant and snacks and confectionary compared to other food items as indicated by low marginal propensity to consume (Table 4.29).

There was a considerable difference in the estimated expenditure elasticities between the different categories of rural households.

Table 4.29: Marginal propensity to consume and expenditure elasticities of large Farmers

Sl. No.	Food items	MPC	Expenditure elasticity
1	Cereals	0.003(2.68)**	0.49
2	Pulses	0.016(4.62)*	1.15
3	Vegetables	0.017(1.23)	0.46
4	Fruits	0.006(1.49)	0.66
5	Sugar and jaggery	0.007(6.15)*	1.15
6	Meat and egg	0.052(3.50)*	0.83
7	Milk and milk products	0.001(0.37)	0.14
8	Edible Oil	0.009(3.06)*	0.95
9	Beverages and intoxicants	0.03 (4.33)*	2.32
10	Snacks, confectionary and other food items	0.02 (3.27)*	0.88

Note: Figures in parenthesis represents the t value

** indicates significance at 5 per cent and * indicates significance at 1 per cent.

V SUMMARY AND CONCLUSION

A brief summary of the study on Income and Expenditure pattern of different categories of rural households in Southern Karnataka: An economic analysis is presented in this chapter. This chapter also includes major findings of the study and policy implications based on results of the current study.

5.1 Introduction

The main sources of income for the rural households are crop cultivation, livestock, agricultural wage labour and other non-farm occupations. Apart from the cultivation of crops which is the major constituent of income of the rural households in India, livestock and agricultural labour income also has a considerable share in the rural household's total income which are dependent on farming. In spite of the existence of many programmes and policies aimed at improving the socioeconomic condition of the rural households, people of rural India could not develop equally in a region and different types of economic classes are found within a small village.

The present study focuses on the estimation of income from different sources and the expenditure incurred on different food and non-food items and also the consumption elasticities of different categories of rural households. Apart from the estimation of income of rural households from different sources and consumption expenditure on different items, the foremost thing is to estimate the adequacy of income to meet their expenditure as it serves as a better indicator of the socioeconomic development of the households in a particular region.

Specific Objectives of the study

1. To document the socio-economic profile of different categories of farm and non-farm households in Southern Karnataka.
2. To estimate the household income of farm and non-farm families from different sources.
3. To assess the adequacy of the current income levels to meet current expenditure of rural households.
4. To estimate the consumption pattern and elasticities of different categories of rural households.

5.2 Methodology

5.2 Sampling

Kolar and Chikkaballapur districts were selected for the current study. From each district two taluks were selected to draw the sample respondents. Sample taluks were selected purposively and a total of 160 rural households were selected randomly. Primary data was collected from different categories of rural households of Chikkaballapur and Shidlaghatta Taluks of Chikkaballapur district, Kolar and Malur taluks of Kolar district. The information elicited from the sample rural households related to various socio-economic characteristics, income from different sources and expenditure on different food and non-food items.

The study was undertaken during the period from December, 2017 to March, 2018.

5.3 Analytical tools used

To accomplish the specific objectives of the study, the primary data collected was subjected to different statistical tools. Descriptive statistical analysis such as mean, percentages were used to analyse the data and infer the results obtained. Simpson's crop diversity index was used to know the extent of diversification across different categories of farm households. The elasticity concepts were used to know the expenditure elasticities of different categories of rural households. Regression analysis was also carried out to know the marginal propensity to consume across different categories of rural households.

5.4 Major findings of the study

- It was evident from the present study that the majority of the rural households were small and marginal farmers (52.25 %) having an average land holding of 2.46 acres followed by non-cultivators (23.75 %) who were mainly dependent on activities other than crop production for their livelihood.
- About 50 per cent of the head of the households belongs to the age group of old (more than 47 years) followed by young (28.75 %) and middle age group (21.25 %).

- Among all rural households, illiteracy rate was highest in case of non-cultivators (26.32 %) followed by small and marginal farmers (26.19 %) and it was interesting to note that all the households were literate in large farmers category. The rate of illiteracy decreases with increase in size of land holding.
- Around 82.50 per cent of rural households live in nuclear family system where as only 17.50 respondents belongs to joint family system.
- Majority of the sample respondents (47.50 %) were living in a medium size family followed by small family (41.25 %) having four or less than four members in their family.
- Average land holding of non-cultivators, small and marginal, medium and large farmers is 0.32, 2.46, 5.64 and 12.79 acres respectively.
- The extent of diversification was more in case of large farmers (0.78) compared to medium (0.71) and small and marginal farmers (0.58) as indicated by the value of Simpson Index.
- In case of non-cultivators, Income from agricultural labour and non-agricultural labour (39.47 %) constitute a major share followed by other public and private service sector (26.32 %) and petty business (23.68 %).
- Average annual income was more in case of large farmers followed by medium farmers, small and marginal farmers and non-cultivators.
- The share of agriculture (agriculture + sericulture) income in total income was more in medium farmers (88.92 %) compared to large farmers (83.03 %) and small and marginal farmers (56.80 %).
- The share of livestock income in total income was more in case of non-cultivators (14.52 %) followed by large farmers (14.51 %).
- The percentage of beneficiaries from transfer payments was more in case of large farmers (33.33 %) followed by small and marginal farmers (23.68 %).
- Income- consumption ratio was highest for large farmers 2.27 followed by medium farmers (1.41), small and marginal farmers (1.21) and non-cultivators (1.08).
- Average propensity to consume was more for non-cultivators (0.92) compared to small and marginal farmers (0.82), medium farmers (0.71) and large farmers (0.44).

- Average per household monthly expenditure on food items and nonfood items was ₹ 5757.62 and ₹ 5467.13 respectively. Per capita monthly expenses on food and non-food items was ₹1193 and ₹ 1103 respectively. Both per capita and per household monthly expenditure on food items was more compared to non-food items.
- Share of food items in total monthly expenditure decreases with increase in income and share of non-food items increases with increase in income. Share of food items in average monthly expenditure was more in case of non-cultivators and small and marginal farmers compared to medium and large farmers.
- Among nonfood items, education constitute the major share (36.16 %) in total expenditure on non-food items followed by Social obligations/ celebration of festivals and entertainment (19.92 %).
- Expenditure elasticity of non-cultivators found to be lowest for vegetables (0.05) and cereals (0.21). It was highest for meat and egg (0.83) followed by pulses (0.71).
- Expenditure elasticity found to be highest for meat and egg (0.52) followed by edible oil (0.46) and snacks and confectionary (0.45) in case of small and marginal farmers.
- In case of medium farmers expenditure elasticity was highest for Milk and milk products (0.75) followed by Sugar and jaggery (0.60), beverages and intoxicants (0.59).
- The expenditure elasticity of large farmers was found to be highest for beverages and intoxicants (2.32) followed by pulses and sugar (1.15), edible oil (0.95) and meat and egg (0.83).
- It was evident from the findings that share of agriculture in average annual income of the households increased with increase in size of land holding and hence the hypotheses “The share of agriculture income increases with increase in the size of landholding” was accepted.
- Overall, it was clear from the findings that the income of the rural households was adequate enough to meet the expenditure and hence the hypotheses “income of the rural households is not adequate enough to meet the expenditure” was rejected.

5.5 Policy Implications

The high share of meat and egg in monthly per household expenditure on food items and also high marginal propensity to consume was seen among all the categories of rural households. Therefore, production and processing of meat and meat products may be given priority in formulating policies.

Cropping pattern of all categories of farmers showed that there was less diversification of crops so policies related to encouraging diversification of crops to get higher returns and avoid risk associated with the production of single crop may be formulated.

It was clear from the results that non-farm income has a considerable share in the household income of the small and marginal farmers and the agricultural income alone was not enough to meet the expenditure in case of small and marginal farmers. Therefore, policy makers may focus on enhancing the off-farm income of marginal and small farmers through generating non-farm employment opportunities like construction work, petty shops and other small-scale household enterprises in order to supplement their family income and reduce the gap between income and expenditure.

The expenditure elasticity of beverages and intoxicants is more in case of medium and large farmers, so policy makers may focus on reducing the consumption of beverages and intoxicants which are hazardous to health through various measures.

Overall rural households cannot sustain depending only on income derived from agriculture which is the major challenge. In this regard, policy makers should focus on formulating policies on generating income from non-agricultural activities.

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APPENDIX - I

Cost of cultivation of Ragi across different categories of farm households in the study area (Rs. per acre)

Sl. No.	Particulars	Small and Marginal	Medium	Large	Share (%)	Share (%)	Share (%)
1	No. of samples	84.00	26.00	10.00			
2	Total area	119.28	48.5	46.50			
3	Average area	1.42	2.20	4.65			
4	Labour man days	28.60	24.41	22.93			
5	Wage rate	384.93	381.82	380.00			
6	Total human labour cost	11007.20	9319.91	8715.05	41.30	38.54	38.97
7	Bullock labour days	3.38	2.71	3.10			
8	Bullock labour wages	993.15	927.27	930.00			
9	Bullock Labour cost	3351.88	2509.77	2883.00	12.58	10.38	12.89
10	Machine labour hours	3.00	2.95	2.61			
11	Machine labour wages	810.27	802.27	850.00			
12	Machine labour cost	2430.82	2365.46	2220.97	9.12	9.78	9.93
13	Seeds and seed material	155.10	183.71	167.00	0.58	0.76	0.75
14	FYM and silt	2632.21	2317.53	2010.75	9.88	9.58	8.99
15	Fertilizers	1829.33	2554.23	1823.01	6.86	10.56	8.15
16	Plant protection Chemicals	0.00	0.00	0.00			
17	Interest on working capital	1498.46	1347.54	973.68			
18	Total variable cost	22905.00	20598.14	18793.47	85.93	85.19	84.03
19	Land revenue	20.00	20.00	20.00			
20	Rental value of land	3000.00	3000.00	3000.00			
21	Interest on fixed capital	362.40	362.40	362.40			
22	Total fixed cost	3382.40	3382.40	3382.40	12.69	13.99	15.12
23	Marketing cost	367.11	199.79	188.82	1.38	0.83	0.84
24	Total cost	26654.50	24180.34	22364.69			

Returns from Ragi among different categories of farm households (Rs. per acre)

Sl. No.	Particulars	Small and Marginal	Medium	Large
1	Yield of main product (Qtls.)	9.78	9.65	8.86
2	Average price per quintal	2572.60	2354.55	2380.00
3	Gross returns of main product	25160.05	22720.15	21087.31
4	Yield of by product	1.18	1.24	0.90
5	Price of by product	5000.00	5000.00	5000.00
6	Gross returns of by product	5900.00	6185.69	4516.13
7	Gross returns	31060.05	28905.84	25603.44
8	Net returns	4405.55	4725.51	3238.75
9	Returns over variable cost	8155.06	4725.51	6809.97
10	Gross returns per rupee of total cost	1.17	1.20	1.14
11	Cost of production (Rs. /q)	2725.41	2505.87	2524.17

Cost of cultivation of Maize in the study area (Per acre)

Sl. No.	Particulars	Cost / number	Share in total cost of cultivation (%)
1	No. of samples	5.00	
2	Total area	5.00	
3	Average area	1.00	
4	Labour man days	36.78	
5	Wage rate	375.00	
6	Total human labour cost	13791.60	47.16
7	Bullock labour days	2.00	
8	Bullock labour wages	883.33	
9	Bullock labour cost	1766.67	6.04
10	Machine labour hours	2.00	
11	Machine labour wages	683.33	
12	Machine labour cost	1366.67	4.67
13	Seeds and seed material	811.67	2.78
14	FYM and silt	1858.33	6.35
15	Fertilizers	2891.67	9.89
16	Plant protection chemicals	410.00	1.40
17	Interest on working capital	1602.76	5.48
18	Total variable cost	24499.36	83.78
19	Land revenue	30.00	0.10
20	Rental value of land	3000.00	10.26
21	Interest on fixed capital	363.60	1.24
22	Total fixed cost	3393.60	11.60
23	Marketing cost	1350.00	4.62
24	Total cost	29242.96	100.00

Returns from Maize in the study area (per acre)

Sl. No.	Particulars	Yield/ returns
1	Yield of main product	19.17
2	Average price per quintal	1666.67
3	Gross returns of main product	31944.44
4	Yield of by product	1.50
5	Price of by product	4500.00
6	Gross returns of by product	6750.00
7	Gross returns	38694.44
8	Net returns	9451.48
9	Returns over variable cost	14195.08
10	Gross returns per rupee of total cost	1.32
11	Cost of production (Rs./q)	1525.72

Cost of cultivation of Tomato in study area (per acre)

Sl. No.	Particulars	Cost/ number	Share in Total cost of cultivation (%)
1	No. of samples	6.00	
2	Total area	6.25	
3	Average area	1.04	
4	Labour man days	90.11	
5	Wage rate	383.33	
6	Total human labour cost	34541.67	34.04
7	Bullock labour days	4.00	
8	Bullock labour wages	933.33	
9	Bullock labour cost	3733.33	0.37
10	Machine labour hours	9.16	
11	Machine labour wages	808.33	
12	Machine labour cost	7404.33	7.30
13	Seeds and seed material	4500.00	4.43
14	FYM and silt	5836.67	5.75
15	Fertilizers	9250.00	9.12
16	Irrigation cost	3700.00	3.65
16	Plant protection chemicals	8933.33	8.80
17	Interest on working capital	625.33	0.62
18	Total variable cost	78524.67	77.38
19	Land revenue	30.00	0.03
20	Rental value of land	10000.00	9.85
21	Interest on fixed capital	123.60	0.12
22	Total fixed cost	10153.60	10.01
23	Marketing cost	12800.00	12.61
24	Total cost	101478.27	100.00

Returns from Tomato in the study area (per acre)

Sl. No.	Particulars	Returns/ number
1	Yield of main product (Crates)	1700.00
2	Average price per crate	80.00
3	Gross returns of main product	136000.00
4	Yield of by product	0.00
5	Price of by product	0.00
6	Gross returns of by product	0.00
7	Gross returns	136000.00
8	Net returns	34521.73
9	Returns over variable cost	57475.33

APPENDIX – II

UNIVERSITY OF AGRICULTURAL SCIENCES, BENGALURU
Department of Agricultural Economics, GKVK, Bengaluru.
“Income and Expenditure pattern of Different Categories of Rural Households in
Southern Karnataka: An Economic Analysis”

SURVEY SCHEDULE

Interviewer Name: _____ Date of Interview: _____

Village: _____ Taluk: _____ District: _____

I. GENERAL INFORMATION:

1. Name of the respondent: _____
2. Contact Number: _____ 3. Age (Years): _____
4. Education: Illiterate / Primary / Secondary / PUC / Deg. / PG
5. Family Type: Nuclear / Joint 6. Ration card/ Adhar Card Number: _____
7. Family size: **Male:** _____ **Female:** _____ **Children:** _____ **Total:** _____
8. Occupation: **Main:** _____ **Subsidiary:** _____
9. Religion: _____ 10. Caste: _____

II. LAND USE PATTERN AND CROPPING PATTERN:

Total Area (Own): _____ **Acres Leased-in*:** _____ **Acres Leased-out*:** _____ **Acres**

Rainfed/ Irrigated	Land use pattern				Cropping Pattern							
	Field Crops	Horticulture/ Perennials	fallow	Others	Kharif		Rabi		Summer		Total	
					Crop	Area	Crop	Area	Crop	Area		
Rainfed												
Irrigated												
Total												

* If leased-in / leased-out, rent paid / received (Rs/acre): _____ (Per year)

III. CROPWISE INCOME & EXPENDITURE (Field Crops)

Name of the crop: _____ Variety: _____ Season: _____ Area (Acre's): _____

Wage rate: M: _____ W: _____ BP: _____, Machine(Rs./Hr.):Ploughing: _____ Harrowing: _____

Sl. No.	Particulars of the Operations	Labour Use					Input Use			Total Expenditure
		M	W	BP	Mach . Hrs	Cost	Qty	Price	Cost	
1	Ploughing									
2	Harrowing									
3	Clod crushing									
4	FYM Transportation									
5	FYM Application									
6	Seedbed/Nursery Preparation									
7	Sowing /Transplanting									
8	Fertilizer Application									
9	Plant Protection									
10	Weeding, Earthing/ Inter culture									
11	Thinning /Gap filling									
12	Irrigation									
13	Watch & ward									
14	Harvesting									
15	Threshing Winning etc.									
16	Marketing Charges									
17	Other Expenditure /Rent									

INCOME:

Sl. No.	Output	Quantity (Qtls/Tonnes)	Price (Qtls/Tonnes)	Agency to whom Product is Sold	Total Value (Rs.)
1	Main product				
2	By-product				
3.	Total Income				

(Field Crops) CROP-2

Name of the crop: _____ Variety: _____ Season: _____ Area (Acre's): _____

Wage rate: M: _____ W: _____ BP: _____, Machine(Rs./Hr.):Ploughing: _____ Harrowing: _____

Sl. No.	Particulars of the Operations	Labour Use					Input Use			Total Expenditure
		M	W	BP	Mach . Hrs	Cost	Qty	Price	Cost	
1	Ploughing									
2	Harrowing									
3	Clod crushing									
4	FYM Transportation									
5	FYM Application									
6	Seedbed/Nursery Preparation									
7	Sowing /Transplanting									
8	Fertilizer Application									
9	Plant Protection									
10	Weeding, Earthing/ Inter culture									
11	Thinning /Gap filling									
12	Irrigation									
13	Watch & ward									
14	Harvesting									
15	Threshing Winning etc.									
16	Marketing Charges									
17	Other Expenditure /Rent									

INCOME:

Sl. No.	Output	Quantity (Qtls/Tonnes)	Price (Qtls/Tonnes)	Agency to whom Product is Sold	Total Value (Rs.)
1	Main product				
2	By-product				
3.	Total Income				

IV. INCOME & EXPENDITURE OF PERENNIAL CROP

Name of the crop: _____ Variety: _____ Season: _____ Area (Acre's): _____

Wage rate: M: _____ W: _____ BP: _____, Machine(Rs./Hr.):Ploughing: _____ Harrowing: _____

Sl. No.	Particulars of the operations	Freq.	Labour Use				Cost	Input Use			Total Expenditure
			M	W	BP	Machi. Hrs		Qty	Price	Cost	
I. Establishment Expenditure											
1	Fencing										
2	Seedbed/Nursery Preparation										
3	Planting										
4	FYM Transportation & Application										
5	Silt Application										
6	Fertilizer Application A. B.										
II. Maintenance cost											
7	Ploughing										
8	Earthing up										
9	Irrigation										
10	FYM Transportation & Application										
11	Plant Protection										
12	Watch & Ward										
13	Harvesting										
14	Marketing (Transportation, loading unloading & Commission Charges)										

INCOME:

Sl. No.	Output	Quantity (Qtls/Tonnes)	Price (Qtls/Tonnes)	Agency to whom Product is sold	Total Value (Rs.)
1	Main product				
2	By-product				
3.	Total Income				

V. FARM INVENTORY & OTHER ASSETS POSSESSED BY THE FARMER/S

SN	Name of Items	Nos.	Present market value	Annual maintenance/repairs charges (₹)
1	Tractor			
2	Cultivator/s			
3	Land Leveler			
4	Weeder			
5	Power tiller			
6	Sprayers			
7	Bullock cart			
8	Iron/ wooden plough			
9	Blade harrow			
10	Seed drill			
11	Hoes			
12	Spade / Pickaxe			
13	Axes			
14	Bags (gunny/spun/jute)			
15	Cattle/Buff allow Shed			
16	Storage house			
17	TV			
18	Refrigerator			
19	CAR/Jeep			
20	Motor cycle/Bicycle			

**VII. LOANS AVAILED FOR CROP PRODUCTION, LIVESTOCK AND
MACHINERY**

SN	Items	Type of loan	Purpose	Total Amt.	Interest rate (%)	Repayment Schedule
1	Commercial banks					
2	RRBs					
3	Co-operative banks					
4	Traders and commission agents					
5	Money lenders					
6	Friends and relatives					

**VIII. OTHERS SOURCES OF INCOME OTHER THAN DIARY/POULTRY
(Rs/ Annum)**

SN	Activity (Name the activities /occupation)	Income (Rs/Month /Year)
1	Artisans	
2	Petty business	
3	Wage earners/Agricultural Labourers	
4	Govt./ Private service	
5	Any others (Specify) 1. 2. 3. 4.	

IX. BENIFITS FROM GOVERNMENT SCHEMES:

Sl. No.	Details	Quantity (Numbers/ kgs)	Amount (Rupees)	Total Subsidy Received (Rupees)
1	PDS/ Anna Bhagya scheme			
	Food grains Rice Wheat Ragi Pulses			
	Sugar			
	Edible Oil			
	Salt			
	Soaps			
	Kerosine			
	Others Specify:			
2	Income from Social Security Schemes			
	Old age pension			
	Widow Pension			
	Physically challenged			
3	Insurance			
	General Insurance			
	Crop Insurance			
	Health Insurance/ Yeshaswini Scheme			
	Livestock Insurance			
	Machinery Insurance			
	(PMFBY)			
	Others (Specify)			
	Student Scholarship			
	Cycle			
	Mid day meal (Yes/ No)			

X. CONSUMPTION EXPENDITURE PER MONTH /HOUSEHOLD

A. Food items Consumption Expenditure

Food Items	Monthly Consumed Quantity	Price / unit	Total Monthly Expenditure	Annual Expenditure
1.Cereals				
Rice				
Wheat				
2.Millets				
Jowar				
Ragi				
Bajra				
Others (rawa/maida/vermicelli/noodles/bread/flour/etc.)				
3.Pulses				
Red gram				
Green gram				
Black gram				
Chickpea				
Others				
4.Total Vegetables				
5.Total Fruits				
6. Sugar & Jaggery				
7.Nuts and Dry fruits (Dates/Cashew/Dry grapes/Almond/pista/others)				
8. Meat & animal products				
Eggs				
Chicken				
Meat				
Fish				
Others (Specify)				
9. Dairy products (milk/milk powder/curd/ghee/butter/Ice cream)				
10. Edible oil				

11. Beverages & intoxicants				
Tea				
Coffee				
Cold drinks				
Fruit juice				
Alcoholic beverages				
Cigarette/beedi				
Pan				
Others				
12. Snacks (Biscuits/Cake/, pastry/Baker sweets/Cooked meals /Pickle/Sause/Jam, jelly/Other processed food etc.)				

B. Non-food items consumption expenditure:

Particulars	Monthly Expenditure	Total Annual Expenditure
Clothing		
News paper		
Educational		
Medical		
Fuel (Gas/petrol/diesel)		
Electricity		
House rent		
Miscellaneous		
Entertainment		
1. Movies		
2. Outing		
3. Social ceremony/ Festivals		
4. TV bill		
5. Mobile bill		
Others (Specify)		
1. Water Charges		
2. House tax		
3.		
4.		