

**GENDER DISPARITY IN LITERACY RATE IN KERALA:
COMPARISON BETWEEN DISTRICTS OF WAYANAD AND
KOTTAYAM**

**First Degree Programme
In
Economics under CBCS system**

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CERTIFICATE

This is to certify that the dissertation titled “Gender Disparity in Literacy Rate in Kerala: Comparison between the districts of Wayanad and Kottayam” is a record of studies carried out by Annette George, Amina SN, Arya V, Arya K Jayan and Arya Krishna at the Department of Economics, All Saints’ College, under my guidance and submitted to the University of Kerala in partial fulfilment of the Degree of Bachelor of Arts, First Degree Programme in Economics under CBCSS System.



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CHAPTER 1

1.1 INTRODUCTION

“Literacy is a bridge from misery to hope. It is a tool for daily life in modern society. It is a bulwark against poverty, and a building block of development.... Literacy is a platform for democratization, and a vehicle for the promotion of cultural and national identity.... For everyone, everywhere, literacy is, along with education in general, a basic human right.... Literacy is, finally, the road to human progress and the means through which every man, woman and child can realize his or her full potential.” ~Kofi Annan

Literacy is the basic building block and a crucial element in the development of education in society. In the context of Indian society, which is essentially patriarchal, it is women and girls who suffer because of low accessibility to literacy. In other words, gender becomes an important factor in determining the literacy level of an individual. Women constitute approximately half, that is, 48.53 per cent of the total population of India. The problem of illiteracy, especially among women, is a huge area of concern as it directly impacts development efforts. Having equal access to education is crucial to alleviating poverty. According to the World Bank, countries with limited educational opportunities for women lose \$15-\$30 trillion in predicted lifetime earnings. Providing education for women helps strengthen female autonomy and allows them to contribute to the national economy.

Educated women also have more opportunities to achieve higher socioeconomic status due to increased career avenues. By educating women and promoting gender equality, women are able to, more confidently, enter the workforce. Education is considered to be one of the best catalysts for sustainable growth within any country. Furthermore, educated women are less likely to marry young. According to The Tribune, women’s education could lead up to 60 per cent fewer women getting pregnant under the age of 17.

Women’s education has cognitive benefits for women as well. Improved cognitive abilities increase the quality of life for women and also lead to other benefits. One example of this is the fact that educated women are better able to make decisions related to health, both for

themselves and their children. Cognitive abilities also translate to increased political participation among women. Educated women are more likely to engage in civic participation and attend political meetings, and there are several instances in which educated women in the developing world were able to secure benefits for themselves through political movements. Evidence also points to an increased likelihood of democratic governance in countries with well educated women. Household surveys in developing countries have consistently shown that women with more education have also benefits relating to their role in the household and have been found to experience less domestic violence regardless of other social status indicators like employment status. Women with an education are also more involved in the decision- making process of the family and report making more decisions over a given time period. In particular, these benefits extend to economic decisions. Besides the intrinsic value of increasing a woman's agency, women play a more active role in the family also brings about social benefits for family members. In a household where the mother is educated, children and especially girls are more likely to attend school.

India is a country with high gender disparity in literacy. As per Census 2011, overall literacy rate of India is 74.04 per cent whereas the male and female literacy rate is 82.14 per cent and 65.46 per cent respectively. Kerala's effective literacy rate is 93.91 per cent as per census 2011. Of this 96.02 per cent of men and 91.98 per cent of women are literates.

Despite considerable efforts made at national and state level, gender disparity in literacy still exists in Indian society. The present study is an attempt to study the gender disparity in literacy in Kerala, between the districts of Kottayam and Wayanad.

1.2 SIGNIFICANCE OF THE STUDY

Women's literacy and educational status – one of the steps to secure social equality and human development, higher economic productivity and a tolerant democratic society – are directly related to democratic progress of development. The gap between male and the female literacy is a sensitive and significant indicator of social discrimination to be eliminated only through the process of education. Education is the key to gender equality in literacy and development. This is a fact that investing in the human capital is one of the most effective means of reducing poverty and encouraging sustainable development. Yet,

women in developing countries usually attain lower levels of school and higher education than men. Massive educational deprivation of girl child is a reality.

The present study is intended to analyze the trends in gender disparity in the literacy rates of Kottayam and Wayanad. The study is to examine whether there has been significant increase or decrease in the gender gap in literacy rates of Kottayam and Wayanad districts by comparing the census data of 1991, 2001 and 2011.

1.3 STATEMENT OF THE PROBLEM

The results of 2011 census reveal that there has been an increase in literacy in India. The literacy rate in the country is 74.04 per cent, 82.14 for males and 65.46 for females. Kerala retained its position by being on top with a 93.91 per cent literacy rate, closely followed by Lakshadweep (92.28 per cent) and Mizoram (91.58 per cent). The state level data masks large variations across districts. Kerala stands at the top in literacy rates in India. According to 2011, Census of India, the literacy rate in Kerala has increased from 89.81 per cent in 1991 to 93.91 per cent in 2011, which is far above the national average. Kerala revealed high literacy rates as compared to its neighbouring states of Tamil Nadu and Karnataka.

The levels of literacy vary from district to district in Kerala. The highest literacy rate was recorded at 97.21 per cent in Kottayam district. The lowest literacy rate was registered at 89.03 per cent in Wayanad district in 2011. In Kerala, gender disparity in literacy is observed from district to district.

Therefore, the present study aims to highlight the pattern in gender disparity in literacy rate of Kottayam and Wayanad District from 1991 to 2011. The investigation of geographical and temporal variation of male-female gap in literacy helps to identify the areas with deficiency, which can help the policy makers to come up with proper developmental strategies for those regions.

1.4 OBJECTIVES OF THE STUDY

- To study temporal differential of gender gap in literacy rate of Kottayam.
- To study temporal differential of gender gap in literacy rate of Wayanad.
- To compare inter district trend in gender gap.
- To compare the gender disparity using Sopher's Index

1.5 HYPOTHESIS

H₀- There is significant disparity in gender-based literacy rate between Kottayam and Wayanad.

H₁- There is no significant disparity in gender-based literacy rate between Kottayam and Wayanad.

1.6 RESEARCH METHODOLOGY

The present study is primarily based on secondary data obtained mainly from the publications of Census of India 1991, 2001 and 2011. The main census publications of different periods of time from where data has been collected include the General Population Tables, Socio Cultural Tables, District Census Handbooks of Kottayam and Wayanad, Primary Census Abstract, Final Population Tables etc from 1991 to 2011. In addition to the sources indicated above, information and data have been collected from a large number of books, research studies including dissertations, published and unpublished works from different sources have been studied thoroughly for the present study. Relevant web sites were visited from time to time for authentic information and data.

In the present study, two types of statistical tools were used for showing the regional pattern of literacy rate and examining the gender gap between males and females. First, the literacy rates were computed for trend analysis. Second, Sopher's method was applied for analysing gender disparity in Kottayam and Wayanad.

Sopher's Index method of calculating disparities was developed by David V Sopher (1974). The disparity index measures disparity between two groups in their possession of a particular property in terms of the logarithm of the odds ratio. The objective of taking log is to reduce

the levelling off effect i.e., regions with higher literacy rate may show a lower level of disparity than the region having low literacy rate even though the gap is the same for both regions. Sopher's Disparity Index is a well-accepted measurement technique to identify the disparity between male and female literacy by using the following formula.

According to this method:

If X_1 and X_2 represent the respective percentage values of variables of Groups 1 and 2, then the Disparity Index (D) can be calculated by the formula:

$$D = \text{Log} (X_2/X_1) + \text{Log} [(Q-X_1)/(Q-X_2)]$$

Where, $X_2 > \text{or} = X_1$ and $Q=100$

In this method of measuring disparities, Group 2 is taken as the variable having comparatively higher value and Group 1 is that having relatively lower value.

Disparity Index technique is useful in measuring **relative disparity** between two variables. In case of perfect equality, i.e., no disparity at all, the value of D will be zero. The measured value of D is interpreted as- higher the value of D, higher the extent of disparity and lower the value of D, lower is the extent of disparity.

1.7 SCOPE AND LIMITATIONS OF THE STUDY

This study focuses on the gender disparity in literacy rate in the two districts of Kottayam and Wayanad in Kerala. It focuses on the trends in gender disparity in literacy as per census of 1991, 2001 and 2011. As far as the population is concerned, the census has used persons above the age of 7 years. Limitations of the study are as under:-

- Lack of time is a major constraint for completing the project.
- The study is limited to the two districts of Kottayam and Wayanad.
- The study only uses data from the census of 1991, 2001 and 2011. Since the last census was only in 2011, the changes in the last 10 years have not been accounted for in the present study.
- The study is an academic effort. Hence, it has its own limitations.

1.8 LITERATURE REVIEW

Review of literature provides the information of research work already done by researchers relating to the topic of study. The work related to the study may support or conflict with present results. The present exercise is not exhaustive in its coverage but provides an insight into remarkable studies in the area concerned. Since the review of literature for gender gap in literacy rate is scanty for the districts of Kottayam and Wayanad, few important reviews of literature are included.

The review of literature is presented below:

1. **Bose, S. (2012)** studied multi-level analyses of data on 18,519 families with opposite sex children to test the impact of maternal son preference and context on the gender differential in education in India.
2. **S. Raju. (1988)** used 1981 Census data to undertake a socio-geographical analysis of female literacy both for the non-scheduled and scheduled caste segments of the population in class I cities of cities. Literacy is examined in relation to the levels for the corresponding male counterparts. Viewed thus, the sex and caste disparities that exist provide insights into biases affecting females and scheduled castes.
3. **Duraisamy, M., & Duraisamy, P. (1999)** analysed the male-female differentials in education, employment and earnings in the labour market for scientific and technical persons for the states of Tamil Nadu and Kerala. A sharp contrast between the two states in the economic and social indicators is seen in this comparative study. The average earnings and gender gap in earnings are higher in Tamil Nadu than in Kerala. Bu it is observed that the occupational segregation and wage discrimination are higher in Kerala compared to that in Tamil Nadu.
4. **Mathew, E. (1999)** contradicted the widely-held view which gives 'enlightened' native princes much of the credit for the widespread of literacy in Kerala. According to this study the educational transformation of Kerala was triggered mainly by Christian missionaries (19th century) and movements for the uplift of deprived communities (first half of 20th century).
5. **Kumar, N., & George, K. (2009)** examined the recent shifts in Kerala's education system from an inclusive to an exclusive one. It is stated in the study that "The pendulum seems to

be swinging from one extreme to the other, from a highly subsidised and a largely state-sponsored and state-supported system to a mostly self-financing system, a euphemism for a student-financed commercial system.” This paper examines the economic, social and political forces that led to this shift, almost tectonic in scale. It also examines the long-term consequences of such a shift to Kerala's economy and society.

6. **Bhaskaran, S. (2011)** indicated that while conventional indicators in Kerala that measure the status of women such as literacy, life expectancy, sex ratio, average age of marriage, infant mortality, and maternal mortality are mostly favourable, women have not fared well in the state in terms of non-conventional indicators such as gender-based violence, mental health, and the incidence of suicides. This paper attempted to take a critical look at the much-acclaimed status indicators for women in Kerala and reflects on the work of the Mahila Samakhya Programme as an illustration of public policy focused on women.

7. **Tilak, J. (1983)** attempted an analysis of the progress of women's literacy and education vis-a-vis men's education and literacy in India and the inequality between them. It examined the educational development of women in quantitative terms in comparison with the educational development of men in the light of the national objective of equality in educational opportunity.

8. **Ghosh, A. (2007)** focused on the gender gap in literacy and education among the Scheduled Tribes in Jharkhand and West Bengal as measured by the gender disparity index. The female literacy rates among the Ho and Mahali in Jharkhand and the Lodha in West Bengal are low, with high gender disparity, as compared with other tribes. The gender disparities among most of the tribes tend to increase at the higher level of school education. The article also analysed the enrolment ratios and dropouts of female children, and discussed the issues related to tribal education.

9. **Stromquist, N. (1992)** In almost every country, illiteracy rates are higher among women than among men. This gender disparity can be explained in terms of (1) the sexual division of labor that assigns women many domestic tasks, especially, among poor and rural families, time-consuming chores, and (2) men's control of women's sexuality, which creates both physical and psychological constraints in women's lives. Research has identified various benefits of literacy for women, such as better maternal behaviours regarding child health and

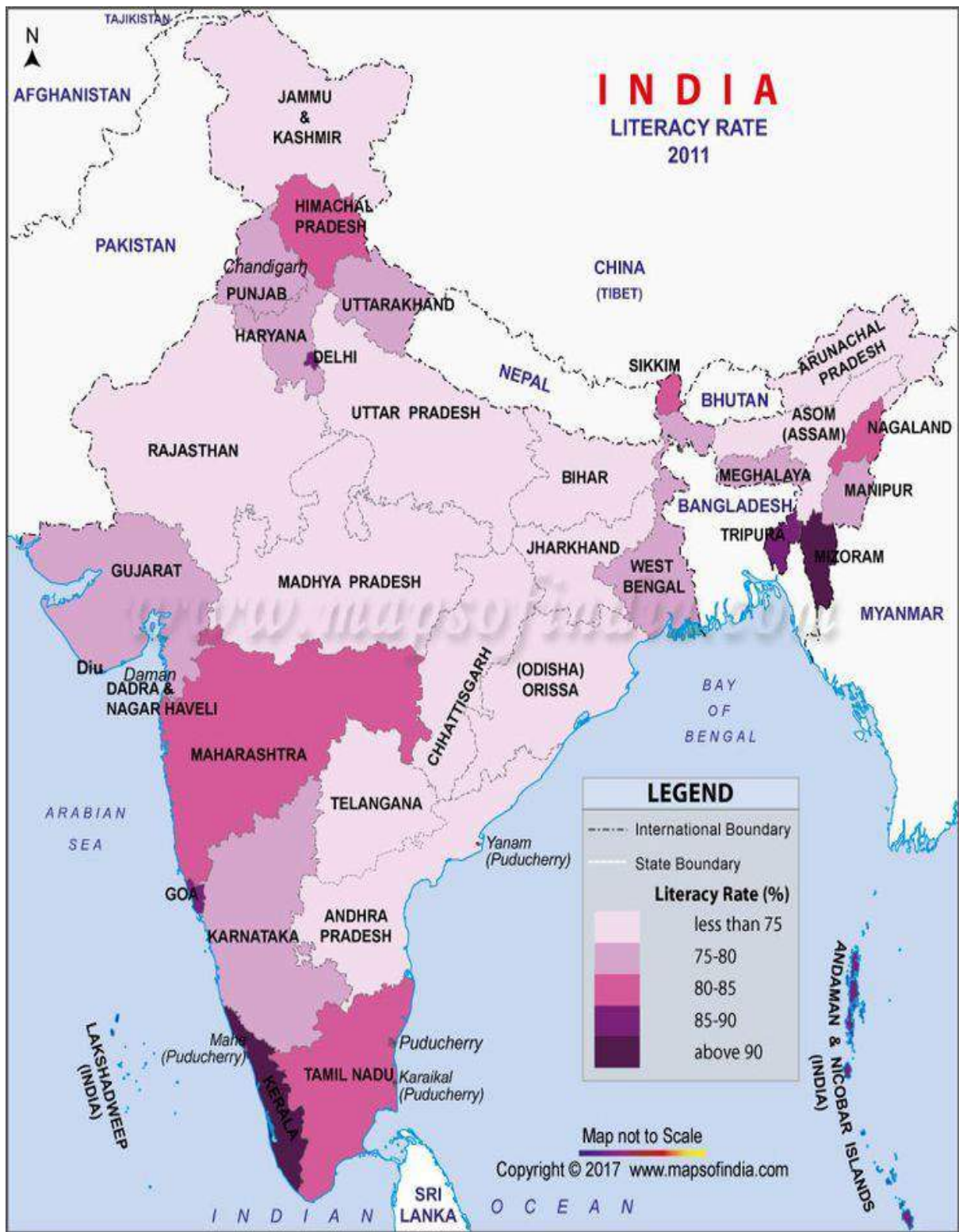
child rearing, and effective family planning. Although women could use literacy to increase their access to new knowledge, most literacy programs do not encourage this because their curricula are still designed along sexually stereotyped lines that emphasize women's roles as mothers and household managers. This article argues that these messages do not convey emancipatory knowledge and may solidify values and attitudes that cause women to accept current gender relations rather than to question them.

10. **Rajendran, R. and Sangeetha, S., (2014)** analysed the state-wise gender gap in literacy rates in India using data from Census 2011. The main inferences drawn were that the average literacy rates of males for both poor and non-poor states was higher than national female literacy rate. Average literacy rates of non-poor states for both sexes were found to be more than that of the poor states.

11. **Jha, P., & Nagar, N. (2015)** have highlighted the multi-dimensional context of gender inequalities prevalent in India. Overall, the study indicates the inequality in economic, social, cultural and legal biasness which are of a great challenge for policy-makers and social scientists to establish proper equality in the entire social field. An attempt has been made to find out those factors which are responsible for the problem of gender inequality in India.

1.9 RESEARCH GAP

An overview of available studies revealed that much research study is not available in the public domain on gender disparity in literacy rate within the districts of Kerala, especially districts of Kottayam and Wayanad. There have also not been many studies on gender disparity in literacy rate in Kerala using the methodology of Sopher's Index. Such studies are required for use by the stakeholders for planning, formulating and implementing policies for social development in the state. Therefore, the present research project aims to highlight the pattern in gender disparity in literacy rate of Kottayam and Wayanad districts from 1991 to 2011 using Sopher's Index.



CHAPTER 2

THEORETICAL FRAMEWORK

2.1 LITERACY RATE AND GENDER GAP

“Educate one man, you educate one person, but educate a woman and you educate a whole civilization.”

-Mahatma Gandhi

Literacy and level of education are basic indicators of the level of development achieved by a society. Spread of literacy is generally associated with important traits of modern civilization such as modernization, urbanization, industrialization, communication and commerce. Literacy forms an important input in overall development of individuals enabling them to comprehend their social, political and cultural environment better and respond to it appropriately. Higher levels of education and literacy lead to a greater awareness and also contributes in improvement of economic and social conditions. It acts as a catalyst for social upliftment enhancing the returns on investment made in almost every aspect of development effort, be it population control, health, hygiene, environmental degradation control, employment of weaker sections of the society.

Literacy level of the population constitutes one of the most important determinants of quality of population and is generally accepted as one of the basic indicators of its progress. In underdeveloped countries the rates are generally low. In India, these levels exhibit wide variation by region, gender, social group, income group, etc. Efforts have been made to raise



literacy levels through various schemes like universal school education, adult education, non-formal education, literacy mission campaigns, etc.

Prior to census 1991, the Census of India had been using the definition of literacy as, “one who could read

and write a simple message in any language with understanding”, which was similar to the definitions used by UNESCO and other agencies.

As per Census of 1991, a person aged 7 years and above, who can both read and write with understanding in any language, is treated as literate. It was decided that all the children in the age group 0-6 years, would be treated as illiterate by definition and population aged seven and above would be classified as literate or illiterate. The same criterion had been retained in the Census of 2001 and 2011.

A person who can only read and cannot write is not considered literate. Further, a person need not receive any formal education or acquire any minimum qualification to be treated as literate.

In earlier Censuses up to 1981, it was customary to work out the literacy rate taking into account the total population. Since literacy rate is more meaningful if the sub-population in the age group 0-6 years is excluded from the total population, it was decided in 1991 to calculate literacy for the population 7 years and above. The same concept has been retained in all Censuses since 1991.

The literacy rate taking into account the total population in the denominator has now been termed as ‘Crude Literacy Rate’, while the literacy rate calculated taking into account the 7 and above population in the denominator is called ‘Effective Literacy Rate’.

The formula for calculating the two is as follows:

$$\text{Crude Literacy Rate} = \frac{\text{Number of Literate persons} \times 100}{\text{Total Population}}$$

$$\text{Effective Literacy Rate} = \frac{\text{Number of literate persons aged seven and above} \times 100}{\text{Population aged seven and above}}$$

Effective literacy rate and literacy rate have been used interchangeably in this report.

According to the census reports of Indian Census 2011, the population of India is 1,210,854,977 with 623, 724, 248 males and 586,469, 174 females in comparison to a total of 1, 028, 737, 436 in the year 2001. In absolute term, the population of India has increased by more than 181 million during the decade 2001-2011.

The percentage decadal growth of population during 2001-2011 has registered the sharpest decline since independence. It declined from 23.87 per cent for 1981-1991 to 21. 54 per cent for the period 1991-2001, a decrease of 2.33 per cent. For 2001-2011, decadal growth has become 17.64 per cent, a further decrease of 3.90 percentage points.

The total literacy rate in the country at present is 74.04 per cent. The density of population is 382 persons/sq.km. In regards to sex ratio, at present there are 940 females on average on per 1000 males and the child sex ratio is 914 females per 1000 males.

The results of 2011 census reveal that there has been an increase in literacy in the country. The literacy rate in the country is 74.04 per cent, 82.14 for males and 65.46 for females. Kerala retained its position by being on top with a 93.91 per cent literacy rate, closely followed by Lakshadweep (92.28 per cent) and Mizoram (91.58 per cent). Bihar with a literacy rate of 63.82 per cent ranks last in the country preceded by Arunachal Pradesh (66.95 per cent) and Rajasthan (67.06 per cent).

Literacy in India is a key for social economic progress. Literacy of girls is vital not only on grounds of social justice but also because it accelerates social transformation. Level of literacy and educational attainment are important indicators of development of any given society. The Indian government has expressed a strong commitment towards education for all. However, India still has one of the lowest female literacy rates in Asia.

Literacy in India

The effective literacy rate for India in Census 2011, works out to 74.04 per cent. The corresponding figures for males and females are 82.14 and 65.46 per cent respectively. Thus, three fourths of the population of age 7 years and above is literate in the country. Four out of every five males and two out of every 3 females in the country are literate. The country has continued its march in improving literacy rate by recording a jump of 9.21 percentage points

during 2001-2011. The increase in literacy rates in males and females are in the order of 6.88 and 11.79 percentage points respectively.

Bihar has the lowest literacy rate in India with 63.82 per cent. It's male literacy stands at 73.39 per cent, which is the lowest in India and female literacy at 53.33 per cent. Lowest female literacy is recorded in Rajasthan which is 52.66 per cent.

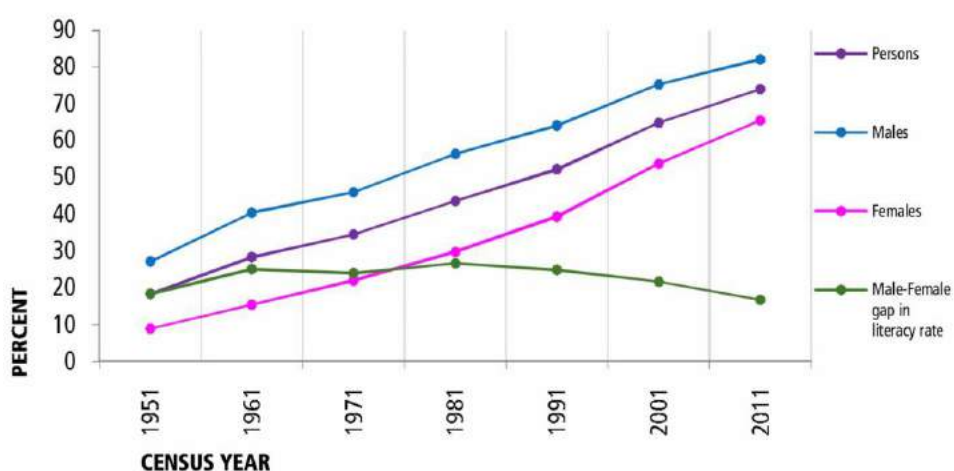
The gap of 21.59 percentage points recorded between male and female literacy rates of India in 2001 census has reduced to 16.68 percentage points in 2011.

TABLE 2.1

LITERACY RATE OF INDIA: 1951-2011

Census Year	Persons	Males	Females	Male-Female gap in literacy rate
1	2	3	4	5
1951	18.33	27.16	8.86	18.30
1961	28.3	40.4	15.35	25.05
1971	34.45	45.96	21.97	23.98
1981	43.57	56.38	29.76	26.62
1991	52.21	64.13	39.29	24.84
2001	64.83	75.26	53.67	21.59
2011	74.04	82.14	65.46	16.68

FIGURE 2.1



Source: Provisional Population Totals, Census of India 2011

There has been a monotonous increase of 5 to 8 percent in the literacy rates after 1951, it becoming 12.5 percent in the 1991-2001 decade. Thus, the literacy rate has increased more than three times during the past half-a-century. It is noteworthy that, in recent years, the increase in female literacy rate has been higher than in male literacy rate narrowing the male-female gap particularly during the 1980s and 1990s.

2.2 LITERACY IN KERALA

Kerala is the southwestern coastal state of India. It is a small state, constituting only about 1 percent of the total area of the country. Kerala stretches for about 360 miles (580 km) along the Malabar Coast, varying in width from roughly 20 to 75 miles (30 to 120 km). The capital of Kerala is Thiruvananthapuram (Trivandrum).

It is bordered by the states of Karnataka (formerly Mysore) to the north and Tamil Nadu to the east and by the Arabian Sea to the south and west; it also surrounds Mahe, a segment of the state of Puducherry, on the northwestern coast.

Kerala has a long history of art and cultural heritage and foreign trade with other countries. The state with the highest literacy rate in India, is noted for its achievements in education, health, gender equality, social justice, law and order.

Kerala is one of India's most progressive states in terms of social welfare and quality of life. The State boasts of one of India's highest literacy rates, highest life expectancy and lowest child mortality rates. The literacy rate for women in Kerala is one of the highest in all of Asia. Enjoying a unique cosmopolitan viewpoint, the people here, at all levels of society, have greater access to services and opportunities - as well as a greater say in their governance.

Literacy in the State

Kerala's educational achievements excel those of other Indian states. Even though the progress that came from the educational Act of 1959 and posterior policies outshine the previous advancements, it is important to note that Kerala's breakthrough in education started well before India's independence. In the Pre-British period, education was controlled by the higher castes of Hindu society, particularly the Brahmins. While other privileged castes were allowed to have education, the repressed castes were completely excluded. During the

British rule, education was characterised by Christian missionaries building and managing schools in order to promote their religion, yet they did not disregard secular subjects. The missionaries started to introduce the excluded castes into their education and schools. By the first half of the 19th century, the princely state of Travancore issued a royal rescript where it was stated that the state should take care of the cost of education of its citizens. Even though this approach was narrowed in scope, it set the basis for public education.

In Kerala the total literacy movement was first initiated at Ernakulam District and Kottayam Municipality in the late 80's. On 4th of February 1990, the then Prime Minister Shri V P Singh declared Ernakulam as the first total literate district in India. State-wide literacy survey was conducted on 8th of April 1990. 28.52 lakhs of people were found illiterate. With the help of voluntary organisations like Sastra Sahitya Parishath, classes were conducted to educate the illiterate and on 18th of April 1991, Kerala became the first total literate state in India.

In the state, at the time of census 2001, of the total population of 31.84 million, 3.79 million were infants and young children below 7yrs. The effective literacy thus worked out for census 2001 for the state as a whole was 90.86 per cent with a split up of 94.24 per cent for males and 87.72 per cent for females. This showed that effective literacy rate was lower among females. The male-female gap in literacy rate was more than 7 percentage points then.

In tune with the increase in effective literacy rate at state level during 2001-2011, a corresponding increase in effective literacy rate has also been witnessed in respect of males from 94.24 per cent to 96.02 per cent and for females from 87.72 per cent to 91.98 percent in the corresponding period. In census 2011, the effective literacy rate among both sexes have gone beyond 90 per cent which is a sound indication of more and more females becoming literates and thus reducing male-female gap in literacy rate. It is further visible from the literacy figures of census 2011 that the male-female gap in literacy has come down from 7 points in 2001 to 4 points in 2011.

TABLE 2.2**District-wise Rural-Urban Literacy Rate by Sex and Male-Female Gap in Kerala, 2001 and 2011**

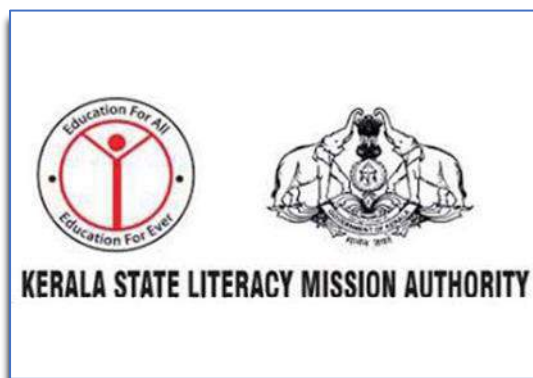
Name of District	Literacy Rate								Male- Female Gap in Literacy Rate			
	2001				2011				2001		2011	
	Rural		Urban		Rural		Urban		Rural	Urban	Rural	Urban
	Male	Female	Male	Female	Male	Female	Male	Female				
Kasaragod	89.50	78.03	93.98	83.56	93.11	84.61	95.27	88.49	11.47	10.42	8.50	6.78
Kannur	95.17	87.20	97.09	91.50	96.50	91.48	98.12	94.64	7.97	5.59	5.02	3.48
Wayanad	89.70	80.64	91.62	82.68	92.77	85.82	94.58	88.87	9.06	8.94	6.95	5.71
Kozhikode	95.82	87.38	96.57	90.65	97.42	92.41	97.64	93.52	8.44	5.92	5.01	4.12
Malappuram	93.15	86.02	94.20	88.40	94.97	90.61	96.81	92.74	7.13	5.80	4.36	4.07
Palakkad	88.88	78.66	93.54	85.24	91.27	83.49	95.41	89.70	10.22	8.30	7.78	5.71
Thrissur	94.58	88.74	96.44	92.21	96.09	92.11	97.41	94.70	5.84	4.23	3.98	2.71
Ernakulam	95.10	89.35	96.60	92.10	95.96	92.76	97.70	94.98	5.75	4.50	3.20	2.72
Idukki	92.18	84.71	95.15	90.74	94.73	89.34	97.10	94.45	7.47	4.41	5.39	2.65
Kottayam	97.30	94.34	97.51	94.41	97.97	96.40	95.16	93.86	2.96	3.11	1.57	1.30
Alappuzha	96.11	90.75	96.67	91.00	98.24	95.38	97.62	94.30	5.36	5.67	2.86	3.32
Pathanamthitta	96.37	93.35	96.72	94.14	97.64	96.19	98.15	96.79	3.02	2.58	1.45	1.36
Kollam	94.50	88.00	94.12	89.03	96.15	92.30	95.46	91.52	6.50	5.09	3.85	3.94
Thiruvananthapuram	91.63	84.39	94.56	89.57	94.27	89.95	94.89	91.71	7.24	4.99	4.32	3.18

The above table shows the literacy rates and gap in male-female literacy rates for the rural and urban areas separately with gender break up for 2001 and 2011 censuses. In census 2001, Kottayam district was at the top among the districts of the state in literacy rate among both males and females of rural and urban areas. In census 2011, the position has changed in the sense that the top position occupied by Kottayam district has now been shared by three districts, namely, Kottayam, Alappuzha and Pathanamthitta. In the rural areas among males and females, the top position is shared by Alappuzha (98.24 per cent) and Kottayam (96.40 per cent) districts respectively, whereas in urban areas, Pathanamthitta district with 98.15 per cent male literacy rate and 96.79 per cent female literacy is at the top.

As regards to male-female gap in literacy rates, two districts namely, Kasaragod (11.47 per cent) and Palakkad (10.22 per cent) were seen with higher male-female literacy gap in the rural areas in census 2001. In all other 12 districts, the male-female literacy gap was below 10 per cent then. In the urban areas only Kasargod district (10.42 per cent) had male-female gap in literacy above 10 per cent in 2001. Kasargod district retains the position as the district with the highest gap in male-female literacy rate both in rural and urban areas in census 2011 also.

Kerala's history as a region plays a role in its literacy success. Starting in the 19th century, royalty called for the state to cover education costs. While still a colony, Kerala implemented social reform in the early 20th century that allowed access to education for lower castes and women. Post-independence, socialist or left of centre governments overarchingly controlled the state government and they made equity and social goals a huge priority.

However, aside from these factors, one of the biggest contributors to Kerala's total literacy is



its literacy program, [Kerala State Literacy Mission Authority](#). This is an institution that works under the state government and received funding from it but operates autonomously. The values of this organization are clearly framed in its slogan, "Education for all and education forever."

The program works on many levels, including basic literacy programs and equivalency programs. The basic literacy programs include a push to take Kerala to a full 100 percent literacy rate. These programs focus on regions and peoples who tend to have lower literacy rates, including urban slum, coastal and tribal populations. District-specific programs target localized issues, needs and a total literacy program for jail inmates. The equivalency program provides the opportunity for adults who did not go through all levels of primary and secondary school to take classes and tests which will bring them up to fourth, seventh, 10th, 11th, or 12th-grade literacy standards. The program also offers certifications and is constantly adding smaller, new programs in social literacy as different areas require attention

Under the Kerala State Literacy Mission, the following programmes:

1. Basic Literacy Programmes

Though our state achieved total literacy, illiteracy still continues. illiterates mostly concentrated in Coastal and tribal areas. In this backdrop, KSLMA envisaged Basic Literacy Programmes for eradicating illiteracy prevails in our state.

Basic Literacy programmes are:

a) Complete Literacy

Complete Literacy (Paripoorna Saksharatha) drive (from 90 Per cent to 100 per cent Literacy).

The Kerala State Literacy Mission Authority's Paripoorna Saksharath (complete literacy) mission is working towards complete literacy in the state through a multipronged strategy, including survey in areas with low access to education and classes for illiterates. As per the 2011 census, there were around 18.5 lakh illiterate people and 12 lakh neo literates in the state.

b) Aksharasagaram

KSLMA embarks on a literacy programme in the coastal areas of the state. Named Aksharasagaram, the project is being funded by the fisheries department to improve the literacy rate in coastal areas where education generally takes a back seat. The first phase of the project has been completed in Thiruvananthapuram, Malappuram and Kasargod districts where the literacy rates are the lowest.

The Second phase of Aksharasagaram literacy campaign focussing on coastal areas has been launched in Kollam, Ernakulam and Kozhikode districts. The campaign in its second phase would cover 234 grama panchayat wards in 36 local bodies spread across the three districts.

c) Total Literacy Programme for Tribals

KSLMA is all set to embark on a project to impart literacy in 100 selected tribal settlements across the state. The project to be implemented in association with the Department of Scheduled Tribes Development, envisages setting up of special literacy centres in tribal settlements with low literacy rate. Qualified persons from the tribal community will be appointed as instructors of the literacy programme. The state wide rollout of the programme is part of literacy mission's task of eradicating illiteracy from all tribal settlements in a phased manner.

d) Wayanad Tribal Literacy Project

KSLMA survey identified 9,751 illiterate people from Wayanad's tribal community. Around 300 literacy centres were launched in the district and 600 instructors were identified and trained. It was also ensured that of the two instructors deployed for each centre, one will be from the tribal community.

Apart from the literacy programme, the project envisages development activities in tribal hamlets with the assistance of the Kudumbasree district mission, awareness campaigns against alcohol abuse among tribes with the assistance of the Excise Department, and imparting financial literacy to the tribespeople with the help of Canara Bank.

e) Attapadi Tribal Literacy Programme

f) Jail Jyothi Project

A literacy programme christened 'Jail Jyothi – jails without illiterates', to ensure total literacy among inmates in prisons in Kerala. It is estimated that nearly 1,000 out of the 7,000-odd inmates in 53 jails across the State were illiterate. The goal of the programme is to ensure total literacy for jail inmates

2. **Equivalency Programmes**

Equivalency programmes are organised with a view to provide an alternative education that is equivalent to the existing formal system of education, be it related to formal or vocational education. This programme is targeted towards those neo- literates who aspires to continue their education and acquire certificate that would place them equal standing with others who have successfully completed their studies from the formal system of education.

- a) Class XII Equivalency
- b) Class X Equivalency
- c) VII Standard Equivalency Course
- d) IV Standard Equivalency Course

3. Other Projects

Though Kerala leads the country in total literacy, the state is not fully literate in terms of social security, environmental issues and legal awareness. That is why in addition to literacy through words, Kerala State Literacy Mission Authority now give due thrust on sector specific literacy campaigns for social oriented literacy programmes.

a) Literacy Programme for Migrant Labourers (Changathi)

Thousands of migrant workers from the northern states initiated into the world of letters as part of an ambitious literacy programme 'Changathi' be rolled out by KSLMA. The programme aims to teach the migrant labourers read and write Malayalam and Hindi within Four months.

The programme launched at Perumbavoor in Ernakulam district, which has the largest concentration of migrant workers in the state. A survey was conducted in 27 wards of Perumbavoor recently, and 400 beneficiaries had been identified for the education programme in the initial phase.

b) Environmental Literacy Programme

The project has been evolved keeping in mind the problems faced by people across the world due to rapid environmental degradation. The mission envisaged detailed action plan for the successful implementation of this project. For this, a survey conducted throughout the state to find out the environmental problems persist in areas, on the basis of urban, semi- urban, rural etc.

This novel scheme picked up steam through launching of environmental literacy campaigns in 75 taluks spread across 14 districts of the state on September 8, 2015, the International Literacy Day.

c) Continuing Education Programme for Transgenders

In a landmark move, KSLMA launched another literacy feat that exclusively for the well-being of transgender society. It plans to bring the TGs under this programme. Special classes would be conducted in each district for TGs with

the support of the civic authorities and continuing education centres. Apart from literacy, skill development programmes also to introduce for them.

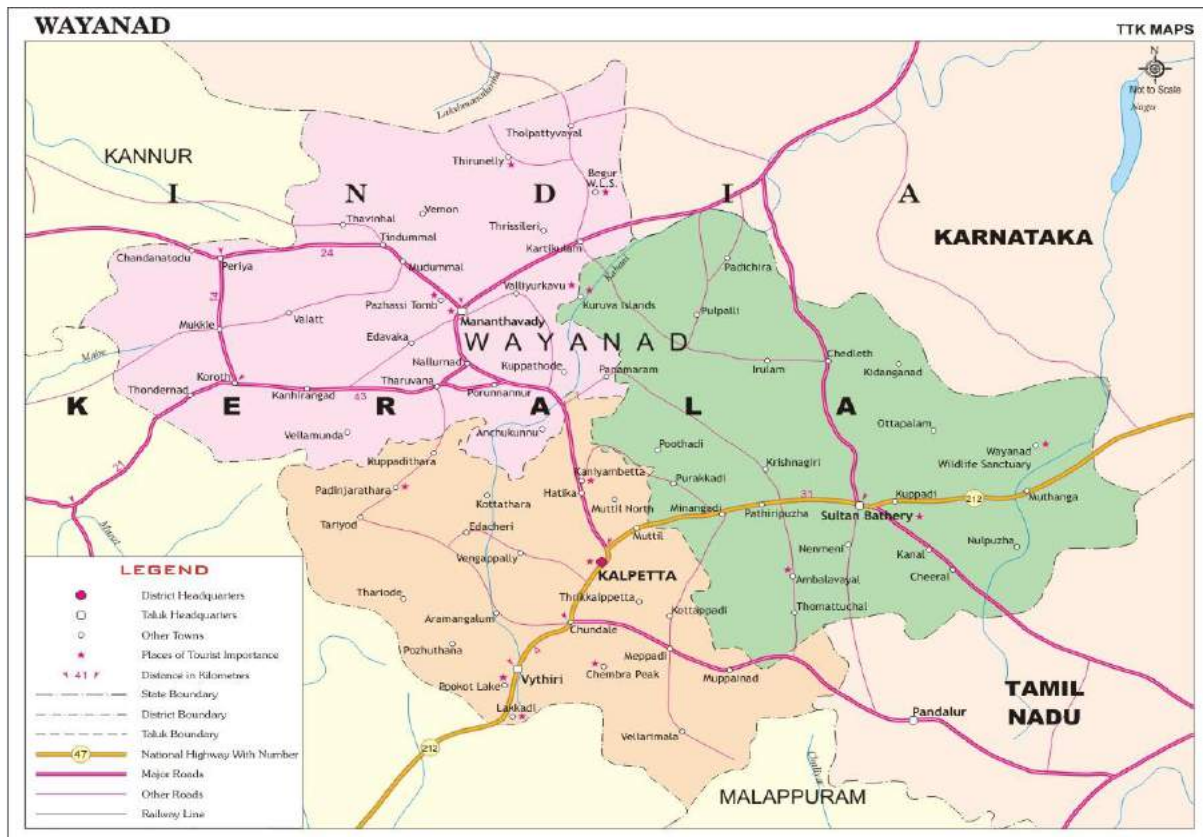
4. Certificate Courses

KSLMA launched three new Certificate courses, Pacha Malayalam, Acchi Hindi and Good English. The four-month courses are aimed at those who are interested in improving their language skills. In the formal education system, a three-language format already exists. In such a scenario, these courses will equip people to handle the three languages- Malayalam, Hindi and English with ease.

Kerala is a fairly small state and largely rural, rather than being a centre of commerce. Additionally, it does not have a high level of industrial development. However, Kerala rises above other states regarding development indicators like literacy, health outcomes and life expectancy. It is crucial to analyse and understand Kerala's success so that the literacy rates can improve in other regions.

2.3 LITERACY IN WAYANAD

Wayanad District came into existence on 1st November 1980 as the 12th District of Kerala consisting of Mananthavady, Sulthanbathery and Vythiri Taluks. The district headquarters is located at Kalpetta municipality. The name Wayanad is derived from 'Vayal Nadu' which means 'the land of paddy fields'. It is a picturesque plateau situated at a height between 700m and 2100m above the mean sea level. It is located in the Eastern portion of North Kerala and is bounded by Tamil Nadu and Karnataka on its West. The district was carved out from the then Kozhikode and Kannur districts. About 885.92 sq. km of area is under forest. The culture of Wayanad is mainly tribal oriented. Though considered as backward, this district is perhaps one of the biggest foreign exchange earners of the State, with its production of cash crops like pepper, cardamom, coffee, tea, spices and other condiments.



Wayanad, the green paradise is nestled among the mountains of the Western Ghats, forming the greener part of Kerala. Clean and pristine, enchanting and hypnotizing, this land is filled with history and culture. Located at a distance of 76 km from the seashores of Kozhikode, this verdant hill station is full of plantations, forests and wildlife. Wayanad hills are contiguous to Mudumalai in Tamil Nadu and Bandhipur in Karnataka, thus forming a vast land mass for the wildlife to move about in their most natural abode. The place also enjoys a strategic location as the leading tourist centres of South India like Ooty, Mysore, Bangalore, Coorg and Kannur are situated around this region. It is also home to various tribal communities. They can be prominently classified into Paniyas, Adiyas, Kattunayakans, Kurichiyas, Kurumans, Ooralis, Uraali Kurumas etc.

Established in 1973, the Wayanad Wildlife Sanctuary is contiguous to the protected area network of Nagarhole and Bandipur of Karnataka on the north-east and Mudimalai of Tamil Nadu on the south-east. Rich in bio-diversity, the sanctuary is an integral part of the Nilgiri Biosphere Reserve, which has been established with the specific objective of conservating the biological heritage of the region. Consisting entirely of notified reserve, the sanctuary is very rich in fauna and flora. The management of the sanctuary lays emphasis on scientific

conservation with due consideration to the general lifestyle of the tribals and others who live on the fringes of the forest.

According to the census of 1991, the population of Wayanad was 6,72,128 out of which 3,41,958 persons were male and 3,30,170 were females. The sex ratio was at 966 females per 1000 males, which was the lowest among all the districts of the state at the time. As per Census 2001, Wayanad had a population of 7,80,619 of which males were 3,91,273 and remaining 3,89,346 were females. Wayanad District recorded an increase of 16.14 per cent to its population compared to 1991. In 2011, Wayanad had a population of 8,17,420 of which male and female were 4,01,684 and 4,15,736 respectively. There was a change of 4.71 percent in the population compared to population as per 2001. The average sex ratio of Wayanad district is 1,035 but the sex ratio of urban areas in Wayanad district is 1,051 while that of rural areas is 1,034.

THE TRIBAL POPULATION

Another important demographic feature of the district is the presence of about 17.4 per cent of tribal population. This is the highest in Kerala. While they are categorized within the Hindu community, they are the most backward group of population, devoid of most of the basic amenities. In fact, due to the categorization of the tribal population within Hindu, the socio-economic indications of Hindus are below the other religious minorities, especially Muslims.

It is estimated that there are about 4 lakh tribal people living in Kerala and about half of this population has made the interiors of Wayanad their home. The tribals were the original inhabitants of Wayanad region. But once the British opened roads to this region and commercial plantations began to sprout, there occurred a migration of settlers to this region and during the 1940s, this migration enhanced tremendously displacing the aborigines or Adivasis of the area. The tribes lost their land and dwindled in numbers and now they constitute only 18.5 per cent of the total population of the district.

As per the census of 1991, the district had a high content of Scheduled Tribes. The total Scheduled Tribes population recorded in Wayanad at the time was 1,14,969 which worked out to be 35.8 per cent of the total Scheduled Tribes population in Kerala and 17.10 per cent of the total population of Wayanad.

The native Adivasis of the district belong to various sects like Paniyas, Kurumas, Adiyars, Kurichyas, Ooralis, Kattunaikkans and Uraali Kurumas. They are mostly physically distinguishable with darker skin and stout built physique. They often live in houses made of thatched roof, mud, bamboo and brick houses set in swampy valleys and plateaus. They are usually found in remote and inaccessible areas. They depend on casual labour in agriculture, plantation work and forestry for survival. They have little amount of land. Lack of land, education and health facilities are acute among the tribal community.

Literacy in Wayanad

As per the census of 1991, there were 4,74,612 literates in the district of which 2,55,679 were males and 2,18,933 were females. The general literacy rate was 70.61 per cent which was less than the state average of 77.96 per cent at the time. But the effective literacy rate of the district was 82.73 per cent as against the state average of 89.81 per cent. The male literacy rate was 87.59 per cent and that of females was 77.69 per cent.

But according to Census 2011, the total literacy rate of Wayanad district is 89.03 per cent, least in the state. The male literacy rate is 92.51 per cent and the female literacy rate is 85.70 per cent. Thus, there is a perceptible gender difference in the literacy rate. Out of the total population, 3.9 per cent of the people live in urban areas while 96.1 per cent live in the rural areas. The average literacy rate of the urban areas is 91.2 per cent while that of the rural areas is 88.9 per cent.

Around 30 per cent of tribal people in Wayanad are illiterates, out of which majority are women, according to a survey conducted by the Kerala State Literacy Mission Authority (KSLMA) in 300 tribal settlements of the total 2,975 such colonies in the district. Conducted ahead of launching the first phase of 'tribal literacy programme' in these selected settlements, majority of them occupied by 'Paniya' and 'Kattunaika' tribes, the survey found that 9,751 people out of the total 31,831 were illiterates. Among them, 6,044 were women against 3,707 illiterates among their male counterparts.

Official estimates given in the Economic Review show that both Palakkad and Wayanad districts face a relatively higher dropout rate compared to the rest of Kerala. These numbers however remain particularly high for the ST category. Both these districts also have higher ST enrolments compared to the rest of the state. The case of Wayanad is particularly important

considering that the enrolment of ST students is the highest in this district. In government schools in Wayanad, ST dropout rates are as high as 5.34 per cent while in aided schools these figures are 3.32 per cent.

The literacy rate among Wayanad's tribal community, which constitutes nearly 20 per cent of the district population, is below 70 per cent. This is lower than both the overall literacy rate of Adivasis in Kerala as well as the overall literacy rate in Wayanad. It is this gap that the local authorities are trying to fill, with the help of civilian volunteers.

'Wayanad Complete Tribal Literacy Project' is a project guided by the Kerala State Literacy Mission Authority which aims to increase the literacy rate amongst Adivasis in the district and it has already completed two phases since 2017. It is aimed at achieving 90 per cent



literacy rate among Adivasis. The officials associated with the project believe that, if successful, it could be a model for the rest of the country. As part of its efforts, the KSLMA drew up the Wayanad Literacy Equivalency and Attappadi Literacy Equivalency programmes, a framework to develop effective schooling strategies. They addressed gaps in literacy programmes for marginalised people. The initiatives were a huge success and inspired to pursue 100 per cent literacy among tribal people in Wayanad by end-2020. So far, the literacy campaign has touched the lives of people in 483 remote tribal hamlets among 2,000 such habitations in the district. In 2017, when the first phase began, there were 4,309 learners from 283 hamlets. Ahead of the second phase, the KSLM surveyed 4,371 houses in 200 tribal hamlets and found that 5,342 individuals, including 3,133 women, were illiterate. With help from educators, 3,179 residents, including 2,590 women, made progress and took the literacy test.

Wayand Tribal Complete Literacy Programme

The project, 'Wayanad Complete Tribal Literacy Project' headed by Kerala State Literacy Mission aimed to achieve 90 per cent literacy rate among Adivasis in the district of Wayanad with the goal of attaining "complete literacy". Wayanad's tribal community, which constitutes about 20 per cent of the Wayanad's population, has literacy rate of about 70 per cent, which

is significantly lower than the state's and Wayanad's literacy rate. This divide is what the local authorities are trying to fill, with the help of civilian volunteers. If the project achieves its target, then Wayanad will achieve 90 per cent literacy rate among Adivasis.

Samagra Shiksha

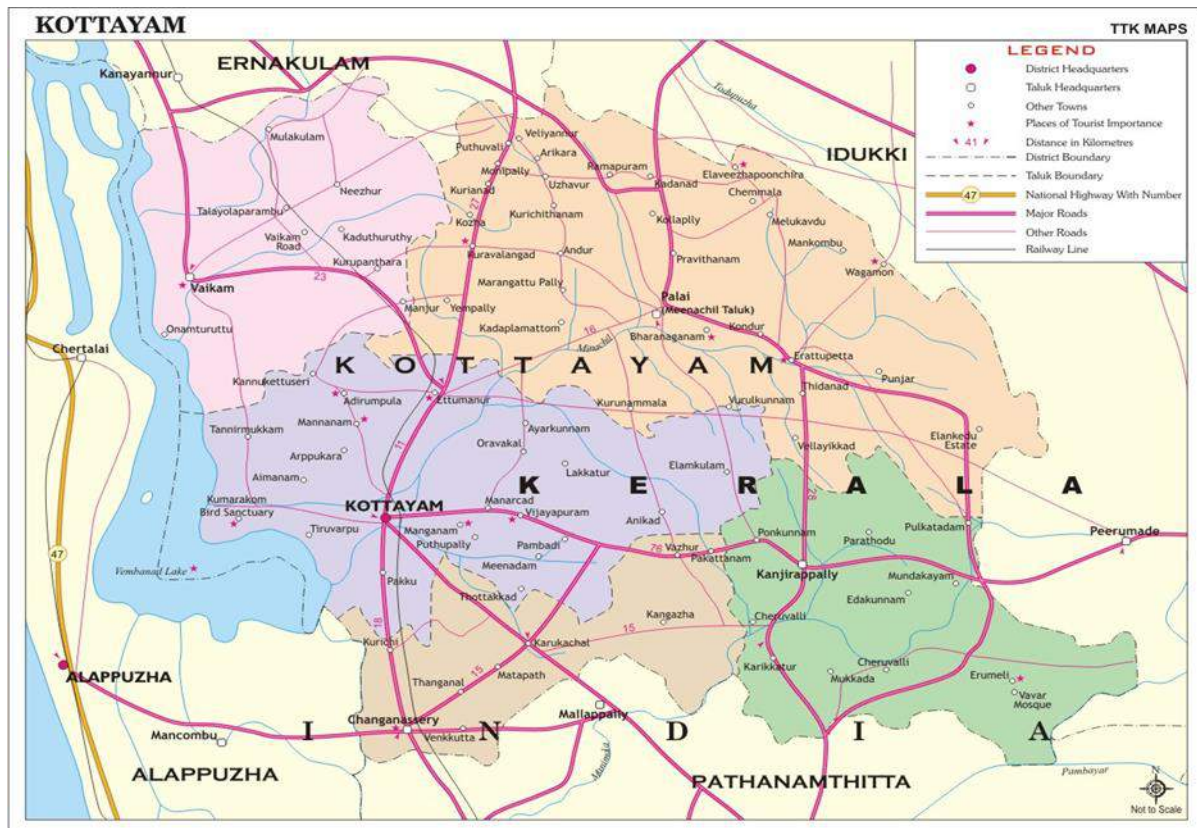
Samagra Shiksha – an overarching programme for the school education sector extending from pre-school to class 12 has been prepared with the broader goal of improving school effectiveness measured in terms of equal opportunities for schooling and equitable learning outcomes. It subsumes the three Schemes of Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education (TE).

The major objectives of the scheme are provision of quality education and enhancing learning outcomes of students; bridging social and gender gaps in school education; ensuring equity and inclusion at all levels of school education; ensuring minimum standards in schooling provisions; promoting vocationalisation of education; support states in implementation of Right of Children to Free and Compulsory Education (RTE) Act, 2009; and strengthening and up-gradation of SCERTs/State Institutes of Education and DIET as a nodal agency for teacher training.

In the wake of education going online, mentors from the six prominent tribal communities in Wayanad district, have begun online classes for tribal students in the district in their own dialects. Under the project Implemented by Samagra Shiksha Kerala (SSK), the mentors translate the Malayalam content aired through the government-run education channel, into tribal dialects. The Malayalam content is translated into six local tribal languages - Paniya, Kurichya, Oorali, Kattunaykkar, Adiya and Kuruma.

2.4 LITERACY IN KOTTAYAM

Kottayam is a city in the Indian state of Kerala. Kottayam district was formed on the 1st July 1949 at the time of the integration of the States of Travancore and Cochin. It is located in central Kerala and is also the administrative capital of Kottayam district. Kottayam comprises of 5 taluks- Kottayam, Meenachill, Changanassery, Vaikom and Kanjirapalli. Bordered by the lofty and mighty Western Ghats on the east and the Vembanad lake and paddy fields of Kuttanad on the west, Kottayam is a land of unique characteristics. Panoramic backwater



stretches, lush paddy fields, highlands, hills and hillocks, extensive rubber plantations, places associated with many legends and a totally literate people have given Kottayam District the enviable title: The land of letters, legends, latex and lakes. The city is an important trading center of spices and commercial crops, especially rubber. Most of India's natural rubber originates from the acres of well-kept plantations of Kottayam, also home to the Rubber Board. Kottayam is also called as "Akshara Nagari" which means the "city of letters" considering its contribution to print media and literature.

Kottayam Town is the first town in India to have achieved 100% literacy (a remarkable feat achieved as early as in 1989). English education in South India did actually start at the Old Seminary in Kottayam in 1813. The first printing press in Kerala was established (CMS Press) at Kottayam in 1821 by Rev. Benjamin Baily.

The first college in the State (CMS College) was also started at Kottayam in 1840. Maiden printed Malayalam-English and English-Malayalam Dictionaries were published from Kottayam in 1846 and 1847 respectively. The first and only Cooperative Society of writers, authors and publishers (SPCS), for publishing books and periodicals was set up here in 1945. Kottayam is the hometown of a vast number of books and periodicals and is the centre of

publishing business in the State. Kottayam is the first town in India selected by the Ministry of Environment and Forests, Government of India to be transformed as an Eco City.

Kottayam district has a total area of 2208 sq. km. The district is naturally divided into high land, midland and lowland, the bulk being constituted by the midland regions. Meenachil and Kanjirappally Taluks have high land and midland areas while Kottayam, Changanassery and Vaikom Taluks have midland and lowland areas. The district has no coastal area.

As per census 2011, Kottayam has a population of 1,974,551 of which male and female were 968,289 and 1,006,262 respectively. In 2001 census, Kottayam had a population of 1,953,646 of which males were 964,926 and remaining 988,720 were females. There was a change of 1.07 percent in the population compared to population of 2001. In the previous census of India 2001, Kottayam District recorded increase of 6.86 percent to its population compared to 1991.

Average literacy rate of Kottayam in 2011 was 97.21 per cent with male literacy rate being 97.97 per cent and female literacy being 96.48 per cent. The sex ratio recorded for 2011 was 1039 and in 2001 was 1025.

Literacy in Kottayam

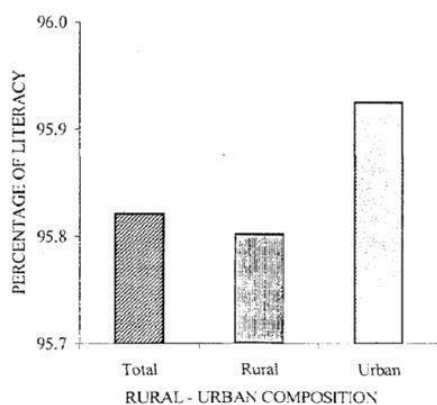
The effective literacy rate of Kottayam was 95.7 per cent in 1991 which was much higher than the state average of 89.8 per cent at the time. Literacy rates for males and females in the district were 97.46 per cent and 94.0 per cent respectively. This was higher than the state's female and male literacy rates of 86.17 per cent and 93.62 per cent respectively. The literacy rates among both males and females were higher in the urban area than rural area in the district.

As per the census of 2001, Kerala had a literacy rate of 90.9 per cent. There were 1,668,266 literates in the district of Kottayam, of which 833,748 were males and 834,518 were females. The general literacy rate was 95.82 per cent which was much higher than the state average of 90.86 per cent at the time. The male literacy rate was 97.34 per cent and that of females was 94.35 per cent.

Among the Districts of Kerala, Kottayam had the highest literacy rate both in 1991 and in 2001 Censuses. The literacy rate of Kottayam District is also higher than the literacy rate of

the State, both in 1991 and 2001. The same pattern of higher literacy in Kottayam District, as compared to the State, is seen in respect of male and female literacy rates also, both in 1991 and 2001 Censuses.

FIGURE 2.2:



The rural literacy rate of the district was 95.80 per cent and that of the urban areas was 95.92 per cent in 2001. The rural and urban literacy rates of the district in 1991 were 95.68 per cent and 95.91 per cent respectively. During 1991-2001, both the rural and the urban literacy rates of the district had marginally increased. The urban literacy rate is higher than the rural literacy rate and the total literacy rate both in 1991 and 2001 Censuses. The

total, rural and urban literacy rates of the district are also higher than the total, rural and urban literacy rates of the State both in 1991 and 2001.

The male and the female literacy rates of the district in 1991 were 97.46 per cent and 94.00 per cent respectively, thus showing a higher literacy rate for the males. The position is the same both in the rural and the urban areas of the district in 1991. The urban area also had higher male (97.67 per cent) and female (94.16 per cent) literacy rates as compared to the rural area (97.41 and 93.97 per cent). In 2001 Census, the literacy rate of both males and females have increased in all the areas, with higher literacy for males and higher male and female literacy rate in the urban areas as compared to the rural areas. The trend in 1991 has thus continued in 2001.

The literacy rate of the Scheduled Castes in the State in 1991 Census was 79.66 per cent as against the literacy rate of 89.81 per cent of the State. In seven Districts of Kerala, viz., Kannur, Kozhikode, Emakulam, Kottayam, Alappuzha, Pathanamthitta and Thiruvananthapuram, the literacy rate among Scheduled Castes was above that of the state. The highest literacy rate among Scheduled Castes was in Kottayam district with 90.28 per cent and the lowest in Kasaragod district with 63.61 per cent. Among the Scheduled Castes in Kottayam district, the male literacy rate was 93.99 per cent and the female literacy rate was 86.63 per cent. Among the rural Scheduled Castes, the male literacy rate was 94.14 per cent and the female literacy

rate was 86.67 per cent. On the other hand, the total literacy rate of the Scheduled Castes was 89.71 per cent, 93.04 per cent for males and 86.36 per cent for females.

The literacy rate of the Scheduled Tribes in the State in 1991 was 57.22 per cent. Among males, it was 63.38 per cent and among females, 51.07 per cent. Among the districts, the highest literacy rate for the Scheduled Tribes was in Kottayam district with 88.69 per cent and the lowest in Palakkad district with 34.87 per cent. In Kottayam district, the Scheduled Tribe literacy rate was 88.69 per cent, 89.98 per cent and 87.44 per cent respectively for total, males and females. Among the rural Scheduled Tribes, the literacy rate was 88.83 per cent with 90.06 per cent for males and 87.63 per cent for females. The rural literacy rate among the Scheduled Tribes was higher than that of the urban literacy rate, reported as 82.64 per cent with 86.29 per cent for males and 79.26 per cent for females.

In Census 2011, the total literacy rate of Kottayam district is 97.21 per cent, highest in the state. The male literacy rate is 97.97 per cent and the female literacy rate is 96.48 per cent. Thus, there is a difference of 1.49 percentage points in the literacy rates of males and females. Out of the total Kottayam population for 2011 census, 28.63 percent lives in urban regions of district. In total 565,393 people live in urban areas of which males are 275,616 and females are 289,777. Average literacy rate in the urban area as per census 2011 is 97.48 per cent of which males and females are 98.24 per cent and 96.75 per cent literates respectively. In actual number 503,023 people are literate in urban region of which males and females are 246,141 and 256,882 respectively.

71.37 per cent of the population of Kottayam districts lives in rural areas of villages. The total Kottayam district population living in rural areas is 1,409,158 of which males and females are 692,673 and 716,485 respectively. Literacy rate in rural areas of Kottayam district is 97.10 per cent as per census data 2011. Gender wise, male and female literacy stood at 97.86 and 96.37 percent respectively. In total, 1,246,775 people were literate of which males and females were 615,451 and 631,324 respectively.

Kottayam Town was the first town in India to have achieved 100 per cent literacy in 1989. The project was achieved through a '100 days, 100 percent literacy' campaign that opened the world of letters to 2,208 people. Initiated on the basis of a door-to-door survey, conducted by the National Service Scheme (NSS) volunteers from Mahatma Gandhi University, among



the nearly 70,000 residents of the town, it was implemented through a concerted action-plan involving bureaucrats, civil authorities and the public. Using the technique of 'each one, teach one,' as many as 600 volunteers, including a group from the Madurai-Kamaraj University in Tamil Nadu, reached out to the illiterates and taught them how to read and write. The entire activities in each of the 32 wards were coordinated by a National Service Scheme volunteers, employed with a monthly stipend of ₹450. On June 25, 1989, Kottayam was declared the country's first '100 percent literate town' by N.P. Sahi, the then Union Minister of State for Education. At the convocation ceremony, each neo-literate was given a certificate authenticated by the Mahatma Gandhi University and the Kottayam municipality.

CHAPTER 3

GENDER GAP IN LITERACY RATE IN KOTTAYAM AND WAYANAD: AN ANALYSIS

3.1 INTRODUCTION

Kerala has the distinction of having India's highest rates of adult illiteracy. According to the 2011 Census of India, Kerala's rate of literacy is 93.91 per cent with a split up of 96.02 per cent for males and 91.98 per cent for females. This showed that effective literacy rate was lower among females. The male-female gap in literacy rate was around 4 percentage points then. That there is a slow rate of growth of female literacy compared with male literacy is a matter of grave concern. Despite the number of efforts made at state and national levels, there exists a significant number of illiterate women in society, a disturbing factor for all developmental efforts. Female literacy is important as it is a force multiplier for the social development of a country. Illiteracy retards the development of an individual, society and the country. Literacy plays a significant role in reducing gender inequality.

This chapter analyzes data collected from various secondary sources. The chapter solely focuses on examining the gathered data in a meaningful way to facilitate the research, that is, to analyze the trends in gender gap in literacy between the two districts. Tables and diagrams are used to facilitate a simplistic reader-friendly writing. The analysis of the collected data is as follows:

3.2 GENDER DIFFERENTIAL IN LITERACY RATE OF KOTTAYAM

Literacy rates (in percentages) of the male and female population of Kottayam according to the censuses: -

TABLE 3.1

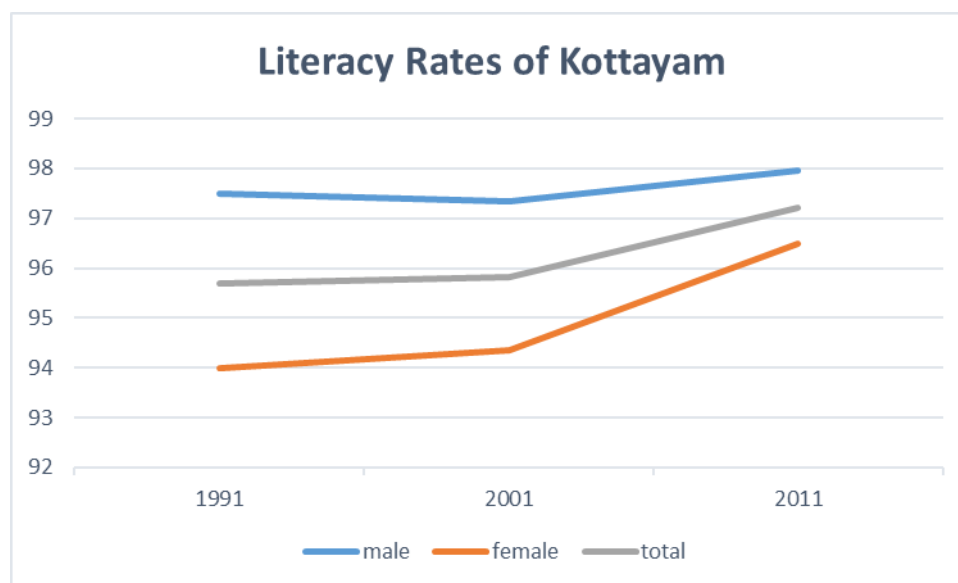
Literacy rate/ Year	1991	2001	2011
Males	97.50	97.34	97.97
Females	94.00	94.35	96.48
Total	95.70	95.82	97.21

Source: 1991, 2001, 2011 Census Data

Literacy in Kottayam was never below the national average during the period 1991-2011. Kottayam's literacy rate has, in fact, remained higher than even the state average in the above censuses. Literacy rate improved from 95.70 per cent in 1991 to 97.21 per cent in 2011. The male literacy rate appears to remain somewhat constant with only slight variations. The female literacy rate, on the other hand, has shown a major rise of 2.13 per cent between 2001 and 2011.

From the above table 3.1, the following graph can be plotted: -

FIGURE 3.1



From figure 3.1, it is evident that the total literacy rate of the district of Kottayam increases by 0.12 per cent from 1991 to 2001 and improves between 2001 and 2011 by 1.39 per cent. The male literacy sees a slight decline of 0.16 per cent between 1991 and 2001 and then goes on to increase to 97.97, almost 98 per cent, in 2011. The female literacy rate sees only a feeble increase from 1991 to 2001 but rises significantly between 2001 and 2011. Thus, it is apparent that all three quantities increase considerably between 2001 and 2011.

Gender gap (in percentages) in the literacy rates of Kottayam in the respective censuses: -

TABLE 3.2

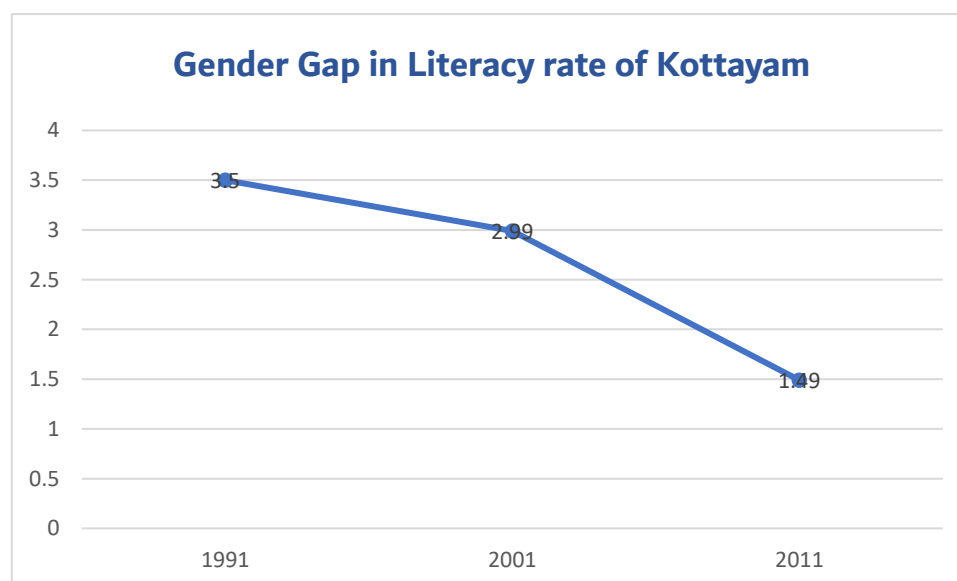
Year	1991	2001	2011
Gender gap in lit rate	3.50	2.99	1.49

Source: Computed by authors

The above gender gaps have been computed by calculating the difference in percentages of literacy rates of males and females for each census. The gender gap in literacy rates for Kottayam reduced by 0.51 percentage points from 1991 to 2001 and by 1.5 percentage points between 2001 and 2011.

From table 3.2, the following graph can be plotted: -

FIGURE 3.2



Observing figure 3.2, the gender gap in literacy rate for Kottayam has been decreasing considerably every census, most noticeably between 2001 and 2011.

3.3 GENDER DIFFERENTIAL IN LITERACY RATE OF WAYANAD

Literacy rates (in percentages) of the male and female population of Wayanad according to the censuses: -

TABLE 3.3

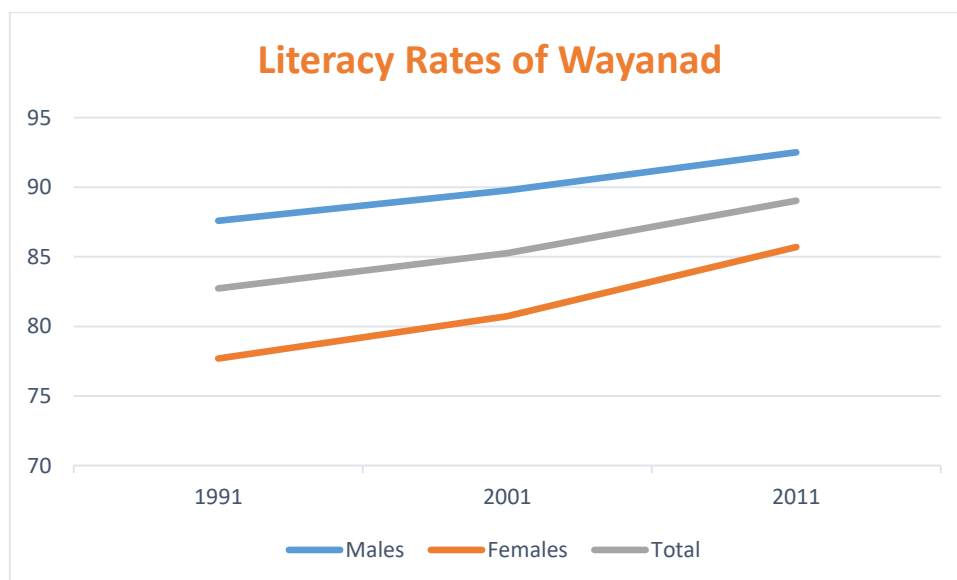
Literacy rate/Year	1991	2001	2011
Males	87.59	89.77	92.51
Females	77.69	80.72	85.70
Total	82.73	85.25	89.03

Source: 1991, 2001, 2011 Census data

Wayanad's literacy rate has remained lower than the state average in each of the above censuses. Literacy rate of the district improved from 82.73 per cent in 1991 to 89.03 per cent in 2011. The male literacy rate increased by 2.18 per cent from 1991 to 2001 and by 2.74 per cent between 2001 and 2011. The female literacy rate has shown a major increase in all three censuses. It increased by 3.03 per cent from 1991 to 2001 and by 4.98, almost 5, per cent between 2001 and 2011.

From the above data, the following graph can be plotted: -

FIGURE 3.3



From figure 3.3, it is apparent that the total literacy rate of the district increases by 2.52 per cent from 1991 to 2001 and improves between 2001 and 2011 by 3.78 per cent. The male

literacy is seen to be almost constantly rising between 1191 and 2011. The female literacy rate sees a considerable increase from 2001 to 2011.

Gender gap (in percentages) in the literacy rates of Wayanad in the respective censuses: -

TABLE 3.4

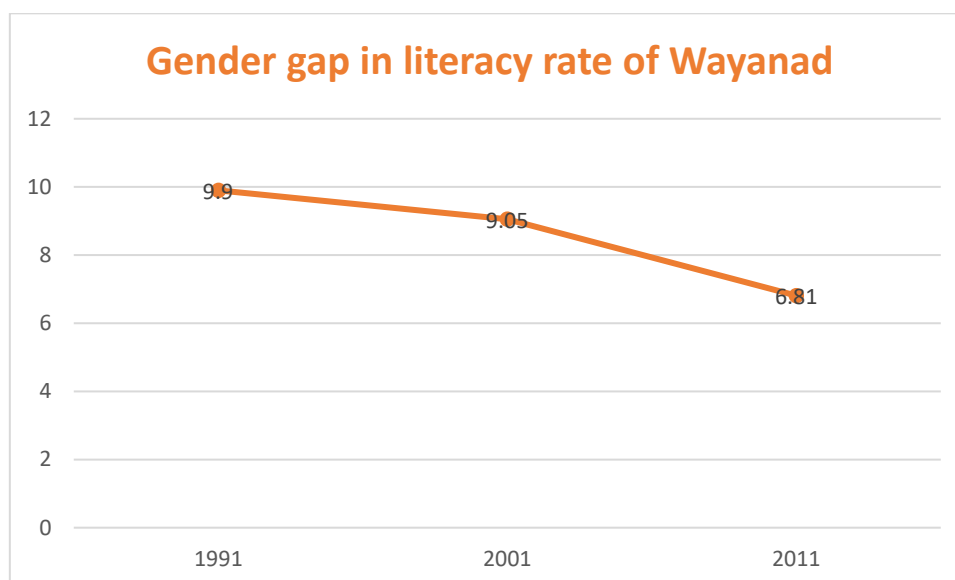
Year	1991	2001	2011
Gender gap in lit rate	9.90	9.05	6.81

Source: Computed by authors

The above gender gaps have been computed by calculating the difference in percentages of literacy rates of males and females for each census. The gender gap in literacy rates for Wayanad reduced by 0.85 percentage points from 1991 to 2001 and by 2.24 percentage points between 2001 and 2011.

From the above table the following graph can be plotted: -

FIGURE 3.4

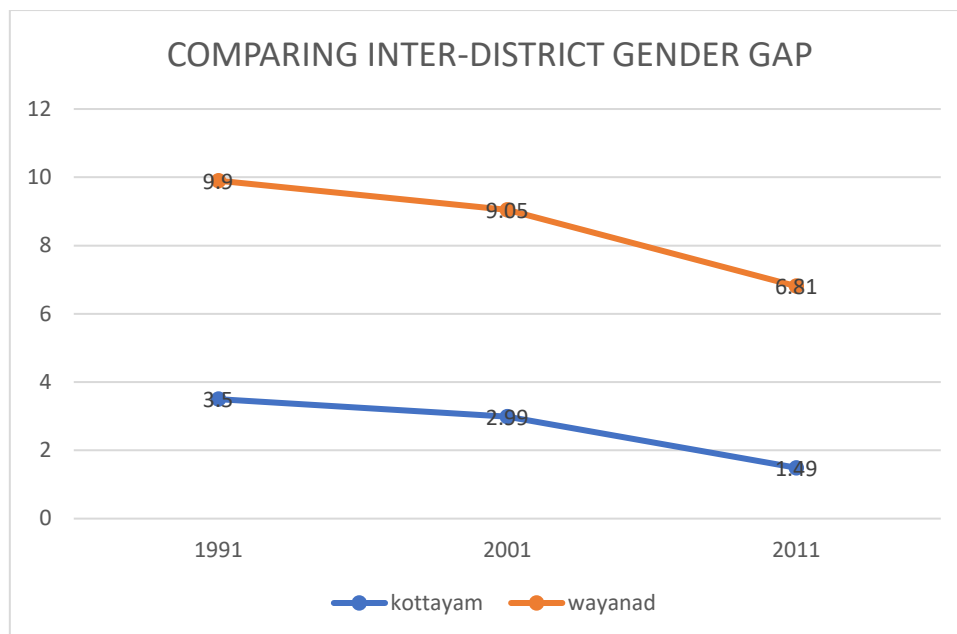


Examining figure 3.4, the gender gap in literacy rate for Wayanad has been decreasing every census but most considerably between 2001 and 2011.

3.4 COMPARING INTER-DISTRICT TREND IN GENDER DISPARITY

From the above data, a comparison of inter district trend in gender gap in literacy rate can be made:

FIGURE 3.5



Examining figure 3.5, it is observed that the gender disparity in Wayanad is much higher than that of Kottayam. A possible reason for this difference could be the fact that the literacy rate among Wayanad's tribal community, which constitutes nearly 20 per cent of the district population, is below 70 per cent.

3.5 Calculating Disparity using Sopher's Disparity Index

This method of calculating disparities had been developed by David V Sopher (1974).

According to this method:

If X_1 and X_2 represent the respective percentage values of variables of Groups 1 and 2, then the Disparity Index (D) can be calculated by the formula:

$$D = \text{Log} (X_2/X_1) + \text{Log} [(Q-X_1)/(Q-X_2)]$$

Where, $X_2 > \text{or} = X_1$ and $Q=100$

In this method of measuring disparities, Group 2 is taken as the variable having comparatively higher value and Group 1 is that having relatively lower value.

Disparity Index technique is useful in measuring **relative disparity** between two variables. In case of perfect equality, i.e., no disparity at all, the value of D will be zero. The measured value of D is interpreted as- higher the value of D, higher the extent of disparity and lower the value of D, lower is the extent of disparity.

TABLE 3.5

Gender gap in literacy rate of Kottayam (using Sopher's Disparity Index):

Year	1991	2001	2011
Disparity Index	0.4	0.3	0.2

Source: Computed by authors

TABLE 3.6

Gender gap in literacy rate of Wayanad (using Sopher's Disparity Index):

Year	1991	2001	2011
Disparity Index	0.3	0.3	0.3

Source: Computed by authors

(All the index values have been rounded off.)

Sopher's index is used to compare the gender disparity in literacy rates between the two districts. By examining tables 3.5 and 3.6, it is seen that, in 1991, Kottayam had a disparity index of 0.4 while Wayanad had 0.3. Thus, Kottayam showed increased disparity in comparison to Wayanad. In 2001, both the districts have equal disparity in their literacy rates. Whereas, in 2011, Kottayam had a disparity of 0.2 in its literacy rate and Wayanad had 0.3. This shows that Kottayam had lesser disparity than Wayanad.

Hence, we can conclude from the above analysis that there is no significant disparity in literacy rates between the districts of Kottayam and Wayanad. Thus, the null hypothesis is rejected.

Wayanad district has about 17.4 per cent of tribal population. This is the highest in Kerala. The literacy rate among Wayanad's tribal community, which constitutes nearly 20 per cent of the district population, is below 70 per cent. This is lower than both the overall literacy rate of Adivasis in Kerala as well as the overall literacy rate in Wayanad. Official estimates given in the Economic Review show that Wayanad district faces a relatively higher dropout rate compared to the rest of Kerala. These numbers however remain particularly high for the ST category. The district also has higher ST enrolments compared to the rest of the state. The case of Wayanad is particularly important considering that the enrolment of ST students is the highest in this district. In government schools in Wayanad, ST dropout rates are as high as 5.34 per cent while in aided schools these figures are 3.32 per cent. The presence of a largely illiterate tribal population could be one of the major causes of lower literacy rate in Wayanad.

Kottayam Town is the first town in India to have achieved 100 per cent literacy. English education in South India did actually start at the Old Seminary in Kottayam in 1813. The first printing press in Kerala was established (CMS Press) at Kottayam in 1821 by Rev. Benjamin Baily. The first college in the State (CMS College) was also started at Kottayam in 1840. Maiden printed Malayalam-English and English-Malayalam Dictionaries were published from Kottayam in 1846 and 1847 respectively.

Kottayam Town was the first town in India to have achieved 100 per cent literacy in 1989. The project was achieved through a '100 days, 100 percent literacy' campaign. Initiated on the basis of a door-to-door survey, conducted by the National Service Scheme (NSS) volunteers from Mahatma Gandhi University, among the nearly 70,000 residents of the town, it was

implemented through a concerted action-plan involving bureaucrats, civil authorities and the public. Using the technique of 'each one, teach one,' as many as 600 volunteers reached out to the illiterates and taught them how to read and write.

Kottayam also has a significant presence of cities and urban agglomeration in the district. Whereas, in Wayanad, there is one designated urban area in the district, Kalpetta municipality, by virtue of it being the district headquarters of Wayanad. According to census 2011, Wayanad had 265 educational institutions in the district and Kottayam, on the other hand, had 476 educational institutions. The population of Kottayam has had more exposure and opportunities of pursuing education due to the above mentioned reasons. Furthermore, the different socioeconomical and cultural context affects the tribal children's success in education. Education of Indigenous communities around the world faces a series of difficulties. There is a shared struggle for cultural identity and inclusion into the mainstream society. In many cases, the education offered by mainstream society fails to cater for the communities' needs for survival. This is often translated into high drop-out rates, social discrimination and marginalisation. These could be some of the contributing factors to the gender disparity in literacy rates between Kottayam and Wayanad.

Thus, from the analysis, it is evident that there is a general rise in the literacy rates for Kottayam and Wayanad between 1991 and 2011. Male and female literacy rates have also increased, on the whole, for both districts in the period 1991-2011. The gender gap in literacy rates have decreased from 1991 to 2011. Sopher's Index analysis also showed that there is no significant difference in the gender gap in literacy rates between the two districts.

CHAPTER 4

SUMMARY, FINDINGS, CONCLUSION AND SUGGESTIONS

This chapter seeks to draw an overall summary, findings of the study, suggestions, and the conclusion of the study in order to understand the project work at a glance.

4.1 SUMMARY

This project titled 'Gender Disparity in Literacy Rate in Kerala: Comparison between districts of Wayanad and Kottayam' analyses the differences in literacy rates of males and females in the two districts. Our project tries to draw inferences from the observation of trends in gender gap in literacy rates of the two districts. The study is based on secondary data obtained primarily from the Census of 1991, 2001 and 2011. The purpose of this chapter is to summarize all the chapters that provide insightful discussions on the topic.

The present study consists of four chapters. Chapter One is an introductory chapter that deals with the problem under evaluation, objective, hypothesis, methodology, scope of the study, limitations of the study and review of literature of the prior studies. Chapter Two provides an overview of the state of literacy and the gender gap in literacy in India, Kerala, Wayanad and Kottayam. Chapter Three consist of the analysis of the data collected from the census data. Chapter Four carries a summary of the analysis, findings, conclusion and some suggestions which might be useful in the future.

4.2 FINDINGS

The findings drawn from the study can be observed as follows: -

➤ **IN THE CASE OF KOTTAYAM**

- i. Male literacy rate decreased by 0.16 percentage points between 1991(97.50 per cent) and 2001(97.34 per cent). It rose to 97.97 per cent in 2011, leading to an increase of 0.63 percentage points.
- ii. Female literacy rate has shown an increase in all three censuses. It rose from 94.0 per cent in 1991 to 94.35 per cent in 2001, an increase of 0.35 percentage points. And in 2011, it rose to 96.48 per cent, which is an increase of 2.13 percentage points.
- iii. The gender gap in literacy rate in Kottayam has shown a decline over the course of three censuses. From 1991 to 2001, there was a decrease of 0.35 percentage points and between 2001 and 2011, the gender gap reduced by 1.5 percentage points.

➤ **IN THE CASE OF WAYANAD**

- i. Male literacy rate increased by 2.18 percentage points between 1991(87.59 per cent) and 2001(89.77 per cent). It rose to 92.51 per cent in 2011, leading to an increase of 2.74 percentage points.
- ii. Female literacy rate has shown remarkable increase in the district. It rose from 77.69 per cent in 1991 to 80.72 per cent in 2001, an increase of 3.03 percentage points. And in 2011, it rose to 85.70 per cent, which is an increase of 4.98 percentage points.
- iii. The gender gap in literacy rate in Wayanad has shown a decline over the course of three censuses. From 1991 to 2001, there was a decrease of 0.85 percentage points and between 2001 and 2011, the gender gap reduced by 2.24 percentage points.

➤ **INTERPRETING SOPHER'S INDEX**

- i. It is observed that, in 1991, Kottayam had a disparity index of 0.4 while Wayanad had 0.3. Kottayam showed increased disparity in comparison to Wayanad. In 2001, both the districts have equal disparity in their literacy rates. Whereas, in 2011, Kottayam had a disparity of 0.2 in its literacy rate and Wayanad had 0.3. This shows that Kottayam had lesser disparity than Wayanad.

4.3 SUGGESTIONS

Since this study is only a comparison of the disparity, it does not look into the causes of the disparity. The government may introduce literacy programmes solely for females as, even though an increase in female literacy rates is seen, it is still lesser than that of the males in the two districts.

It is also important to note that literacy rate only includes the ability of a person to read and write their name in their mother-tongue and perform basic numeracy. But to be truly educate, it requires a holistic development of a person in all aspects. It includes learning, receiving, experience and/or acquiring knowledge, skills, values and beliefs to impart instructions and provide an overall development.

This study can be utilized by major stakeholders like the government agencies, policymakers, advisors, researchers, etc., for planning, formulating and implementing policies in order to improve the literacy of the state and the districts even further.

4.4 CONCLUSION

To conclude, literacy is the basic building block and a crucial element in the development of education in society. In the context of Indian society, which is essentially patriarchal, it is women and girls who suffer because of low accessibility to literacy. In other words, gender becomes an important factor in determining the literacy level of an individual. Women

constitute approximately half, that is, 48.53 per cent of the total population of India. The problem of illiteracy, especially among women, is a huge area of concern as it directly impacts development efforts.

This study provides an insight into the existing pattern of literacy rates and the levels of gender disparity in Kottayam and Wayanad. Although the gender gaps in literacy have declined from 1991 to 2011, yet the literacy rate of the female population is far behind that of the male population for Kottayam and Wayanad.

In Kerala, though female literacy fares much better as compared to the literacy rates in most other states, the gap between male and female literacy shows that women still lag behind men in this aspect. Even though Kerala has the highest literacy rate in India, the gender disparity in the literacy rate should not go unnoticed as it is a cause of concern. This kind of disparity in the field of literacy is serious problem which needs immediate attention and long-term action plan. In this context, the result of the present research project proves of immense importance to planners, researchers, administrators, educationists and decision makers. It is evident from the present study that female literacy in the state is on a constant rise but it is below that of the male. With the government's initiative and the people's efforts, this situation can be resolved and Kerala can become a model for the rest of India to follow.

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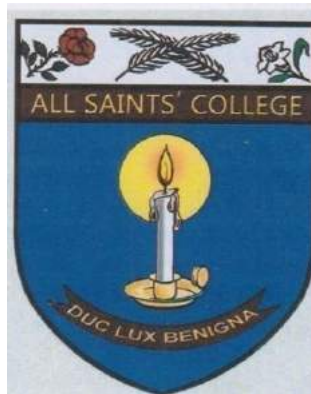
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**ACCESSIBILITY AND UTILIZATION OF HEALTHCARE
SERVICES IN KERALA : A CASE STUDY OF
KATTAKADA PANCHAYAT**

FIRST DEGREE PROGRAMME

IN

ECONOMICS UNDER CBCSS SYSTEM



ALL SAINTS' COLLEGE

2020-2021

CERTIFICATE

This is to certify that the dissertation titled “**ACCESSIBILITY AND UTILIZATION OF HEALTHCARE SERVICES IN KERALA : A CASE STUDY OF KATTAKADA PANCHAYAT**” is a record of studies carried out by Beena J S, Akhila Prasad, Amina N S and Amina S, in the Department of Economics, All Saints College, Trivandrum under my guidance and submitted to the University of Kerala in partial fulfilment of the requirements for the award of Degree of Bachelor of Arts, First Degree Programme in Economics under CBCS System.


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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

Health is an essential requisite for good quality of life. Health is an invaluable gift of nature. It is one of the basic needs of all the human beings and it's influenced by many factors, such as food, housing, basic sanitation, healthy lifestyles, protection against environmental hazard and communicable diseases. Health is man's natural condition and his birthright which is the result of living in accordance with the natural laws pertaining to the body, mind and environment.

The world is going through rapid changes, and the only constant thing that is in our hands is our health. Being healthy is a choice. Specific guidelines are there to maintain good health, but in the end, it is individual effort and determination. Good health is essential for having a proactive and fully functioning life. Man is a social animal, and good health ensures social survival. Health, besides being personal, is also social. A healthy person can bring positive changes in society. It is not an end to itself but also the key to creating a better and more reformed community.

The World Health Organization defines health as a state of mental, physical, and social well-being, and not merely physical well-being. Individuals who are healthy in mind are automatically healthy in their bodies. Good health is man's greatest possession. A healthy person is one who can function up to his optimal capacity without any difficulty. Good health facilitates a lot of other body processes. Good helps us to handle stress and combat with increasing pressures. According to "WHO" in 1948, the definition on the concept of health is, "a state of complete physical, mental and social wellbeing of the individual and not merely the absence of disease or infirmity". In 1986, the WHO, in the Ottawa Charter for Health Promotion, said that, health is "a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities". The repeated proverbs like "Health is Wealth" "Cleanliness is godliness". A Sound mind in a sound body indicates the Universal reorganization of the importance of health. Therefore, Health has occupied the highest place in the life of man from time immemorial. Health has several dimensions; each dimension is important but its relative importance, i.e., other dimensions depends on the circumstances in which an individuals or community. The dimensions are: Physical, Mental, Nutritional, Environmental, Educational, socio-cultural, Economic, Preventative and Curative. Health is Wealth means good health is the real treasure. A healthy life enables one to remain positive and face all life challenges.

Every country in the world has a general system for managing a country. The role of the

governments in all countries is by providing security, services, and well-being of their populations, and every country has policy to provide the best healthcare services for their people. Thus, according to the Universal Declaration of Human Rights, the Article 25 assures that:

“(1) Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control. (2) Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.”

Therefore, the health care system is one of the most important indicators that reflect the power of any country and the respect of human rights. The health care systems differentiate from country to another. It ranges between private healthcare systems to comprehensive health care systems. The disparity between the healthcare systems is due to the economy and the system of government in every country.

Health care is an essential sector to develop for better standard of living, refers to the treatment and management of illness, and the preservation of health through services offered by the medical, dental, pharmaceutical, clinical laboratory sciences (Diagnostics) in using and allied health professions. Healthcare embraces all the goods and services designed to promote health, including, “Preventing, curative and palliative interventions whether directed to individuals or to populations” (WHO 2000). The main theme of healthcare is; to provide complete health facilities, to protect every one physical, social, and mental health, to decrease the death rate, to increase the life expectancy of man and socially for balanced development. Health is quality of life and involves the responsibility of governments for its maintenance and to achieve a social goal.

The Healthcare system acts as an intermediately between the providers and the seekers. Health care systems are more oriented towards curative healthcare. Healthcare is one of India's largest service sectors. The Indian health sector can be viewed as a glass half empty or a glass half full. The challenges which the sector faces are substantial, from the need to reduce mortality rates, improve physical infrastructure, necessity to provide health insurance, ensuring availability of trained medical personnel etc. There has been a rise in both communicable and non-communicable diseases, including chronic disease. As Indians live more affluent lives and adopt unhealthy diets that are high in fat and sugar, the country is experiencing a rapidly rising trend in non-communicable diseases such as cancer, diabetes that is expected to grow at a faster rate than infectious diseases. In addition, to that, the growing elderly population will place an enormous burden on India's healthcare systems and services. There are considerable shortages

of hospital beds and trained medical staffs such as doctors, Nurses etc., and as a result public accessibility is reduced. There is also a considerable rural-urban imbalance in which accessibility is significantly lower in rural compared to urban areas (planning commission, 2012). A good healthcare system consist many characteristics like Adequacy, availability, accessibility, affordability and feasibility. These are the factors related to individual circumstances that have found to have an influence on the access to health care often translated into utilization rates. Health, like education is one of the basic capabilities that give value to human life and its importance in its own right cannot be overstated. The anguish of disease and premature death makes disease control a central preoccupation of all societies, and motivates the inclusion of health among the basic human rights enshrined in international law. The strong link between poverty and ill health needs to be recognized. The onset of a long and expensive illness can drive the non-poor into poverty. Health creates immense stress even among those who are financially secure. High health care costs can lead to entry into or exacerbation of poverty. The importance of public provisioning of quality health care to enable access to affordable and reliable heath services cannot be underestimated.¹ This is specially so, in the context of preventing the non-poor from entering into poverty or in terms of reducing the suffering of those who are already below poverty line. During the plan period, the total plan outlay by the Central and the State Governments on the health sector has increased in absolute terms, though it has declined percentage term, which was in contrast to the recommendations made by the Bhole Committee. Total plan outlay by the Central Government on the health sector has increased from Rs. 65.3 crore during the First Plan to Rs. 1252.6 crore during the Fifth Plan, further up to Rs. 14102.2 crore during the Eighth Plan and then to Rs. 140135 crore during the Eleventh Plan. In percentage terms, it has decreased from 3.3 per cent of total outlay in the First Plan to 3 per cent in the Second Plan, 2.6 during the Third Plan to 1.9 in the Fifth Plan and 1.45 per cent during the Eleventh Plan. In the last six years, public health expenditure by the Central and the State Governments as a percentage of gross domestic product (GDP) has increased only marginally from 1.24 in 2003-04 to 1.41 in 2009-10. The total expenditure on health services in the country is estimated to be around 5 per cent of the GDP, of which more than 80 per cent is borne by the private sector and that too by the households in the absence of any significant contribution by public health insurance. As compared to this, in most developed countries, public sector accounts for the major share of health expenditure. For instance, in the United Kingdom, more than 85 per cent of the total health expenditure is borne by the public sector. The United States is the only developed country where the share of private sector is more than the public sector, though the latter accounts for about 45 per cent of total health expenditure. Thus, India's public health expenditure as a percentage of GDP is one of the lowest among all countries.

1.2 STATEMENT OF THE PROBLEM

Good health is central to human happiness and well-being that contributes significantly to prosperity and wealth and even economic progress, as healthy populations are more productive, save more and live longer. Ill health of a human being is not only wastes human resource but also reduces his income level. The extent of fall in his income depends directly not only on the severity of illness, but also and more importantly on the availability and accessibility of public health services. Data indicate that the growth in health infrastructure is not commensurate with that of welfare services in rural India population growth and thus it has pushed down the relative availability of the public health services. The onset of economic reforms has restricted the public sector's role in the health sector, while the introduction of privatisation and globalisation has led to the arrival of multi- speciality, super-speciality and corporate hospitals. Thus, in India, public health infrastructure has not improved on the one hand, while the private health infrastructure has grown at a rapid rate. This has resulted in huge rise in the out-of pocket expenditure on health care by the household sector, which has the potential to push them below the poverty line or push them under abject poverty. It becomes pertinent to analyse the degree of availability, extent of accessibility, the rate of utilisation of the health care system and health care expenditure among the households.

1.3 SIGNIFICANCE OF THE STUDY

The quality of health care system and services in the society is considered as one of the crucial factors that define a government in a certain state. Kerala is characterized by a high density of public and private health infrastructure. In this advanced state, a question arises that whether the fruits of human development are fairly shared to all segments of population so this out we should go through a research. Health care is also a very important factor to determine the physical and mental well-being of the people, that is why it is also highly recognized as a great contributor to a country's economy. The necessity of maintaining good health is more relevant among the poor both due to their precarious level of income and vulnerable health status. Among the households, many factors push down their relative income level which includes rising general price level on the one hand and rising expenditure on the other hand, which is inevitable. Health care expenditure is one such expenditure which ought to be incurred to make themselves employable again. This study attempts to examine the issues of availability of health infrastructure, the extent of its accessibility, the rate of utilisation and also the expenditure incurred by the households on their health.

1.4 OBJECTIVES

- To analyse the present health status of Kattakada Panchayat.
- To study the accessibility and utilization of healthcare system in Kattakada Panchayat.
- To study the weakness of primary health care services in Kattakada Panchayat.

1.5 HYPOTHESIS

Accessibility and utilization of healthcare services are positively related to the level of income.

1.6 SOCIAL REVALANCE OF THE STUDY

Kerala's achievements in the health sector have been often cited as role models for the country. Some of its health indices match with that of the developed countries. The state has a better health standard with low birth and death rate, rapidly declining growth rate, high level of acceptance of family planning methods and increased life expectancy. Government of Kerala patient-friendly hospital mission AARDRAM provides quality services at all health level.

Generally, lower socioeconomic groups (poor people) live in the remote areas such as coastal area, slum, hilly area have less health care facilities and services and also more costly to reach in urban hospitals and physician. It is well recognized that poor health is a common consequences of poor health and it is working as a vicious circle. The lives of poor are very vulnerable to health risk and there exist health cost relative to their income because they are frequently suffering from poverty related diseases causing a higher level of morbidity and mortality. Now it is time to rethink about health care facilities, accessibility and utilization of poor people because they are internal part of our development.

1.7 RESEARCH METHODOLOGY

Accessibility and utilization of healthcare systems in Kattakada Panchayat in Thiruvananthapuram district is selected. Primary data is collected by questionnaire through online survey. Among them 100 samples are selected for this.

1.7.1 PRIMARY DATA

The primary data has been collected by questionnaire through online survey. It contains the information regarding the utilization and accessibility of health care services by the seekers.

1.7.2 SECONDARY DATA

The secondary data is collected in the form of published works such as Books, Gazetteers, Journals, Articles both national and International reports published by the Government collected through the libraries and website also.

1.7.3 TOOLS FOR ANALYSIS

Appropriate statistical tools are used for analysing data such as Bar diagram, Pie diagram to express income, utilization of health services, expenditure etc of the respondents.

1.7.4 SAMPLE DESIGN

Sample size: for this study 100 respondents are used for collecting data. Sample techniques: Stratified Sampling Technique is used for this study.

1.8 LIMITATIONS

The study was conducted in rural area only. It would be better than if it had compared with the utilisation and accessibility of health care services in urban area. However due to transport problem and finances to do the study is limited. And also very few studies were done in this topic, so it difficult to get base line data.

1.9 REVIEW OF LITERATURE

An attempt is made in this chapter to review the relevent literature which could serve as a empirical, theoretical and intellectual backdrop for the present study through reputed national and international journals, magazines and annual reports are presented by the authors below for easy understanding. In this study, we have reviewed only few important ones to understand the concept easily. These are :

The collected secondary literature is reviewed as under.

Dilip (2005) and Barnn et al (2010) have studied how inequities in the acces to health care have been rising across states, between rural-urban, among different economic class, castes India.

Hongvivitana (1984), access to healthcare comprises of five different components: availability, accessibility, contact and effectiveness. Availability includes the provision of manpower and facilities; accessibility means geographic availability; accessibility means percieved value of obtaining care; contact and effectiveness are to mean the process and outcomes of health use respectively. If all those components have been taken into account lots of regional disparities can be observes in India. Again, for socio economically backward section of people regional disparity in access to healthcare creates more trouble.

John kuemoirri Ganle, Michael Parker, Raymond Fitzpatrick, Easmon Otupiri BMC pregnancy and childbirth 14(1),1-17-2014 to reduce financial barriers to access, and improve access to and use of skilled maternal and new born healthcare services, the Government of Ghana, in 200, implemented a new maternal healthcare policy that provided free maternity care service in all public and mission healthcare facilities.

Britton A Gibson, Debarchana Ghosh, Jamie P Morano, Frederick L Altice-Health and place 28,153-166,2014 we mapped mobile medical clinic(MMC) clients for spatial distribution of their self-reported locations and travel behaviours to better understand health seeking and utilization patterns of medically vulnerable populations in Connecticut.

Jo Ann Damron-Rodriguez, Steven Wallace, Raynard Kington-Gerontology and Geriatrics Education 15(1),45-64,1995, Research on minority elderly service use was examined and patterns of utilization of emergency services, hospital stays, physician visits, nursing home placements and community-based services are described.

Hodgson (1991) gave a geographical angle to primary healthcare planning. He analysed the pattern of utilization of health services. In a large country like India, where people live in remote areas, the decision to correctly locate the health centres assumed a strategic importance for the maximum.

Banejee et al (2004) conducted a survey in rural Udaypur district of Rajasthan focusing on the relation between access to healthcare and health status of the rural people. The study has reflected about poor access to healthcare in terms of public health care system in rural Rajasthan. Availability of untrained private sector as well as high absenteeism is also some of the characteristics of such areas.

Fuchs (1974) studied the problems of access to healthcare fall into two main categories, which may be labeled as "special" and "general". The special problems of access are those faced by particular groups in society—the poor, the ghetto dwellers, and the rural population. The general problem of access is one that is felt even by individuals and families who have enough income or insurance to pay for care and are not disadvantaged by reason of location or race. For them the problem is simply to get kind of care when they need it.

Utilization of health care happens in terms of the interaction between demand and supply of health care; however they do not necessarily happen on equal terms.

Arrow (1963) explains that the most distinguishing characteristics of an individual's demand for medical services are that it is not steady in origin as, for example food, clothing, but irregular and unpredictable. Medical services, apart from preventive services, afford satisfaction only in the event of illness, a departure from the normal state of affairs.

Mooney et al (1988), McPake et al (2002) say that demand for healthcare is a derived demand from the demand for health. Though consumption of health care is often unpleasant, people demand it for the sake of good health. Again, it is income elastic as well as is induced by supply of it.

Feldstein, 1965; Lee and Mills, 1983 and Mooney, 1986 giving importance to demand side of healthcare, Mooney (1986) said that having equal access to healthcare meaning two individuals face the same costs of using the health care facility (e.g., as a proxy it might be that they live in the same distance from the facility) may not use it equally as their demand for healthcare may be different. So, there may be mismatch between demand for and supply of healthcare which results in poor health outcome.

Cutler (1994), in his paper, describes the relation between demand for healthcare and high costs, inefficient production and lack of security, poor people, when they need healthcare, are not able to go to private healthcare on one hand.

Chatterjee (1988) pointed out that while framing a National Health Policy, the commitment of the states to implement it should be ensured as it may vary widely as it has happened in the past. Therefore, mechanism needed to be instituted to make sure that all states implement the primary health care as envisaged by the policy. The central councils must be strengthened so that both carrots and sticks are applied to their recommendations in so far as these favour the goal of universal health care.

Panikar (1992) opined that in spite of a wide network of public sector medical care institutions, where medical services are supposed to be easily accessible and freely available, private expenditure on medical care in Kerala remains very high utilization of scarce resources.

Kuppozhackel (1995) suggested that the existing health services are curative oriented, capital intensive and urban biased. As a result, two sub-systems exist simultaneously. One consisting of the ill-equipped primary health care network meant for the rural poor and the other, a well equipped hospital network in the urban areas which in fact gets the large share of the planning resources.

Datar (2008) examined whether increased mortality risks induce households to make differential health investment in their high-versus low-endowment children. They found that in villages with high mortality risks, small-at-birth children in a family are 6-17 percent less likely to be breastfed or immunized compared to their average or large-at-birth siblings. In contrast, they found no significant differences in investments in villages with low mortality risks.

Sanyal (1996) analysed the changes in utilization patterns and differentials across economic classes. According to this study, private healthcare dominates in outpatients' treatment and the public sector in respect of in-patients. Not surprisingly, the rate of out-patients to in-patients in private sector outstrips that of the public sector, there being hardly any difference between the rural and urban sectors. There is a much higher ratio of secondary and tertiary hospitals

compared to the lower level indicating the inefficiency or the incapability of the primary health care system.

Ojha (2006) explained that the National Rural Health Mission (NRHM) strategy integrates health with sanitation and hygiene, nutrition and safe drinking water. A hostile approach to integrate education and family planning with the mission will yield more substantial result. The objectives of the mission are to achieve acceptable health and nutrition status of women, girls and children by ensuring optimal care at home and within the community with appropriate access to state sponsored health and nutrition and services as and when required.

Reyes-Gibby et al (2005) classify access to healthcare into two parts potential access (probability that services will be obtained) and realized. Among the factors to be highly associated with utilization of healthcare are a usual person or place to go to when sick or needing health advice and higher level of education.

Dror (2006) has highlighted that most Indian have to pay the vast majority of their healthcare costs out-of-pocket. This burden is particularly high for those who suffer from both poverty and illness. Without any insurance coverage, those people suffer severely.

Mihir K. Mahapatra and Rajesh Raj S. N. (2009) make an attempt to analyze the health scenario in India during the pre-reforms and reforms period taking 15 major states. They found that there has been considerable improvement in the health sector during the last few decades in India but there is a long way to go to meet the target stipulated in the Millennium Development Goals and to be on par with some of the Asian Countries.

Dastageer R. Myageri (2007) examines the performance of healthcare system as a whole by measuring the trends of health indicators, determinants and the effect of the determinants of health status on each of the health indicators.

1.10 RESEARCH GAP

Here, a detailed review of the relevant literature in connection with healthcare services was done. It reveals that a number of studies were conducted in the area of accessibility and utilization of healthcare services in India. Coming to Kerala, a well – detailed study about this healthcare services has not been initiated. In this context, it is highly imperative to have an in-depth study regarding the accessibility and utilization of healthcare services especially utilization of rural healthcare services of the people of Kerala.

1.11 CONCLUSION

From the study, review here, there has an positive aspect that there has been considerable improvement in the health sector during the last few decades in India because of the implementation of National Rural Health Mission (NRHM) programme which integrates health with sanitation and hygiene, nutrition and safe drinking water. Although consumption of health care is often unpleasant, due to the people less demand it for the sake of good health. Again, it is income elastic as well as is induced by supply of it.

1.12 CHAPTER SCHEME

The study is divided into four chapters

CHAPTER 1

First chapter gives a brief introduction of the topic. It includes statement of the problem, significance of the study, objectives, research methodology and limitation of the study and review the literature of the study

CHAPTER 2

The third chapter shows an overview of healthcare services in Kerala

CHAPTER 3

Data analysis and interpretation

CHAPTER 4

Last chapter states the summary, findings, suggestions and conclusion.

CHAPTER 2

AN OVERVIEW OF THE HEALTH CARE FACILITIES IN KERALA

2.1 INTRODUCTION

Health is both means and end of development. Healthy and educated population can contribute to the productivity, economic growth and development in a better way. On the other hand, decreased health status reduces labour productivity resulting in poverty which further leads to more healthcare needs. In the present day economy, investment in health and education is of greater importance from the point of view of human capital approach of New Growth Theory. This theory gave importance to human capital to explain the way towards long run growth with increasing returns to scale. Although, in the initial period emphasis was given on education as the source of human capital formation, in the ground breaking analysis, health and nutrition have also been given equal importance. Mahbubul Haq, the distinguished economist, who has introduced the United Nations Development Programme (UNDP)'s Human Development index, gives much importance on health as a goal of development. Any development should put people at centre of its concern. Purpose of development is to develop all human choices not just income. India, over the last two decades, has enjoyed accelerated economic growth, but has performed poorly in human development indicators and health outcomes. Various health status indicators, specially, regarding child health and reproductive health, remain unacceptably low compared with countries in the South and East Asian region that have similar income levels and rates of economic growth. According to *Human Development Report 2004*, the infant mortality rate (IMR) in India is 58 per thousand, while in China it is 20 and in Sri Lanka it is 17.

2.2 HEALTHCARE

According to World Health Organization, "Health means a complete state of physical, mental and social wellbeing and not just merely the absence of disease or illness." According to Achesonetal, this definition considers nearly all of us to be sick. So, there is a need of a more precise definition of health. In economics, health has been considered as durable goods which provide services. The flow of services provided from health capital is consumed continuously over lifetime. Each person is assumed to be dowed with a given stock of health at the beginning of a period such as a year. This stock of health depreciates with age and may be augmented by investment in medical services.

According to Schutlz there may be four different types of health indicators as

- 1) Self reported health status;
- 2) Morbidity rates;
- 3) Physical functional limitations; and

4) Nutritional and physical growth outcomes.

But, all the four types of indicators have certain limitations as they leads to some subjective results based on socioeconomic condition, age group, regional disparities etc of the sample patients. Still, various studies conducted in India by National sample Survey Organization (NSSO), National Family Health Survey (NFHS) etc have assumed self reported health status as a measuring rode of people's health. So, this study also considers self reported health status as a parameter of measuring people's health.

Health care refers to those resources society uses in an attempt to cure them or to care for people in ill health. In addition to curing and caring for people who have already become ill, healthcare includes some activities that seek to prevent people becoming ill in the first place. Hence, cure is concerned with improvement in health that patient. When a person's life is in danger, or when they suffer from illness from illness, a 'cure' might,

- 1) Folly restore that patient's health (for example, rescue operations);
- 2) Improve their health though not completely (for example, cataract operations);
- 3) Limit the extent to which health deteriorates (for example, pain relief for the terminally ill).

On the other hand, prevention includes those resources whose main purpose is to reduce the probability of illness or premature death. So, it is the subset of all the resources that impact upon health.

2.3 HEALTH SCENARIO IN INDIA

India has a rich, centuries-old heritage of medical and health sciences. Since independence, considerable progress has been achieved in the promotion of health in India. Smallpox has been eliminated, and mortality from cholera and other related diseases has decreased. But problems like higher population density, low socioeconomic status of a significant number of people and low literacy rate in some parts of the country, have resulted in poor health indicators.

Though hospitals, dispensaries, public health centers and other medical facilities are present, they are not sufficient to cater to the growing needs of India's substantial population. Rural access to quality medical service has to be improved. The inadequate manpower of doctors in public sector hospitals is also a concern for health authorities. Furthermore, the infrastructure required in the hospitals, like medicine, furniture and equipment, are not adequate to serve the population.

Though the public sector is not expanding its healthcare services, private, co-operative and other non-profit organizations have started hospitals and are providing medical services to the public. Moreover, the Government of India is taking other steps to improve healthcare. For example, the Government has, from time to time, appointed various committees to address the pervasive problems in the healthcare sector. In addition, it has demonstrated a strong

commitment to population control, including the implementation of family planning programs geared towards controlling the population.

2.4 HEALTH POLICY AND PROGRAMMES IN INDIA

The Department of Health and Family Welfare services implements various National and State Health Programs of Public health importance and also provide complete healthcare service to the people through various types of health institutions. It may be noted that as many as nearly 33 different major health programmes have been introduced ever since independence in India. These programmes are sometimes generic in nature and applicable to the entire population; at times they aim at controlling specific mass diseases; sometimes they target women and children. And a few programmes are meant exclusively for children.

Table 2.1 Health Programmes in India

YEA R	HEALTH PROGRAMMES	Nature
1948	India Joined WHO	
1951	BCG Vaccination Programme	Vaccination
1952	National Family Planning Programme	General
1953	National Malaria Control Programme	Disease Specific
1956	Central Health Education Bureau Established	
1955	National Filaria Control Programme	Disease Specific
1955	National Leprosy Control Programme	Disease Specific
1958	National Malaria Eradication Programme	Disease Specific
1958	Primary Health Centres Programme	General
1962	National Goitre Control Programme	Disease Specific
1962	National Small Pox Eradication Programme	Disease Specific
1962	National tuberculosis Programme	Disease Specific
1962	School health Programme	Nutrition
1962	Iodine Deficiency Disorder (IDD) Programme	Nutrition
1963	Applied Nutrition Programme	Nutrition
1963	Mid-day meals Programme	Nutrition
1964	Maternal and Child Health Programme	General
1966	Separate Department of Family Planning Started	
1968	Extensive Family Planning started	
1969	Promulgation of the Central Birth and Death	
1970	Iron and Folic Acid Supplementary Programme	Nutrition
1970	Special Nutrition Programme	Nutrition
1971	Anemia Control Programme	Nutrition
1971	Vitamin A Prophylaxis Programme	Nutrition
1974	Minimum Needs Programme	General
1975	ICDS Programme	General
1975	Integrated Health Scheme	General
1976	National Programme for Prevention of Blindness	Disease Specific
1978	Expanded Programme of Immunization	Immunization
1980	National Diarrheal Control Programme	Disease Specific
1983	National Leprosy Eradication Programme	Disease Specific
1985	Universal Immunization Programme	Immunization

1987	National AIDS Control Programme	Disease Specific
1989	Blood Safety Programme	Disease Specific
1990	ARI Control Programme	Disease Specific
1992	Child Survival and Safe Motherhood Programme	General
1995	Pulse Polio Eradication Programme	Immunization
1996	Reproductive and Child Health Programme	General
1999	New National Health Policy announced	
2000	New National Population Policy announced	
2005	National Rural Health Mission	General
2007	National Aids Prevention And Control Policy	Disease Specific
2008	Pradhan Mantri Bhartiya JanaushadhiPariyojana	quality generic medicines at affordable price
2013	National Health Mission	General
2018	Ayushmanbharat Yojana	General

Source: National Family Health Survey, 2018-2019, Institute for population science, Mumbai

The Indian government considers health is an important state subject. Its main aim is to the areas of control eradication of major communicable and non communicable diseases, and for broad policy formulation, medical and para-medical education, drug control; prevention of food adulterine etc. a major portion of outlay is for the eradication of diseases like malaria, tuberculosis, leprosy, AIDS, blindness, cancer control. In 1946, the Bhore committee report on health pointed out for an integrated primary healthcare, social and preventive medical care, citizen's participation; strong inter sectoral cooperation and cooperation between central and state governments. The Alma Ata Declaration on Primary healthcare and the National Health Policy of the Government gave a new care the central function and main focus of its national health planning in India, making primary healthcare the central function and main focus of its national health system. The goal of national health planning in India was to attain Health for all by the year 2000.

2.5 NATIONAL RURAL HEALTH MISSION(NRHM)

The **National RURAL Health Mission (NRHM)** was launched by the government of India in 2013. It was further extended in March 2018, to continue until March 2020. It is headed by Mission Director and monitored by National Level Monitors appointed by Government of India.

The programme is a comprehensive package of promotive, preventive, curative and rehabilitative services to be delivered to the community through a process of inter-sectorial co-ordination with other services departments and active community participation. It adapts a synergic approach by relating health to determinants of good health viz., Nutrition, Sanitation, hygiene and safe drinking water. In order to improve the standard of care in PHC's, NHRM has come up with a set of norms or standards called as Indian Public Health

Services (IPHS) is to provide healthcare which is quality oriented and sensitive to needs of the community. NRHM gives importance to Mother and child health care. Various national programmes like, Immunization, tuberculosis control, leprosy elimination, cancer control etc., and state programmes like Janani Suraksha Yojane, Prasthuthi Arike and Madilu, Arogya kavacha, Arogya sanjeeveni scheme, Arogya Bandhu and citizen help line etc, have been integrated under the NHM programme that also address the social determinants of health and delivery of the same with the active participation of Panchayat Raj Institutions (Local governance) for its sustainability.

The NRHM sought to increase public spending on health, reduce to regional imbalances in health infrastructure, pool resources and integrate various organizational structures and national programmes. At the village level the government has promoted the concept of having an Accredited Female Social Health Activist (ASHA) in order to facilitate household access to healthcare. Village health committees of the Panchayat Raj are responsible for putting in place village health plans. The institutional design of the NHM includes a number of entities at different levels-village, district, state and central.

2.6 AVAILABILITY OF RURAL HEALTH CARE DURING NRHM PERIOD

Total number sub-centres have increased 146026 to 165702 from 2005 to 2019 whereas number of PHCs has increased from 23236 to 35567 from 2005 to 2019. In case of CHCs also; it has risen from 3346 to 5616 during this period.

Table 2.2: Rural Health Care in India under NRHM

Type	Total number in 2005	Average population served (based on census 2001)	Total number in 2019	Average population served (based on census 2011)
Sub-centre	5094	5,078	5380	2140
PHC	911	31,918	848	13,574
CHC	106	2,21,656	227	50,709

Source: Bulletin of Rural Health Statistics 2005, Bulletin of Rural Health Statistics 2019, Census 2001, Census 2011

After the introduction of NRHM, rural health care system of India seems to be improved. But, it will be more appropriate if we consider about the average number of population served by each type of health care system as shown in table 3.5. So, in case of average number of population served by each SCs and PHCs, burden of health care has been increased instead of decreasing which are actually not up to the standard of national norm even today. But, in case of CHCs, average number of population served by each of the CHCs has come down considerably during the period 2005 to 2019; but still quite away from

national norm.

2.7 HEALTH INSURANCE IN INDIA

In India, all major central and state-level schemes are receiving a government subsidy, including the traditional social health insurance (SHI) schemes, the Employees' State Insurance Scheme (ESIS), and the Central Government Health Scheme (CGHS). Central level insurance schemes include ESIS, Rashtriya Swasthya Bima Yojana (RSBY) scheme, and Central Government Health Scheme (CGHS) and also state level includes Rajiv Aarogyasri Scheme (Andhra Pradesh), Yeshasvini Scheme (Karnataka), Vajpayee Arogyashree Scheme (Karnataka), Kalaignar Insurance Scheme (Tamil Nadu), RSBY Plus (Himachal Pradesh) and ASBY (Delhi).

2.8 HEALTH SCENARIO IN KERALA

Kerala, the southernmost state of India, has attracted international attention for its outstanding achievements in population health despite its economic backwardness. This paradox, often referred to as the 'Kerala Model of Development', has been studied since the 1970s, and has become an ideal model of development for many poor income countries in the world.'

Kerala's development experience has been distinguished by the primacy of the social sectors. Traditionally, education and health accounted for the greatest shares of the state government's expenditure. Health sector spending continued to grow even after 1980 when generally the fiscal deficit in the state budget was growing and government was looking for ways to control expenditure. But growth in the number of beds and institutions in the public sector had slowed down by the mid-1980s. From 1986–1996, growth in the private sector surpassed that in the public sector by a wide margin.

Public sector spending reveals that in recent years, expansion has been limited to revenue expenditure rather than capital, and salaries at the cost of supplies. Many developments outside health, such as growing literacy, increasing household incomes and population ageing (leading to increased numbers of people with chronic afflictions), probably fuelled the demand for health care already created by the increased access to health facilities. Since the government institutions could not grow in number and quality at a rate that would have satisfied this demand, health sector development in Kerala after the mid-1980s has been dominated by the private sector.

Expansion in private facilities in health has been closely linked to developments in the government health sector. Public institutions play by far the dominant role in training personnel. They have also sensitized people to the need for timely health interventions and thus helped to create demand. At this point in time, the government must take the lead in quality maintenance and setting of standards. Current legislation, which has brought government health institutions

under local government control, can perhaps facilitate this change by helping to improve standards in public institutions.

2.9 STRUCTURAL MODEL OF HEALTHCARE SYSTEMS IN KERALA

Kerala has emerged as the best state in the India in terms of healthcare performance. Kerala's health status is almost on a par with that of developed economies. The state has succeeded in increasing life expectancy as well as reducing infant and maternal mortalities. The implementation of land reforms improved the standard of living of the rural poor.

The effective implementation of the public distribution of food played an important role in improving nutritional status. Kerala's publicly funded healthcare system has helped in providing treatment facilities to people. The high literacy rate, especially among the females, also played a major role in improving the health scenario. The Kerala Model of Health is often described as "good health based on social justice and equity".

Despite, better health outcomes on certain indicators, the much-proclaimed Kerala model of health has been showing a number of disturbing trends. Although mortality is low, the morbidity (those suffering from chronic/non-communicable diseases) levels in urban and rural Kerala is high in Kerala compared to other Indian States. Thus the paradox is that on the one side Kerala stands as the State with all indicators of better health care development in terms of IMR, MMR, birth rate, death rate etc. On the other it outstrips all other Indian States in terms of morbidity especially the chronic illness. Kerala may have the best health indicators but necessarily not have the best public health care institutions. The success of Kerala health indicators is more due to the investment in the social capital rather than only in the public health care, resulting in a more accountable and integrated primary health care system.

The government of Kerala has taken up the Rashtriya Swasthya Bima Yojana scheme of Government of India announced by Prime Minister, along with Comprehensive Health Insurance Scheme for (CHIS) in October 2008. The objective of RSBY/CHIS is to protect below poverty line (BPL) households from major health shocks that involve hospitalization. Specifically, BPL families are entitled to more than 700 in-patient procedures with a cost of up to 30,000 rupees per annum for a nominal registration fee of 30 rupees. The Scheme is jointly implemented by departments of Labour & Rehabilitation, Health & Family Welfare, Rural Development, and Local Self Govt. The Labour Department is the Nodal dept. for implementation of CHIS. A separate agency 'Comprehensive Health Insurance Agency of Kerala' (CHIAK) is created for implementation of the scheme. 'United India Insurance Company Limited' is the insurance provider for all 14 districts. 140 government hospitals and 165 private hospitals have been empanelled towards implementing the scheme.

The health care system is considered to be the principal factor for attaining the high level

of health status in Kerala. From the formation of the state, health care provision was one of the governments' top priorities, and the system was developed in a way that incorporated both western and traditional medicine that was accessible to the people. The health care facilities can be divided into three categories in view of service of care: Allopathy (western medicine), Ayurvedic, and Homeopathy, and three categories in view of the ownership: Public, Private and Cooperative sectors.

The District level structure of health services is a middle level management organization and it is a link between the State and regional structure on one side and the peripheral level structures such as Primary HealthCare and Sub-Centre on the other. The structure and functions of healthcare centre's facilities are primarily based on the consideration of institutional size, volume of work and the range of services that they provide for people.

The structure of health care services are functioning at three levels, i.e., Primary, Secondary and Tertiary level. Primary level it is a first contact point of individuals, families and communities with the National Health System, where, Primary health care is provided in the context of primary health centres and health sub centres through a number of trained health workers. The next level is secondary health care includes the sub district or taluk hospital and community health centres which serves as the first referral level of health care to primary care system. The tertiary level is more specialized level than secondary care. District hospital is an essential component of the district health system and function as tertiary level of health care. All these health institutions provide curative, preventive and promotive healthcare services to the community in the district.

Table 2.3 Structure Of the Public Health Care Institutions in District

Primary Level	Secondary Level	Tertiary Level
i. Primary Health Centre	i. Community Health Centre's	i. District
ii. Primary Health Units/Health Sub Centre	ii. Taluk/General Hospital	Hospital

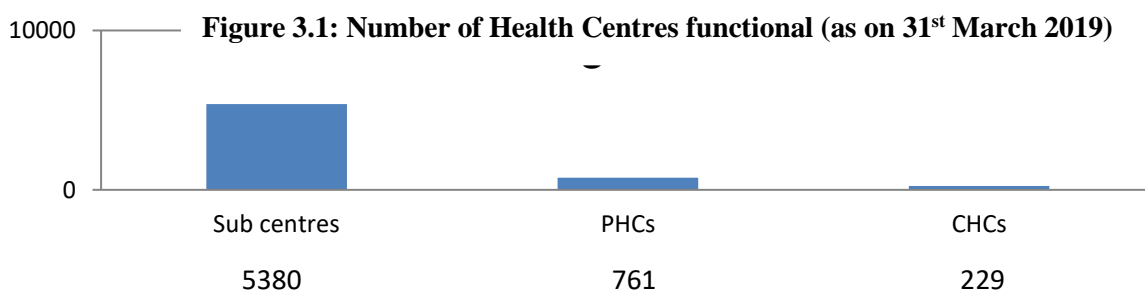
The healthcare institutions are structured in a hierarchical order, in order to optimize the use of resource available. The administrations of each level of health institutions are interrelated, for e.g.: The District Hospital the higher order service centre provide higher level services with greater administrative responsibilities. Where, the administration and function of PHU are consisting lower order services with lower administrative responsibilities. At the district level, the district health officer is in charge of public health and Family welfare programme with the head quarter at Mysore. The health Centres or institutions are functioning under a chain of administrators. For example, Medical officer, at primary health Centre, Chief medical officer at Community health centre or General hospital, district health officer/Chief medical officer/Civil

surgeon at district hospital. These officials have to look after all the healthcare centres/medical care activities under their respective institution.

2.10 PROGRESS IN THE RURAL HEALTHCARE SYSTEM IN KERALA

Progress of Sub Centres, which is the most peripheral contact point between the rural health care systems and the community, is a prerequisite for the overall progress of the entire system.

Figure 2.1: Progress of Rural Health Care System in Kerala



As on 31st March 2019, there are a total of 5380 Sub Centres (SCs) functioning both in rural and urban areas of Kerala. Similarly there are 761 Primary Health Centres (PHCs) functioning in both rural and urban areas in Kerala. There are 229 Community Health Centres (CHCs) functional in the country. Unfortunately, the rate of growth in the number of CHCs has not shown the required amount of growth.

2.11 DRAWBACKS OF THE PUBLIC HEALTH SYSTEM

Despite these health improvements, Kerala's PHC system has recently faced a number of challenges: the epidemiological transition towards chronic disease, erosion of public health funding, and the continued presence of private health care at much higher cost have pushed the health system to its limits. The rise of non-communicable diseases in the state has challenged the healthcare system: Kerala has a high prevalence of diabetes—14.8 percent of its population between the ages of 15 and 64 years is diabetic, compared with only 8 percent in India overall. Furthermore, the prevalence of many NCD risk factors in the state is estimated to be very high; a 2010 study found that 42 percent of adult males smoked and that 40 percent of the adult population ate diets low in fruits and vegetables, while 25 percent were overweight.

Improvement in socioeconomic conditions has prompted growth of the private sector as public institutions failed to keep up with the population's increasing demand for quality care. The return of the shift from the public to the private sector is concerning because individual household spending on health fees is increasing while many public facilities are underutilized and under staffed as a result of employees seeking higher-paying jobs in the private sector. The new national government in India elected in May 2014 has reduced spending on health care and

this is likely to also have a negative effect on the public health care system—including in Kerala—further increasing the stress on the fragile public health care system.

2.12 PRIVATE HEALTHCARE SECTOR

The growth of private health sector in Kerala has been considerable in both provisioning and financing. There is diversity in the composition of the private sector, which ranges from voluntary, not-for-profit, for-profit, corporate, trusts, stand-alone specialist services, diagnostic services to pharmacy shops and a range of highly qualified to unqualified providers, each addressing different market segments.

Today, private sector health care provision is greater than that by the public sector, which is particularly true in the urban areas. But despite the presence of a large, dynamic, and a well spread out private health care provision network, access issues remain important because in remote and far flung habitations, the private sector does not have the incentive to set up shop and in the absence of adequate penetration by public sector health centres, these areas remain unserved. Moreover, private sector's health services are mostly curative and not preventive in nature.

The cost of health care in the private sector is much higher than the public sector. Many small providers have poor knowledge base and tend to follow irrational, ineffective and sometimes even harmful practices for treating minor ailments. Bulk of the qualified medical practitioners and nurses are subject to self-regulation by their respective State Medical Councils under central legislation. In practice, however, regulation of these professionals is weak and close to non-existent.

Overall, Kerala has made significant strides through investing in infrastructure, decentralized governance, and community engagement. Though many challenges remain, it is working towards making health care accessible, affordable, and responsive to an increasing burden of non-communicable diseases.

CHAPTER 3

ACCESSIBILITY AND UTILIZATION OF HEALTH CARE SERVICES: AN ANALYSIS

Health is an important determinant of human life. Health status of the people determines the average life expectancy, productivity, the earning capacity, employment and all other socio-economic indicators.

This chapter shows the analysis of accessibility and utilization of healthcare systems in Kattakada Panchayath. Information was collected about every individual in the household through questionnaire from 100 respondents in Kattakada Panchayat. The standardized questionnaire covered items pertaining to perceived morbidity, utilization of health services, and individual and household characteristics.

3.1 Gender

In the table given below (Table 3.1) on the basis of gender the total respondents are classified into three categories (i.e., male, female and other categories).

TABLE 3.1 Gender classification among respondents

Gender of Household Head	Number of Households	Percentage (%)
Male	52	52
Female	48	48
Transgender	-	-
Total	100	100

Source: Primary data

FIGURE 3.1 Gender wise classification among Respondents

100 responses

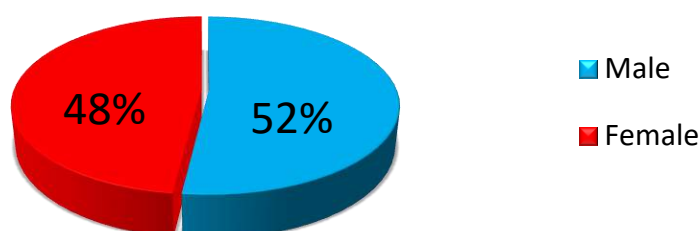


Table 3.1 shows the gender distribution of households. According to the data collected about 52% of the 100 households that participated in the study are male headed households while 48% are female headed households. The above data reveals that male participation is more than female participation of households in this study. This data percentage wise shown in Figure 3.1

3.2 Age

In the table given below (Table 3.2) on the basis of age groups the total respondents are classified into five categories (i.e., below 30, 31-40, 40-50 and 50 & above).

TABLE 3.2 Age Classification of Respondents

Age Distribution	Number of responses	Percentage (%)
Below 30 years	34	34
30 - 40 years	16	16
40 – 50 years	15	15
Above 50 years	35	35

Source: Primary data

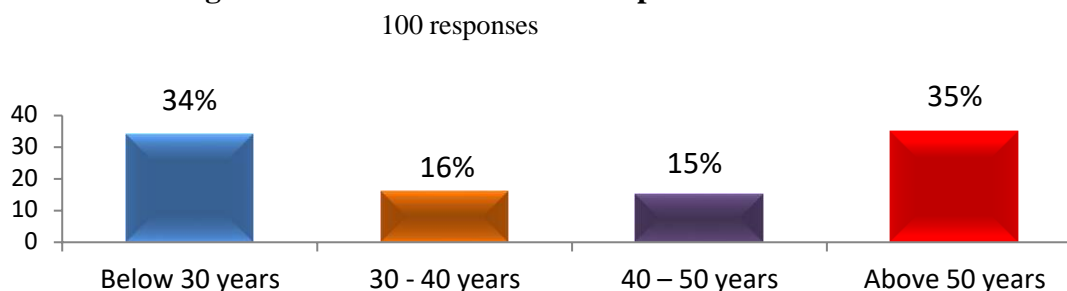
FIGURE 3.2 Age wise Classification of the Respondents

Table 3.2 shows age distribution of the head of the family. According to the given data the age distribution of the head of the family reveals that 34% of them fall within the age group of below 30 years, 16% fall within the 30-40 years, 15% fall within 40-50 years and 35% are above the age of 50 years. The above data reveals that age distribution is above 50 years higher than that of others. This is graphically shown in figure 3.2

3.3 Educational Qualification

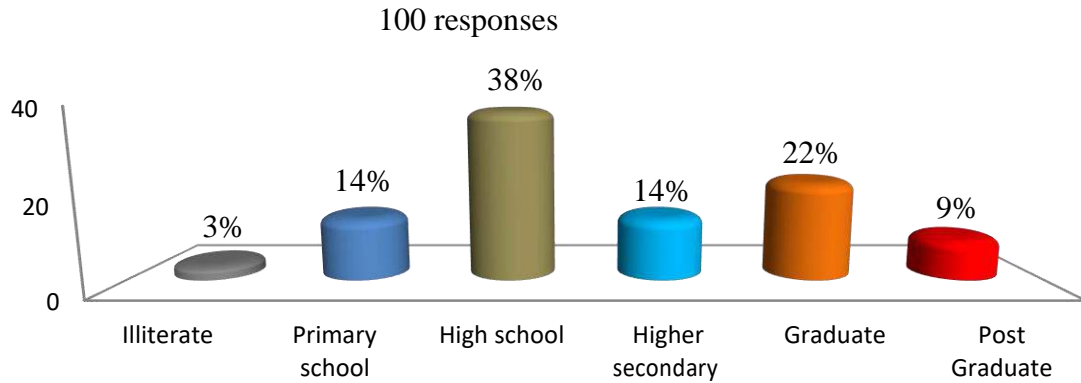
In the table given below (Table 3.3) on the basis of Educational qualification the total respondents are classified into three categories (i.e., illiterate, primary school, high school, higher secondary, graduates and post graduates).

TABLE 3.3 Educational Qualification of the Respondents

Educational status of head of the family	Number of responses	Percentage (%)
Illiterate	3	3
Primary school	14	14
High school	38	38
Higher secondary	14	14
Graduate	22	22
Post Graduate	9	9
Total	100	100

Source: Primary data

Figure 3.3 Educational Qualification wise Classification of the Respondents



From Table 3.3, the educational qualification of the respondents reveals that 3% of them fall within ‘Illiterate’ and 14% fall within ‘Primary School’ level. As many as 38% of households have completed their ‘High School’, 14% have done their ‘Higher Secondary’ and 22% have done their ‘Under Graduation’ level, while the remaining 9% of respondents opted for ‘Post Graduate’. As per the data, the number of respondents are higher in completing educational qualification as ‘High School’. The figure 3.3 is the graphical presentation of the data.

3.4 Professional Details

In the table given below (Table 3.4) on the basis of professional details the total respondents are classified five categories (i.e., Govt. Employees, Private Employees, Business men and others, like Students, Housewives or unemployed).

TABLE 3.4 Professional Details of the Respondents

Employment Status	Number of responses	Percentage (%)
Government Job	10	10
Private worker	17	17
Business/ aboard	16	16
Others	57	57
Total	100	100

Source: Primary data

FIGURE 3.4 Professional Detail wise Classification of the Respondents

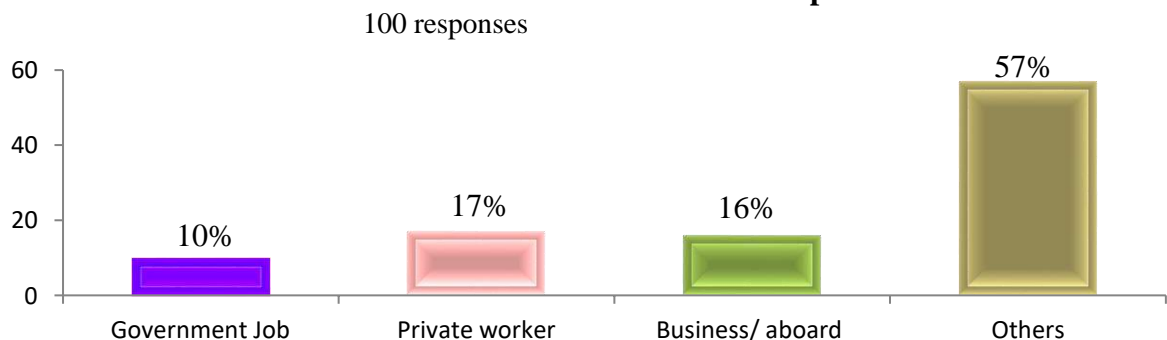


Table 3.4 shows the occupational status of the respondents. 10% of the respondents occupied ‘Government Job’ in various sectors while 17% are occupied ‘Private Job’. 16% of them are occupying ‘Business or aboard while remaining 57% opted for ‘Other’ and the entries suggested under this which includes Students, Housewives, unemployment etc. The above data reveals that employment status is higher in belonging to ‘Others’ category. This is graphically shown in figure 3.4

3.5 Income Details

In the table given below (Table 3.5) on the basis of Monthly Income the total respondents are classified into five categories (i.e., Less than 1000, 2000-5000, 6000-10000 and above 10,000).

TABLE 3.5 Income of the Respondents

Monthly Income of Respondents	Number of responses	Percentage (%)
Nil	24	24
Less than 1000	26	26
2000 - 5000	24	24
6000 - 10,000	13	13
Above 10,000	13	13
Total	100	100

Source: Primary data

FIGURE 3.5 Income Details of the Respondent

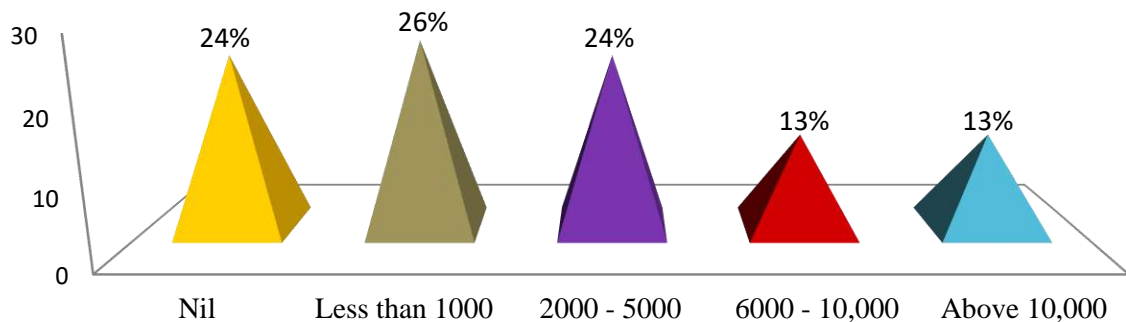


Table 3.5 shows the it reveals that 26% of families earns below 1000 per month. About 24% family’s monthly income is above 5000 while both of families between 6000 and 10000 income above 10,000 earns 13% of monthly income. Thus the majority of respondents earn below 1000 per month. This is illustrated in Figure 3.5. It shows that the accessibility and utilization of healthcare services are positively related to the level of income of the people.

3.6 Consumption Expenditure

In the table given below (Table 3.6) on the basis of Monthly Consumption Expenditure the total respondents are classified into six categories (i.e. Food, Rent, Health, Transport,

Clothes and Smoking and Alcohol.

TABLE 3.6 Monthly Consumption Expenditure of the Respondents

Items	Nothing	Less than 1000	2000 - 5000	Above 5000	Total
Food	-	67	29	4	100
Rent	94	-	2	4	100
Health	46	39	13	2	100
Transport	31	45	22	2	100
Clothes	50	42	8	0	100
Smoking and Alcohol	78	14	8	0	100

Source: Primary Data

FIGURE 3.6 Monthly Consumption Expenditure wise Classification of the Respondents

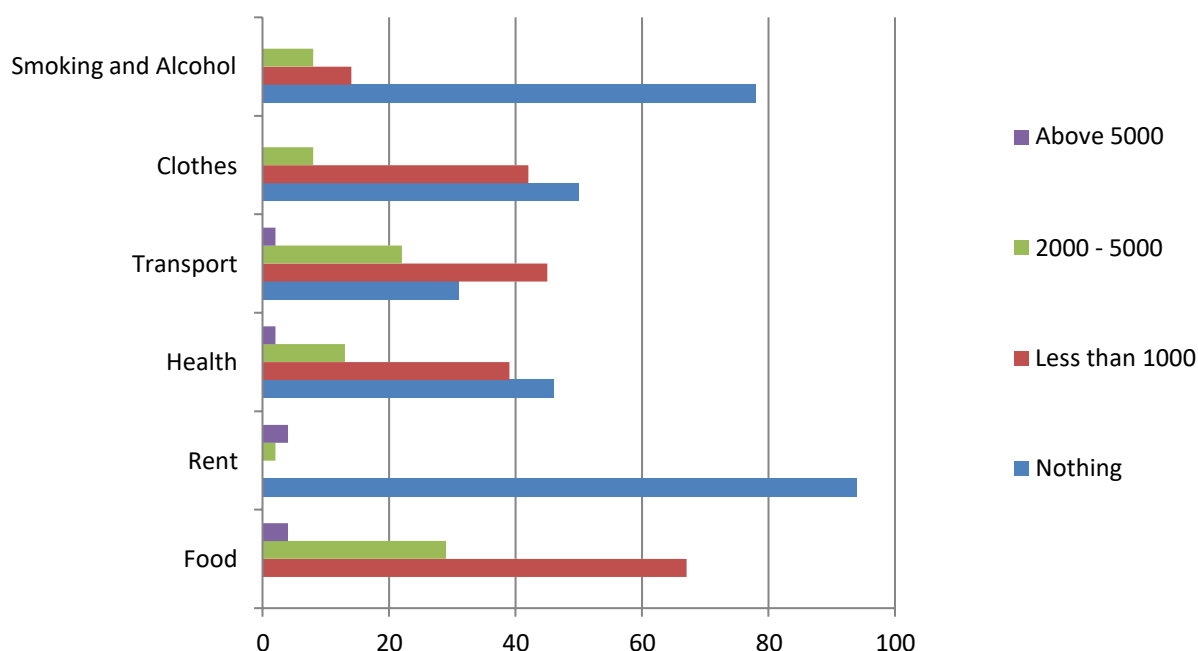


Table 3.6 shows the monthly consumption expenditure of respondents. Majority of families that is 67% of families spends below 1000 for their food items at the same time 39% spends for health. 45% and 50% spends below 1000 for transport and clothes and 78% for Smoking and Alcohol.

When it comes to the amount in between 2000-5000, majority, 29% of families spends for food, 2% for rent and 13% for health while 22% spends for Transport. Clothes and smoking and alcohol are relatively same, that is, 8%. Only 4% of families spends above 5000 for food and rent. Health and transport are relatively same, that is, 2%. Figure 3.6 is the graphical representation of the data.

3.7 Health Status–Short term and Long term Morbidity

In the table given below (Table 3.7.1) on the basis of health status on short term morbidity of the total respondents are classified into eight categories (i.e. Fever, Cold and Cough, Diarrhoea, Headache, Muscle pain, Injuries/Fractures, Eye problem and Smoking and Others)

In the table given below (Table 3.7.2) on the basis of health status on long term morbidity of the total respondents are classified into three categories(i.e. Diabetes, Heart diseases and Cancer)

TABLE 3.7.1 Short-term Morbidity among Respondents

Short-term Morbidity	Nil	Cured	Still Ailing
Fever	66	31	3
Cold and Cough	62	25	13
Diarrhoea	92	8	-
Headache	77	18	5
Muscle pain	73	16	11
Injuries/Fractures	87	8	5
Eye problem	64	7	29
Others	60	9	31

Source: Primary Data

TABLE 3.7.2 Long-term Morbidity among Respondents

Long – term Morbidity	Nil	Cured	Still Ailing
Diabetes	80	3	17
Heart diseases	96	3	1
Cancer	96	3	1

Source: Primary Data

FIGURE: 3.7.1 – Short term Morbidity among Respondents

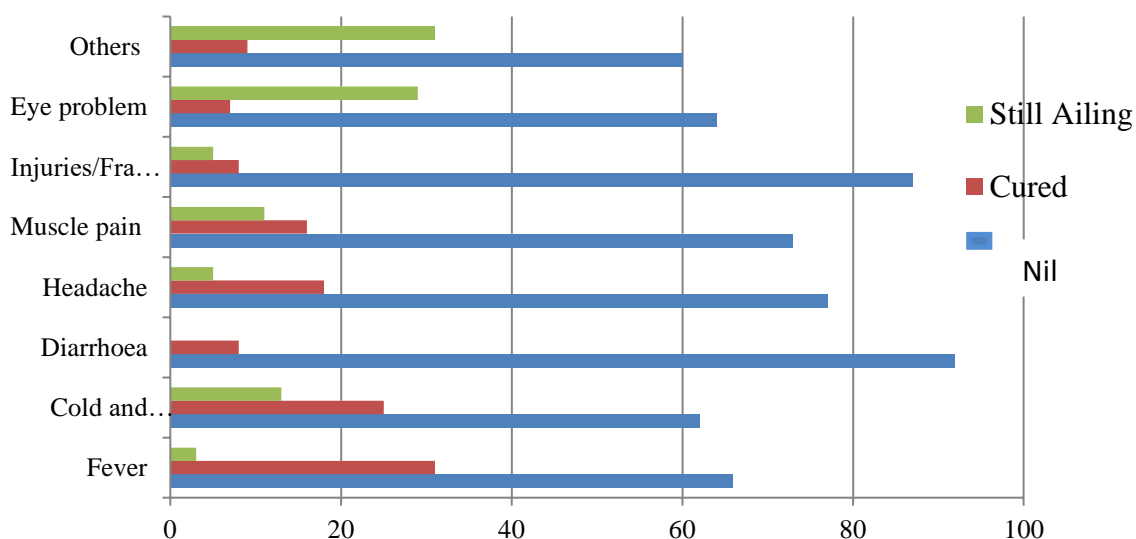


FIGURE: 3.7.2 – Long term Morbidity among Respondents

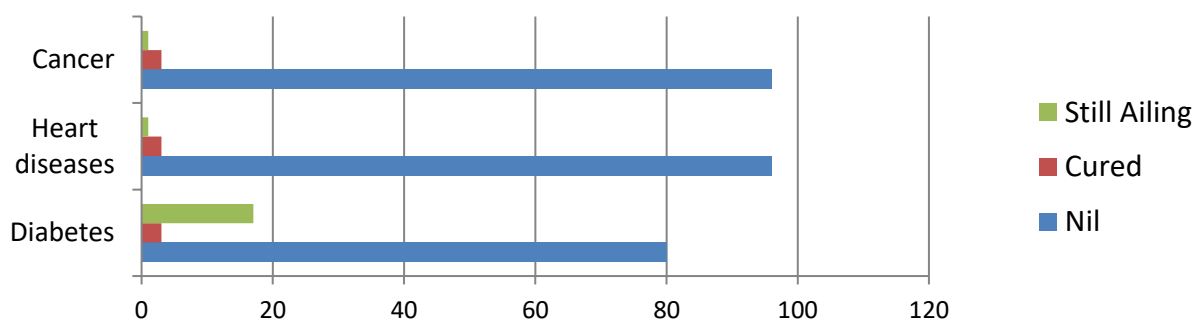


Table 3.7.1 shows the health status of each individual in the studied family from the point of last one year. In the case of short-term morbidity is higher than cured and still ailing. This is illustrated in figure 3.7.1

Long – term morbidities like diabetes are higher than cured and still ailing. Cancer and heart diseases are also same health status as diabetes. This is illustrated in figure 3.7.2

3.8 Accessibility of Health Insurance

In the table given below (Table 3.8) on the basis of the accessibility of health insurance of the total respondents are classified into two categories (i.e. Families having Health Insurance, Families having no health insurance)

TABLE 3.8 Accessibility of Health Insurance among Respondents

Category	No. of Families	Percentage (%)
Families having Health Insurance	42	42
Families having no Health Insurance	58	58
Total	100	100

Source: Primary Data

FIGURE 3.8 Accessibility of Health Insurance among Respondents
100 responses

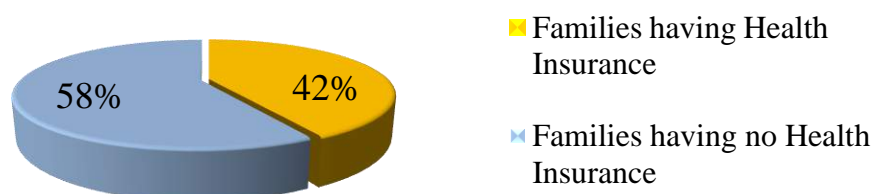


Table 3.8 shows the number of families in which it had taken health insurance and how many families are not taken health insurance. Majority, 58% families had not taken health insurance and remaining 42% families had taken health insurance. This is illustrated in figure 3.8.

3.9 Classification based on Health Insurance Provider among Respondents

In the table given below (Table 3.9) the total respondents are classified into two categories on the basis of Health Insurance Provider (i.e. Government Health Insurance, Private Health Insurance)

TABLE 3.9 Classification based on Health Insurance Provider among Respondents

Category	No. of Families	Percentage (%)
Government Health Insurance	28	65
Private Health Insurance	15	35
Total	43	100

Source: Primary Data

Figure 3.9 Classification based on Health Insurance Provider among Respondents

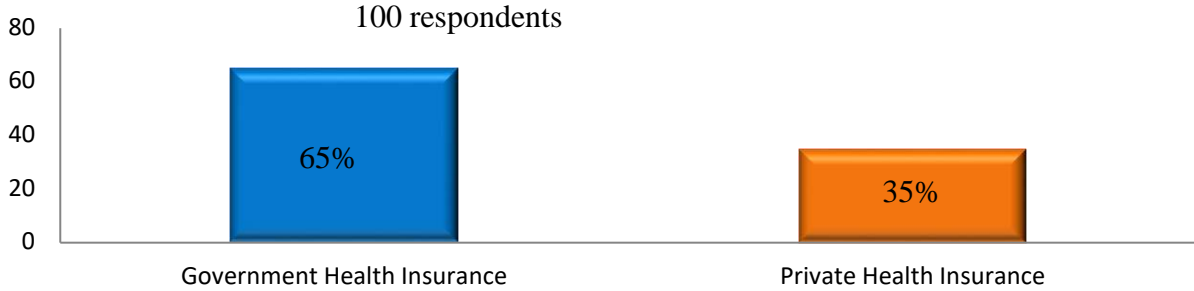


Table 3.9 shows classification of respondents that is based on Health Insurance Provider. Out of 43 responses, 65% of families have Government Health Insurance, that is, 28 families. Among them, 35% of families have Private Health Insurance, which means, 15 families. Thus the majority of respondents have Government Health Insurance. This is illustrated in figure 3.9

3.10 Respondent's Aware about 'Health Insurance Scheme' of the Government

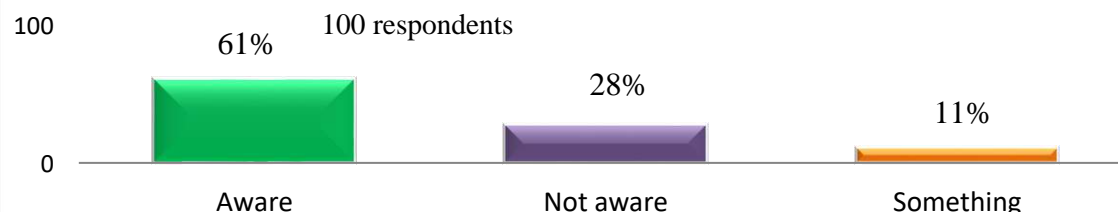
In the table given below (Table 3.10) the total respondent's awareness are classified into three categories on the basis of Aware about 'Health Insurance Scheme' of the Government (i.e. Aware, Not aware, Something)

TABLE 3.10 Respondent's Aware about 'Health Insurance Scheme' of the Government

Category	No. of Families	Percentage (%)
Aware	61	61
Not aware	28	28
Something	11	11
Total	100	100

Source: Primary Data

FIGURE 3.10 Respondents Aware about ‘Health Insurance Scheme’ of the Government



According to the above table (Table 3.10), majority, that is, 61% of families are aware about ‘Health Insurance Scheme’ of the Government. But 28% of them are not aware and the remaining 11% of them only have few knowledge regarding it. This is illustrated in figure 3.10

3.11 Details of the Respondents usage of ‘Health Insurance Scheme’ of the Government

In the table given below (Table 3.11) the total respondents are classified into three categories on the basis of Respondent’s made use of ‘Health Insurance Scheme’ of the Government. (i.e., Yes / No / Very Rarely).

TABLE 3.11 Classification based on the usage of ‘Health Insurance Scheme’ of the Government among Respondents

Category	No. of Families	Percentage (%)
Yes	26	45
No	31	53.4
Very Rarely	1	2
Total	58	100

Source: Primary Data

FIGURE 3.11 Details of the Respondents usage of ‘Health Insurance Scheme’ of the Government

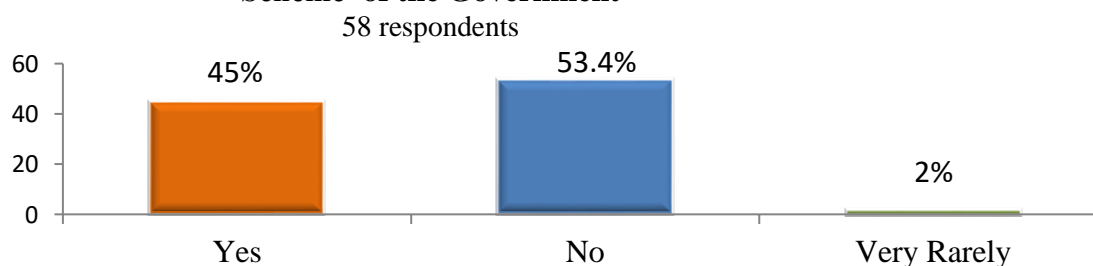


Table 3.11 shows Families made use of ‘Health Insurance Scheme’ of the Government. Out of 58 responses, 53.4% of families made use of ‘Health Insurance Scheme’ of the Government while 45% of them does not made use of it. The remaining 2% of them are rarely made use of it. Thus the majority of families made use of ‘Health Insurance Scheme’ of the Government. This is illustrated in figure 3.11

3.12 Reason for Denying Accessibility of Health Insurance

In the table given below (Table 3.12) the total respondents are classified into four

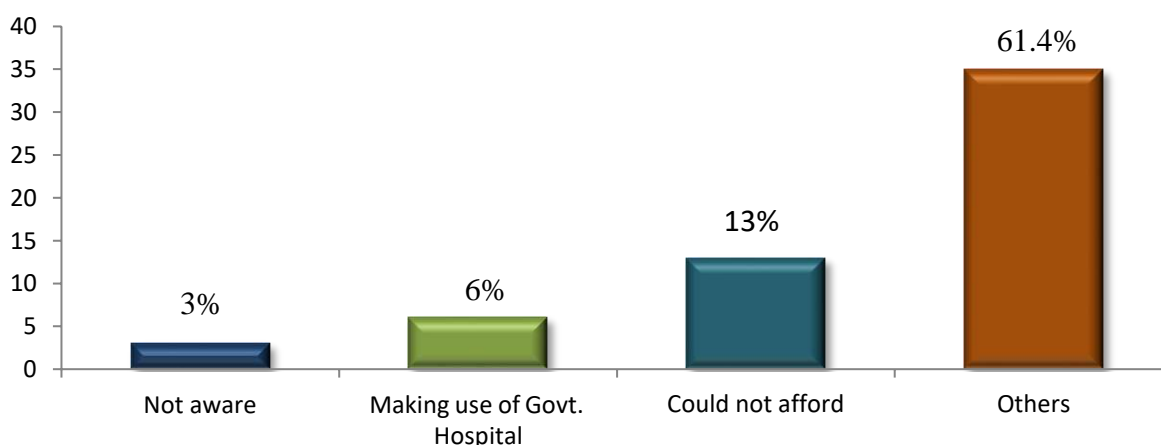
categories on the basis of Respondent's Reason for denying accessibility of Health Insurance. (i.e., Not Aware, Making use of Govt. Hospital, Could not afford and Others).

TABLE 3.12 Respondents Reason for denying accessibility of Health Insurance

Category	Number of Families	Percentage (%)
Not aware	3	5.2
Making use of Govt. Hospital	6	11
Could not afford	13	23
Others	35	61.4
Total	57	100

Source: Primary Data

FIGURE 3.12 Respondents Reason for denying accessibility of Health Insurance
100 respondents



Out of 57 responses, majority, 61.4% of families categorize other reasons for denying accessibility of Health Insurance (includes expiry, loss of card and so on), that is, 35 families belong to this category. 23% of them could not afford it because of their low financial status. 11% of them are making use of Govt. Hospital while the remaining 5% of them are categorized to the low awareness of Health Insurance due to this, they will not be able to access the benefit of Health Insurance. This is illustrated in figure 3.12

3.13 Type of health facility utilization

In the table given below (Table 3.13) on the basis of the type of health facility utilization of the total respondents are classified into six categories (i.e. Do Not Treat, Government Hospital, Private Clinics, Ayurvedic/Homeopathy, Nursing Homes/Home Remedy and Others)

TABLE 3.13 Classification based on the type of health facility utilization of the Respondents (within 5 months)

Category	Number of responses	Percentage (%)
Do Not Treat	7	7
Government Hospital	53	53
Private Clinics	24	24
Ayurvedic / Homeopathy	2	2
Nursing Homes / Home Remedy	33	33
Others	16	16
Total	100	100

Source: Primary Data

FIGURE 3.13 Type of Health Facility Utilization of the Respondents (within 5 months)

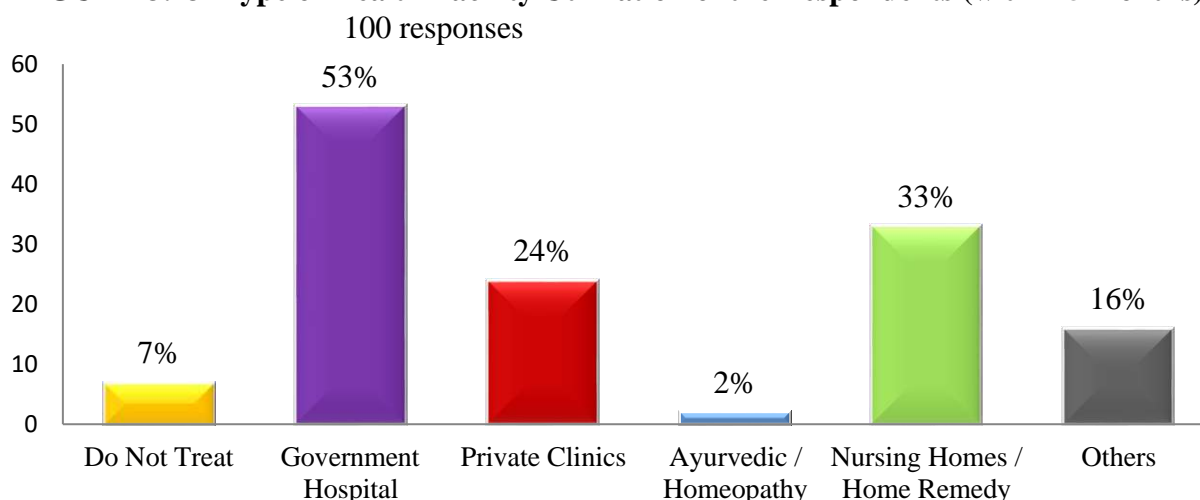


Table 3.13 shows the type of health facility utilization (within 5 months). Out of 100 responses, 53% of families utilized Government hospitals and 24% of families utilized private clinics within 5 months. 33% of them used nursing homes or home remedy, while only 2% utilized Ayurvedic or Homeopathy. 7% of them did not take any treatment. The remaining 16% of them utilized other facilities which includes the mixture of the utilization of both Government and private hospital or they utilize both home remedy and Ayurvedic/ Homeopathy. Thus the above data reveals that majority of respondents utilized Government hospitals for both short term and long term treatments. This is illustrated in figure 3.13

3.14 Respondent's preference on Govt. Hospitals for Health problems

In the table given below (Table 3.14) on the basis of the preference of Govt. Hospitals For Health problems of the total respondents are classified into four categories (i.e. Never approach Govt. Hospitals, Only for Simple and short term difficulties, Only for Long- term difficulties and For all problems)

TABLE 3.14 Respondents Preference on Govt. Hospitals for Health problems

Preferring Govt. Hospitals for Health problems	Number of families	Percentage (%)
Never approach Govt. Hospitals	18	18
Only Simple and short term difficulties	20	20
Only Long- term difficulties	3	3
All problems	59	59
Total	100	100

Source: Primary Data

FIGURE 3.14 Respondent's Preference on Govt. Hospital for Health

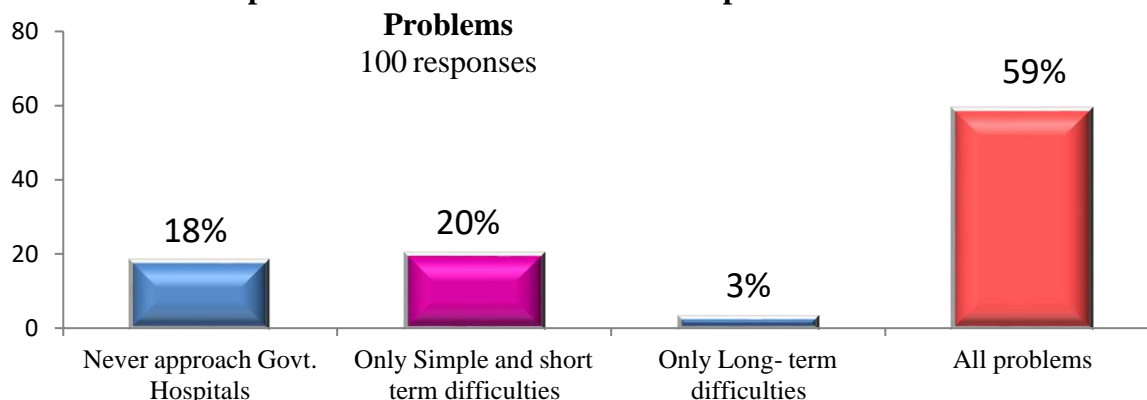


Table 3.14 shows the preference of Govt. Hospital for the health problems. 18% of families never approach Govt. Hospitals. 20% of families prefers Govt. Hospital for their simple and short term difficulties. Majority, 59% prefers Govt. Hospital for all problems. Only 3% prefers for long term difficulties because of waiting. This is illustrated in figure 3.14

3.15 Details of the Respondent's Source to finance medical expenditure

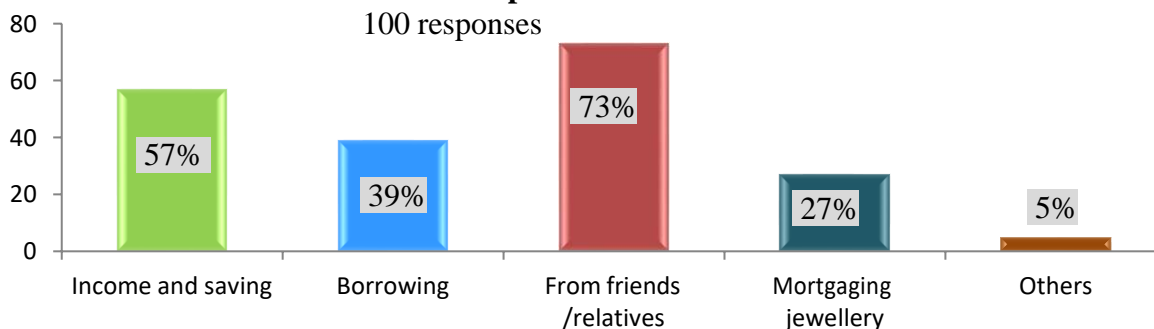
In the table given below (Table 3.15) on the basis of the Details of the Respondent's Source to finance medical expenditure of the total respondents are classified into four categories (i.e. Income and saving, Borrowing, From friends / relatives, Mortgaging jewellery and Others)

TABLE 3.15 Details of the respondents Source to finance medical expenditure

Category	Number of Families	Percentage (%)
Income and saving	57	57
Borrowing	39	39
From friends / relatives	73	73
Mortgaging jewellery	27	27
Others	5	5
Total	100	100

Source: Primary Data

FIGURE 3.15 Details of the Respondents Source to finance medical expenditure



According to the table (Table 3.15), majority of them, 73% finance of their medical expenditure from friends or relatives. Borrowing are relatively same that is, 39% and 57% of finance is from Income and saving. 27% of finance is by mortgaging jewellery and the remaining by others (selling of land etc). This is illustrated in figure 3.15

3.16 Distances to Govt. Hospital from Respondent's Residence

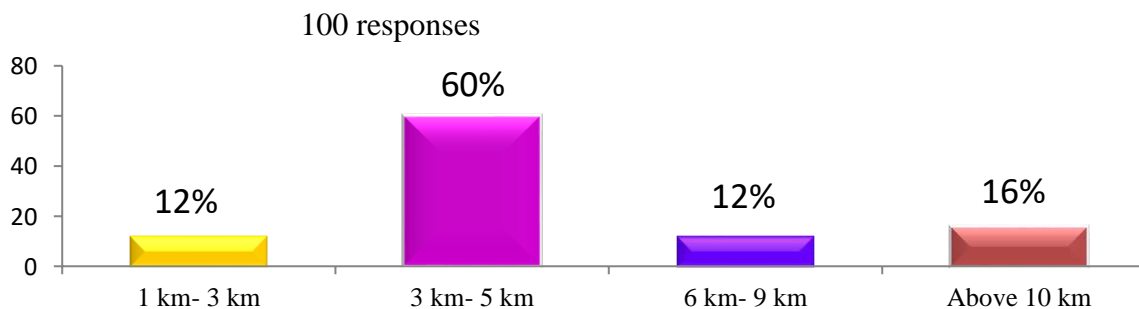
In the table given below (Table 3.16) on the basis of the Distances to Govt. Hospital from Respondent's Residence of the total respondents are classified into four categories (i.e. 1 km- 3 km, 3 km- 5 km, 6 km- 9 km, and Above 10 km)

TABLE: 3.16 Distances to Govt. Hospital from Respondent's residence

Distances to Govt. Hospital from residence	Number of Households	Percentage (%)
1 km- 3 km	12	12
3 km- 5 km	60	60
6 km- 9 km	12	12
Above 10 km	16	16
Total	100	100

Source: Primary Data

FIGURE 3.16 Distances to Govt. Hospital from Respondent's Residence



According to the above table (Table 3.16), it reveals that 12% of the studied participants had to travel 1 km- 3 km to Govt. Hospital while majority 60% had to travel 3 km- 5km to Govt.

Hospital. 12% families had accessible Govt. Hospital from 6 km-9 km and also 16% had to travel Govt. Hospital above 10 km. This is illustrated in figure 3.16

3.17 Respondent’s Preference on Govt. Hospital for Health Emergencies

In the table given below (Table 3.17) the total respondents are classified into three categories on the basis of their preference on Govt. Hospital for Health Emergencies (i.e., Yes, No and Rarely).

TABLE 3.17 Respondent’s preference Govt. Hospital for health emergencies

Category	Number of Families	Percentage (%)
Families Prefers Govt. Hospital For HealthEmergencies (Yes)	53	53
Families Do Not Prefer Govt. Hospital ForHealth Emergencies (No)	12	12
Sometimes they prefers Govt. Hospital forhealth emergencies	35	35

Source: Primary Data

FIGURE 3.17 Respondent's Preference on Govt. Hospital for Health Emergencies
100 respondents

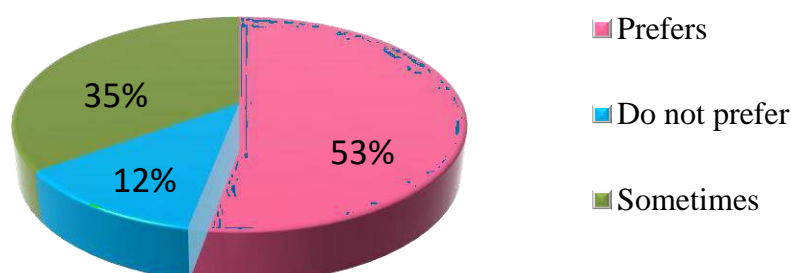


Table 3.17 shows the no. of families who prefers Govt. Hospitals for health emergencies and how many families do not prefer Govt. Hospital for health emergencies. Majority 53% families prefers Govt. Hospital for health emergencies and also 12% families do not prefer Govt. Hospital for health emergencies. The remaining 35% families are not mentioned whether they always prefer Govt. Hospital or not for health emergencies. This is illustrated in figure 3.17

3.18 Reason for preferring Govt. Hospital for Health Emergencies

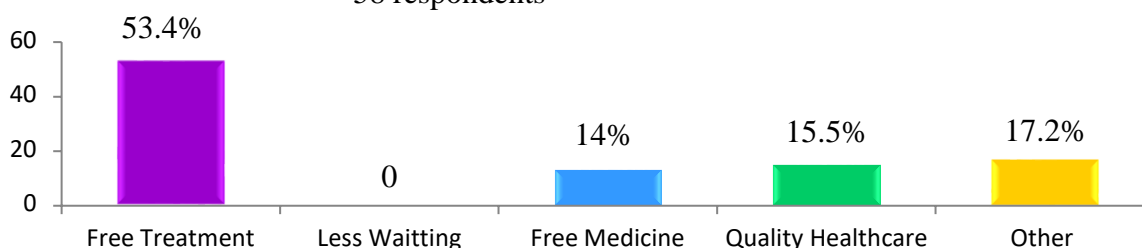
In the table given below (Table 3.18) the total respondents are classified into five categories on the basis of their preference on Govt. Hospital for Health Emergencies (i.e., Free Treatment, Less Waiting, Free Medicine, Quality Healthcare and Other Reasons).

TABLE 3.18 Respondents Reason for preferring Govt. Hospital for HealthEmergencies

Category	Number of Families	Percentage (%)
Free Treatment	31	53.4
Less Waiting	0	0
Free Medicine	8	14
Quality Healthcare	9	15.5
Other Reasons	10	17.2
Total	58	100

Source: Primary Data

FIGURE 3.18 Respondents Reason for Preferring Govt. Hospital for Health Emergencies
58 respondents



Out of 58 responses, majority, 53.4% of families are preferring Govt. hospital due free treatment. 17.2% of them are preferring Govt. hospital for health emergencies due to other reasons such as distance from hospital, availability transportation facility, accessing the govt. benefits and so on. 15.5% of them are of Quality Healthcare system while 14% of them are due to the availability of free medicines. This is illustrated in figure 3.18

3.19 Reason for Denying Govt. Hospital for Health Emergencies

In the table given below (Table 3.19) the total respondents are classified into three categories on the basis of their Reason for denying Govt. Hospital for Health Emergencies (i.e., Doctors are not available, Medicine not available, Very far away, Poor Quality Healthcare, No lab / other facilities, Corruption, Long waiting time and Other Reason).

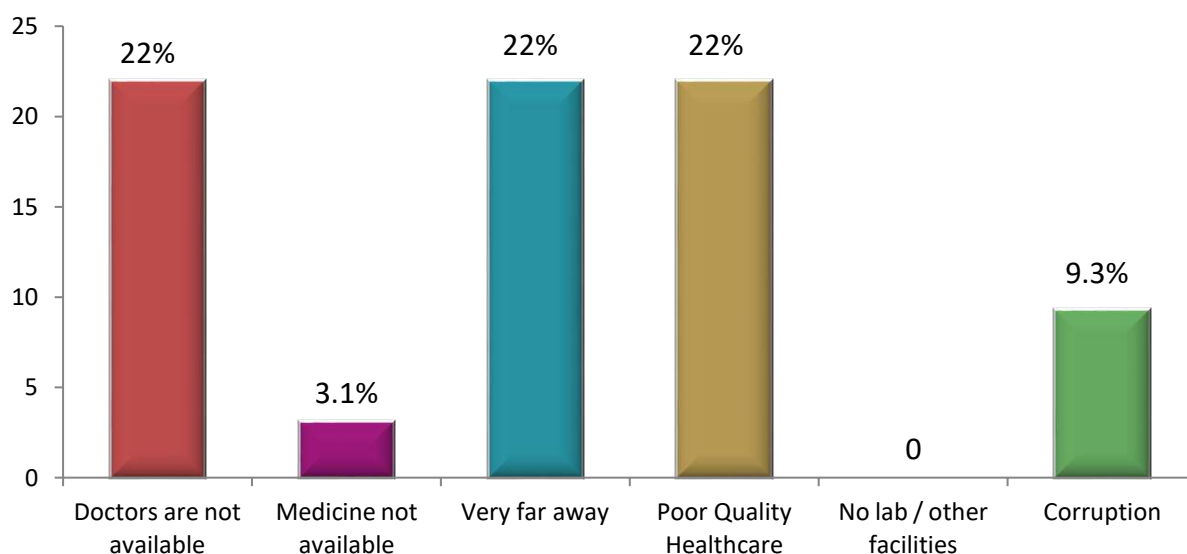
TABLE 3.19 Respondents Reason for denying Govt. Hospital for Health Emergencies

Category	Number of Families	Percentage (%)
Doctors are not available	7	22
Medicine not available	1	3.1
Very far away	7	22
Poor Quality Healthcare	7	22
No lab / other facilities	0	0
Corruption	3	9.3
Long waiting time	11	34.3
Other Reason	5	16
Total responses	32	100

Source: Primary Data

FIGURE 3.19 Respondents Reason for Denying Govt. Hospital for Health Emergencies

32 respondents



Out of 32 responses, 11% of families does not recommend Govt. hospital for health emergencies because of long waiting time while 7% of them do not prefer because of less availability of doctors, far distance from hospital and also poor quality healthcare. Only 1% of them deny preference due to low medicine access and the remaining 3% of them are not preferring it due to corruption. This is illustrated in figure 3.19

3.20 Response on the advisable to approach a Government Hospital incase of any health emergencies

In the table given below (Table 3.20) the total respondents are classified into three categories on the basis of their Response on the advisable to approach a Government Hospital in case of any health emergencies (i.e., Strongly agree, Agree, Neutral, No opinion, Disagree, Strongly disagree and Other Reason).

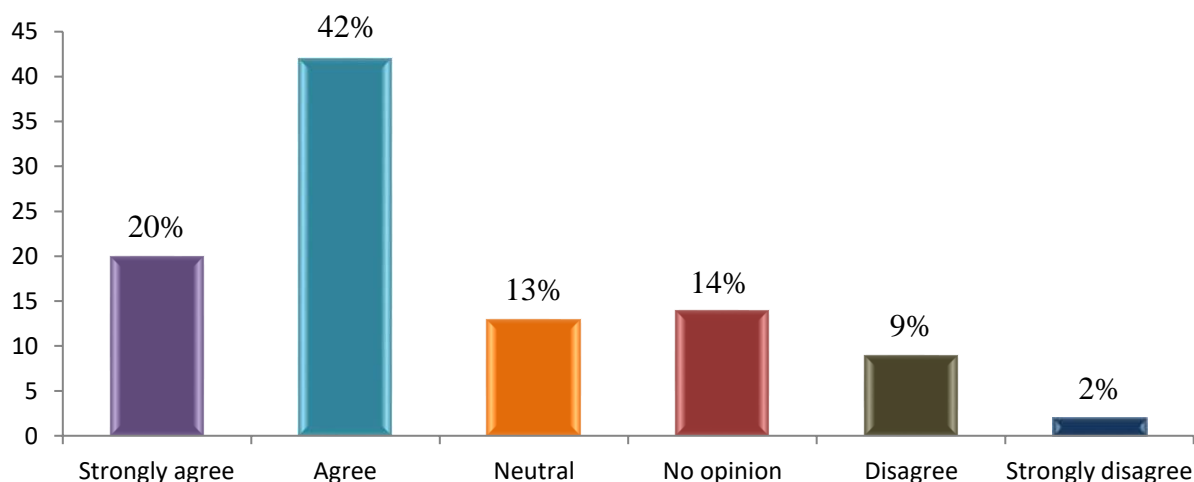
TABLE 3.20 Respondents Response on the advisable to approach a Government Hospital in case of any health emergencies

Category	Number of Families	Percentage (%)
Strongly agree	20	20
Agree	42	42
Neutral	13	13
No opinion	14	14
Disagree	9	9
Strongly disagree	2	2
Total	100	100

Source: Primary Data

Figure 3.20 Respondents Response on the advisable to approach a Govt. hospital in case of any health emergencies

100 respondents



According to the above table (Table 3.20), majority 42% of families agree as respond on the advisable to approach a Govt. hospital in case of any health emergencies while 20% of them are strongly agree on it. 13% and 14% of them are respond as neutral and no opinion. The remaining 9% and 2% of them are disagree and strongly disagree in this. This is illustrated in figure 3.20

3.21 Responses on the important role of a Government Hospital in improving healthcare

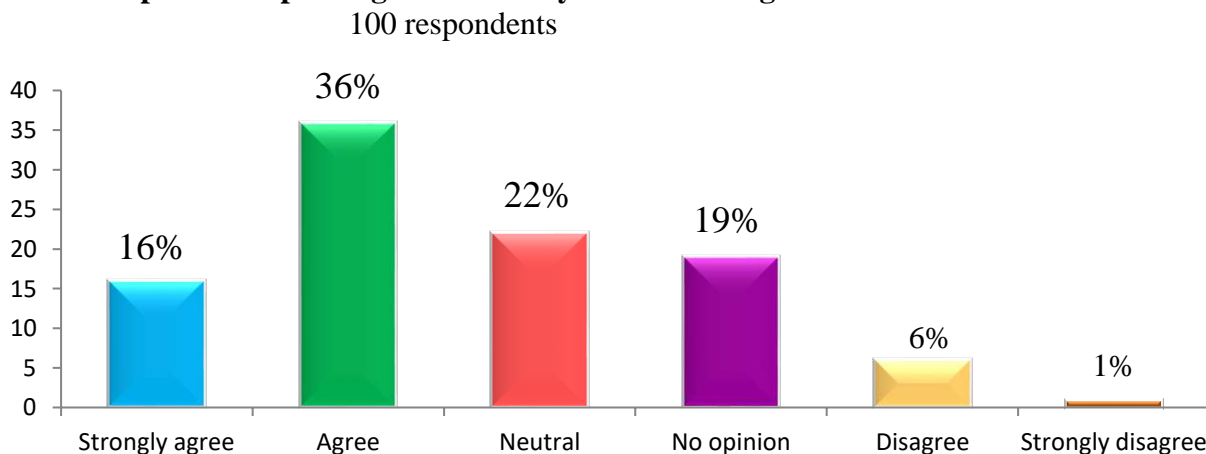
In the table given below (Table 3.20) the total respondents are classified into three categories on the basis of their Response on the advisable to approach a Government Hospital in case of any health emergencies (i.e., Strongly agree, Agree, Neutral, No opinion, Disagree, Strongly disagree and Other Reason).

TABLE 3.21 Respondents Responses on the important role of Government Hospital in improving healthcare

Category	Number of Families	Percentage (%)
Strongly agree	16	16
Agree	36	36
Neutral	22	22
No opinion	19	19
Disagree	6	6
Strongly disagree	1	1
Total	100	100

Source: Primary Data

Figure 3.21 Respondents Responses on the important role of a Govt. Hospital in improving healthcare system in the region



According to the above table (Table 3.21), 37% of families agree as respond on the important role of a Government Hospital in improving healthcare while 16% of them are strongly agree on it. 22% and 19% of them are respond as neutral and no opinion. The remaining 6% and 1% of them are disagree and strongly disagree in this. Thus the above data reveals that majority of respondents thought that Govt. Hospital plays an important role in improving healthcare system in the region. This is illustrated in figure 3.21

3.22 CONCLUSION

Health is an important determinant of economic development; a healthy population means higher productivity, thus higher income per head. On the other hand, the importance of health as a key aspect of development and economic wellbeing of individuals and nations is increasingly being recognized in the world. Accessibility and utilization of healthcare services also plays an important role in molding better nations by proper usage of health services of every individuals. Therefore, the purpose of this study is to analyse the present health status of Kattakada Panchayat and also study the accessibilities and utilization health care system in Kattakada Panchayat. With the use of a questionnaire survey, 100 families participated in this study and have provided valuable feedback and responses pertaining to the above factors that influence individuals to prefer government hospital for health emergencies.

The study reveals that the number of respondents are higher in completing educational qualification as 'High School' and also most of them came under the category as unemployment, students or housewives. Thus most of them earns below 1000 per month which reduces monthly consumption expenditure. Among them, long term morbidity, like diabetes, is higher than short term morbidity. Most of them have Government Health Insurance and also aware about that. Most of them also utilized government hospitals for both short and long term treatment. Majority of them had accessible Government hospital from 6 km-9 km. Most of them prefers Government

hospital for health emergencies, at the same time, others do not prefer government hospital due to lack of doctors, very far away, poor quality healthcare and long waiting time. This may affect on the advisable to approach a Government hospital in case of any health emergencies.

This study is an endeavour to analyse the present health status of Kattakada Panchayat. The major findings are that all the respondents rotate around only “Strongly Agree”, “Agree” and with “Neutral” and “No Opinion” and also with “Disagree” and “Strongly Disagree”. Among these responses, this study suggests found that almost 52% of the responses are in the region of strongly agree and agree. This is a clear indication on the important role of a Government Hospital in improving healthcare. Besides, rest of the 22% of the responses went with Neutral feedback. This study considers this along with positive response. Another proof for disagreed customer level is that, they did not provide their answer to the scale of “Disagree”. So, to conclude it is easy to say that Internet banking services is quite satisfactory to its customer. Government Hospital plays an important role in improving healthcare system in the region.

CHAPTER: 4

SUMMARY, FINDINGS, SUGGESTIONS AND CONCLUSION

4.1 SUMMARY

This project entitled, “Accessibility And Utilization of Healthcare Services In Kerala: A Case Study of Kattakada Panchayat” analyse the accessibility and utilization of health care services in rural area of Kattakada panchayath. The purpose of this chapter is to summarize the chapters that provided insightful discussion on the topic.

The present study consists of four chapters. Chapters one is an introductory chapter which deals with the problem under evaluation, objective, hypothesis, methodology, scheme and scope of the study, limitations of the study and review of literature of the prior studies. Chapter Two provides an overview of healthcare services in Kerala. Chapter Three consists of the analysis of the data collected using primary data. Chapter Four carries a summary of the analysis, findings, conclusion and suggestions.

4.2 FINDINGS

- The gender wise classification shows that 52% of the total respondents belong to male category. The remaining 48% of respondents belong to female category. None of the respondents belong to other category.
- The age wise distribution of respondents shows that out of the total respondents, the respondents belong to the group below 18 years (34%). As a whole 16% of respondents belong to the age group 30-40, 15% of the respondents belong to the age group 40-50 and 35% of the respondents belong to the age group 50 and above. It shows that most of the respondents are in the age group 50 and above.
- The analysis on the educational qualification shows that out of the total respondents, 55% are illiterate, 14% respondents fall within ‘Primary School’ level, 38% respondents have done their ‘High School’ level, 14% respondents have done their ‘Higher Secondary’ and remaining 22% respondents have completed their graduation and only 9% have completed their Post Graduation.
- The analysis on professional details shows that out of the total respondents, 17% respondents were private employees, 10% respondents were government employees, 16% of them were business men and the rest 57% were house wives and students. This shows that most of them were house wives and students.

- The analysis on Income details shows that out of the total respondents, 26% were having their monthly Income less than 1000, 24% were having monthly Income between 2000-5000, 13% were having monthly Income between 6000 -10,000, 13% were having monthly Income of 10000 & above and remaining 24% were not having monthly Income . This shows that most of the respondents are having monthly Income less than 1000.
- The analysis on monthly consumption expenditure details shows that out of the total respondents, 67% spends below 1000 for their food items at the same time 39% spends for health. 45% and 50% spends below 1000 for transport and clothes and the remaining 78% spends for Smoking and Alcohol. 29% of families spends between 2000-5000 for food, 2% for rent, 13% for health and 22% for transport and clothes and smoking and alcohol are relatively same, that is 8%. Only 4% of families spend above 5000 for food and rent and the remaining 2% spends for health and transport.
- The analysis on health status shows that short-term like fever, cold and cough, diarrhoea, headache, muscle pain, injuries or fractures, eye problem and others are nil than cured and still ailing out of the total respondents. Long-term morbidity like diabetes are higher than cured and still ailing and cancer and heart diseases are same as diabetes.
- The analysis on accessibility of health insurance shows that out of the total respondents, 65% have Government Health Insurance and the remaining 35% have Private Health Insurance. This shows that most of the respondents are having Government Health Insurance.
- The analysis on awareness about 'Health Insurance Scheme' of the Government shows that out of the total respondents, 61% are aware, at the same time 28% are not aware and the remaining 11% only have few knowledge regarding it.
- The analysis on families made use of 'Health Insurance Scheme' of the Government shows that out of the total respondents, 53.4% are made use of it, 45% does not made use of it and the remaining 2% are rarely made use of it. It shows that most of families made use of 'Health Insurance Scheme' of the government.
- The analysis on the reason for denying accessibility of Health Insurance shows that out of the total respondents, 23% could not afford it, 11% are making use of Govt. Hospital, 5% are not aware about health insurance and the remaining 61.4% categorize other reasons, like invalidity of Health Insurance.
- The analysis on the type of health facility utilization shows that out of the total respondents, 53% utilized Government hospitals, 24% utilized Private clinic, 33% used nursing homes or home remedy, 2% utilized Ayurvedic or Homeopathy, 7% did not take any treatments and the remaining 16% utilized other facilities.
- The analysis on preference of Govt. Hospital for Health Problem shows that out of the total

respondents, 18% never approach Govt. Hospital, 20% prefers Govt. Hospital for both simple and short term difficulties, 59% prefers Govt. Hospital for all health problems and only 3% of them prefers long term difficulties. It shows that most of the respondents prefers Govt. Hospital for all health problems.

- The analysis on the source to finance medical expenditure shows that out of the total respondents, 73% is from friends or relatives, 27% is by mortgaging jewellery, 57% is from income and savings, 39% is from borrowing and the remaining 5% is from other sources, like selling of land.
- The analysis on the distance to Govt. Hospital from residence shows that out of total respondents, 12% had to travel 1 km-3 km to Govt. Hospital, 60% had to travel 3 km-5 km, 12% had to travel 6 km-9 km and the remaining 16% had to travel above 10 km. This shows that most of the total respondents, 60%, had to travel 3 km-5 km from their residence.
- The analysis on the preference of Govt. Hospitals for Health Emergencies shows that out of the total respondents, 53% prefers Govt. Hospital at the same time 12% do not prefer Govt. Hospital for Health Emergencies and the remaining 35% are not mentioned whether they prefer or not for health emergencies. This shows that the most of the respondents prefers Govt. Hospital for Health Emergencies.
- The analysis on the reason for preferring Govt. Hospital for Health Emergencies shows that out of 58 respondents, 53.4% are preferred Govt. hospital due to free treatment, 15.5% are due Quality Healthcare system, 14% are due to the availability of free medicine and the remaining 17.2% are due to other reasons such as near from residence, availability of transportation facility, accessing the government benefits and so on.
- The analysis on the reason for do not preferring Govt. Hospital for health emergencies shows that out of 32 respondents, 3.1% are due to unavailability of medicine, 9.3% are due to corruption, 34.3% are due to long waiting time, 16% are due to other reasons, like lack of healthcare staff, unknown about working time, not getting better treatment and so on and the remaining 22% are due to very far away, lack of availability of doctors and poor quality healthcare.
- The analysis on the response on the advisable to approach a Government hospital in case of any health emergencies shows that out of the total respondents, 42% are agreed, 20% are strongly agreed, 13% are on neutral respond, 14% are on no opinion and the remaining 9% and 2% are disagree and strongly disagree in it.
- The analysis on the responses on the important role of a Government Hospital in improving healthcare shows that out of the total respondents, 36% are agreed, 16% are strongly agreed, 22% are on neutral respond, 19% are on no opinion and the remaining 6% and 1%

are disagree and strongly disagree in it. This shows that most of the respondents thought that Govt. Hospital plays an important role in improving healthcare system in the region.

4.3 SUGGESTIONS

1. There is an urgent need to provide them with knowledge about availability of health services.
2. Government should take steps to improve the rural health care facilities both in terms of increasing number of rural health care institutions as well as strengthening the internal infrastructure facilities and manpower.
3. Government should provide health care insurance facilities at minimum cost especially for economically and socially underprivileged group.
4. The study reveals that the people choose both Government hospital and private hospital for treatment of various kinds of ailments according to their income and the nature of ailments. Therefore, it is necessary to strengthen both Government service and private service.

4.4 CONCLUSION

This study revealed a relatively higher utilization of government health services for different health problems. Maternal health utilization of women was found satisfactory. But still health problems exist to a great extent due to their low income level and there is an urgent need to improve health services in rural areas. Thus majority of the people took home remedies against diseases which leads to decrease the immunity power or even went to long term morbidity. Increasing awareness of proper usage of available health services, improve the income status of the rural area people by increasing literacy status in their area and strengthening of the present public health infrastructure by providing adequate manpower and provision of effective drugs are corner stone for promoting better health and achieving reduction of health problems and can be accomplished by adequate health education for healthy lifestyle and counseling by the health workers. Moreover, there is necessary to allocate much staff for decrease the long waiting time. It is surely possible to save lives.

This study also showed the lack of utilization of educational resources, distance to travel to meet a health service for their ailments, cultural, religious and family influences had an impact on the people of the village. Our finding suggests that in expanding rural health infrastructure especially PHCs, Government should take few more measures for achieving healthy rural India. In conclusion, fixed infrastructure for the expansion of healthcare facilities in rural areas requires financial support and a strong political commitment from the State Government.

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APPENDIX

1. Name of the respondent :

2. Address :

3. Sex

(a) Male

(b) Female

(c) Other

4. Age :

5. Educational Standard

(a) Illiterate (b) Primary School

(c) High school (d) Higher secondary

(e) Graduate (f) Post Graduate

6. Type of Employment

(a) Private Employee.

(b) Public Employee

(c) Self Employee/Business

(d) Others

7. Monthly Income of the respondent (in Rupees)

(a) Less than 1000

(b) Between 1000 – 5000

(c) Between 5000 – 10,000

(d) 10,000 and Greater

8. Consumption Expenditure

SL. NO.	Item	Expenditure/Month (in Rs)		
		Nothing	Less than 5000	5000 and greater
1.	Food			
2.	Rent			
3.	Health			
4.	Transport			
5.	Clothes			
6.	Smoking and Alcohol			

9. NATURE AND EXTEND OF MORBIDITY

NATURE AND EXTEND OF MORBIDITY	Nil	Cured	Still Ailing
Short-term Morbidity			
1) Fever			
2) Cold and Cough			
3) Diarrhoea			
4) Headache			
5) Muscle pains			
6) Injuries/fractures			
7) Eye problem			
8) Others			
Long-term Morbidity			
1) Diabetes			
2) Heart Disease			
3) Cancer			

10. Do you have health insurance?

(a) Yes

(b) No

11. If yes, name the insurance provider:

- (a) Govt. health insurance
- (b) Private health insurance

12. If no, why?

- (a) Not aware
- (b) Making use of Govt. hospital
- (c) Could not afford
- (d) Others

13. Are you aware about 'Health Insurance Scheme' of the Government?

- (a) Yes
- (b) No

14. If yes, have you made use of it?

- (a) Yes
- (b) No
- (c)

UTILIZATION OF HEALTH CARE SERVICES

15. Choice of Health Care Provider (during the last one year)

- | | | | |
|---------------------|--------------------------|----------------------------|--------------------------|
| (a) Do Not Treat | <input type="checkbox"/> | (b) Government Hospital | <input type="checkbox"/> |
| (c) Private Clinics | <input type="checkbox"/> | (d) Ayurvedic / Homeopathy | <input type="checkbox"/> |
| (d) Home Remedy | <input type="checkbox"/> | (e) Others | <input type="checkbox"/> |

16. Do you prefer Govt. Hospital for your health emergencies?

- (a) Yes
- (b) No

17. If yes, the reasons for preferring Govt. Hospital:

- | | | | |
|------------------------|--------------------------|----------------------|--------------------------|
| (a) Free Treatment | <input type="checkbox"/> | (b) Less Waiting | <input type="checkbox"/> |
| (c) Free Medicine | <input type="checkbox"/> | (d) Available Nearby | <input type="checkbox"/> |
| (e) Quality Healthcare | <input type="checkbox"/> | (f) Others | <input type="checkbox"/> |

18. If you do not prefer Govt. Hospital, state the reasons:

- | | | | |
|-------------------------------|--------------------------|------------------------------|--------------------------|
| (a) Doctors are not available | <input type="checkbox"/> | (b) Medicine not available | <input type="checkbox"/> |
| (c) Very far away | <input type="checkbox"/> | (d) Poor quality health care | <input type="checkbox"/> |
| (e) No lab / other facilities | <input type="checkbox"/> | (f) Corruption | <input type="checkbox"/> |
| (g) Long waiting time | <input type="checkbox"/> | (h) Others | <input type="checkbox"/> |

19. Distance to Govt. hospital from your residence (in Kms.) _____

20. How do you finance your medical expenditure?

- | | |
|-----------------------------|--------------------------|
| (a) From Income/Savings | <input type="checkbox"/> |
| (b) Borrowings | <input type="checkbox"/> |
| (c) From Friends/Relatives | <input type="checkbox"/> |
| (d) Mortgaging of Jewellery | <input type="checkbox"/> |
| (e) Others | <input type="checkbox"/> |

21. For what kind of health problems, do you approach a Govt. hospital?

- | | |
|---|--------------------------|
| (a) Only for simple and short term difficulties | <input type="checkbox"/> |
| (b) Only for acute and long term difficulties | <input type="checkbox"/> |
| (c) For all kinds of health problems | <input type="checkbox"/> |

22. Do you agree that it is advisable to approach Govt. hospital in case of any health emergency?

- | | |
|-----------------------|--------------------------|
| (a) Strongly agree | <input type="checkbox"/> |
| (b) Agree | <input type="checkbox"/> |
| (c) No opinion | <input type="checkbox"/> |
| (d) Disagree | <input type="checkbox"/> |
| (e) Strongly disagree | <input type="checkbox"/> |

23. Do you agree that a Govt. hospital can play an important role in improving healthcare?

- | | |
|--------------------|--------------------------|
| (a) Strongly agree | <input type="checkbox"/> |
| (b) Agree | <input type="checkbox"/> |
| (c) No opinion | <input type="checkbox"/> |

(d) Disagree

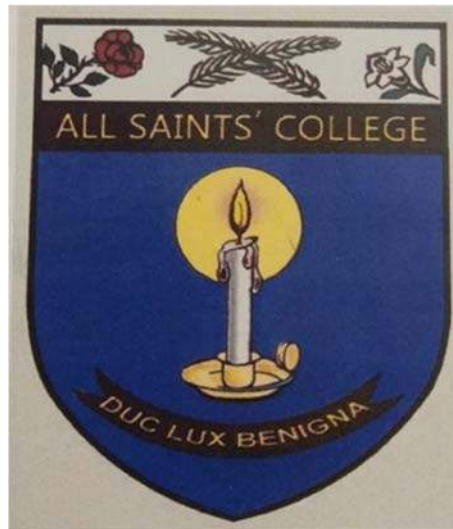
(e) Strongly disagree

24. Remarks, if any:

**INVESTMENT PATTERN OF HOUSEHOLDS IN
THIRUVANANTHAPURAM**

**First Degree Programme
In
Economics under CBCS system**

ALL SAINTS' COLLEGE



YEAR: 2020-2021

CERTIFICATE

This is to certify that the dissertation titled “**Investment Pattern of Households in Thiruvananthapuram**” is a record of studies carried out by Keerthana Manoj Pillai, Arunima.S. Babu, Devika.B and Divya.L at the Department of Economics, All Saints’ College, under my guidance and submitted to the University of Kerala in partial fulfilment of the Degree of Bachelor of Arts, First Degree Programme in Economics under CBCS System.



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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

In Economics, investment is generally held to mean formation of capital. As such, from a pure economics point of view, the formation of physical assets is important when considering investment. However, this study focuses on what is referred to as Financial Investment i.e., investment in shares and securities and even real assets aimed primarily at earning income rather than enhancing production.

A nation's productive capacity depends on a healthy capital formation. Robust savings rate coupled with good capital mobilization are the key macro-economic variables, which play a significant role in economic growth. The difference between savings and investment is that while savings is simply setting aside funds for future, investment also involves mobilizing them so that somebody else may use it for productive purposes. While there is enough evidence to suggest that Indian Households are strong savers there is not enough evidence to suggest that Indian Households are strong investors.

Households in India are risk-averse to investing their savings into risky assets. Households preferred to invest their savings in unproductive assets of gold, silver, and real estate (NCAER, 2011). According to the report of the household finance committee set up by the RBI in 2017, the Indian households have invested 84 per cent of their wealth in physical assets, 11 per cent in gold and silver, and the remaining 5 per cent in financial assets.

But all that is changing very fast. Indians are increasingly preferring financial assets over physical assets, which has led to the 'financialization' of savings in the country. The intensity of the trend in favour of financial assets can be gauged by the fact that the Assets Under Management (AUM) of the Indian mutual fund industry touched 25 trillion rupees in April 2019, growing over four-fold in the previous 10 years.

With a major chunk of savings going into buying a flat or residential property, the marked slowdown in the real estate sector forced investors to redraft their strategy. Despite its ups and downs, investment in the real estate sector was considered a sure shot way to generate decent returns. As Indians continued pouring money into realty, property prices heated up and reached unsustainable levels in several property markets. The sector entered a bearish phase somewhere around 2013. The weakness was amplified by the enactment of the Real Estate (Regulation and Development) Act or RERA in May 2016 and the demonetization of high-denomination currency notes in November of the same year. As returns from real estate diminished and the government cracked down on cash transactions, investors started ploughing funds into financial vehicles like mutual funds. Thus, there has been a significant shift to more financialization of savings in the country in the recent years [bajajfinservmarkets.in].

Against this background, this study was conducted to know the current investment pattern of households. It has also made an attempt to note how socio-economic profile of households also play a role in influencing behaviour of Households.

1.2 STATEMENT OF THE PROBLEM

The problem which has been selected for the study is “The Investment Pattern of Households in Thiruvananthapuram”. This study seeks to understand if perception of Households regarding investments are different across different demographic profiles or if there is a uniform pattern that is largely exhibited amongst all Households. It is also designed to collect additional information that can provide an insight into the factors that play a role in decision making of these Households.

While Indian Households are generally known to be strong savers, they are not exactly known to be very strong investors. Most literature available on Household Finances, seem to suggest that households in India generally indulge in unproductive investment and the only form of productive investment they undertake is in Bank deposits.

1.3 BACKGROUND OF THE RESEARCH PROBLEM

Investment culture among the people of a country is an essential prerequisite for capital formation and faster growth of an economy since the aggregate of savings is the source of investment in the economy. Every individual has a unique portfolio of spending and saving their income and the investment culture is influenced by the investors' attitude, perception, and willingness to place their savings in various real and financial assets. The capital formation happens in the economy as a result of investments in the capital market. To create a better future as well as to take the economy in growth progress, mobilization of saving is necessary. Therefore, it is essential for the country to motivate investment habits among households in the right direction. And in order to take necessary steps to bring about a shift in the investment culture of the, it is necessary to undertake a detailed and comprehensive investigation to understand why households behave the way they do and what factors influence them.

1.4 OBJECTIVES OF THE STUDY

1. To study if demographic factors influence Investment decisions
2. To study the determinants of investment decisions.
3. To understand motives for Investment.
4. To study the level of awareness among respondents regarding different investment avenues.

1.5 HYPOTHESIS

H₀: There is no significant relationship between occupation of respondents and their preference of investment avenues.

H₁: There is a significant relationship between occupation of respondents and their preference of investment avenues.

H₀: There is no significant relationship between educational qualification of respondents and their awareness of investment avenues.

H₁: There is a significant relationship between educational qualification of respondents and their awareness of investment avenues.

1.6 SCOPE AND SIGNIFICANCE OF STUDY

The scope of this study is limited to households in Thiruvananthapuram. Therefore, the conclusions arrived at from this study cannot be generalized to any other area. The scope of the study is limited to selected investment avenues.

This study can be used as an important source of information for providers of financial products as they can develop products suited to the specific needs of the households. The findings of the study will help the government, policymakers, banks and financial institutions to increase and mobilise the savings and investment habits among the households.

The development of a nation is largely influenced by its rate of savings and capital formation. The grass root level of this capital formation is the individual household. If savings of every family is mobilized properly through productive investment, then this will enhance the financial welfare of the nation .

1.7 RESEARCH METHODOLOGY

Research Design

The study was conducted to analyse the investment pattern of households in Thiruvananthapuram. The total number of households in Thiruvananthapuram is 1,91,446 (As per census 2011). The head of the family was selected as a respondent to collect the primary data. This study is based on a descriptive research study.

Area of Study

Thiruvananthapuram commonly known by its former name Trivandrum, is the capital of the Indian state of Kerala. Thiruvananthapuram city is governed by a Municipal Corporation which comes under Thiruvananthapuram Metropolitan Region. It is the most populous city in Kerala with a population of 9,57,730 as of 2011. It is located on the west coast of India near the extreme south of the mainland. The Corporation of Thiruvananthapuram, occupies an area of 214.86 Sq Km. The Urban Agglomeration had a population of 1,687,406 in 2011. The sex ratio is 1,040 females for every 1,000 males, which is higher than the national average. Thiruvananthapuram's literacy rate of 93.72% exceeds the all-India average of 74%. The Corporation of Thiruvananthapuram or TMC oversees and manages the civic infrastructure of the city's 100 wards. Number of Households in Thiruvananthapuram is 1,91,446 (As per census 2011).

Source of Data

Primary data relating to investment behaviour was collected from respondents through carefully designed questionnaires keeping in view the objectives of the study . (A copy of the questionnaire is given in the last as APPENDIX).

Secondary data has also been used wherever necessary to assess the pattern of investments. The relevant secondary data has been gathered from the regulatory authorities like RBI and Economic Survey, and by reviewing previous research works, journals, articles and magazines.

Sampling Techniques and Sample Size

The sampling technique used in this study is Convenience sampling. It is the most common non-probabilistic sampling technique of drawing representative data by selecting people because of their availability or easy access. This study has used Convenience sampling as the study requires a different mix of Pay scale, Age group, Educational background, Financial Experience, Financial knowledge. Also, Convenience sampling works well for the heterogeneous population.

In this study the Cochran Formula has been used as a scientific method of determining the sample size.

Cochran's Formula

Assume ,

Variability (p) = 0.5

Confidence level = 95%

Sampling Error = 10%

$$n = \frac{z^2[pq]}{e^2}$$

$$n = \frac{(0.96)^2 \times (0.5)(0.5)}{(0.1)^2}$$

= 96 Respondents

The sample size used in this study is 100 households which is an appropriate and more than the calculated sample size.

Framework for Data Analysis

In the first stage Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data.

The primary data collected were tabulated and analyzed with the help of computer software keeping in view the objective of the study. Mathematical and statistical tools were used for analysis wherever necessary. The mathematical tools used for the applied are averages and percentages. The statistical tools used for is weighted average mean and correlation.

1.7.1 Statistical Tools of Analysis

A suitably structured questionnaire was prepared and distributed to collect the data from the head of the family.

Reliability and normality of the collected data were ensured, and the information collected through the questionnaire were analyzed by applying the following statistical tools.

Percentage Analysis

Percentage analysis is used in this study to analyze the socio-economic profile of the households, and other relevant aspects relating to motives, determinants, and sources of information for investment by Households.

Relative Frequency

A relative frequency is the fraction or proportion of times a value occurs. To find the relative frequencies, each frequency is divided by the total number of data points in the sample. Relative frequencies can be written as fractions, percentage, or decimals. In this study Relative Frequency is used to remove any error that may occur due to varying sizes of different groups divided on the basis of employment and education for hypothesis testing.

Weighted Average Method

In this study, the weighted average is calculated to find out the order of preference of households for a given selected number of real and financial assets, level of awareness regarding different investment avenues, factors influencing the savings and investment decisions and motivation for investment.

The weighted arithmetic mean is similar to an ordinary arithmetic mean, except that instead of each of the data points contributing equally to the final average, some data points contribute more than others

$$W = \frac{\sum_{i=1}^n w_i X_i}{\sum_{i=1}^n w_i}$$

W = weighted average

n = number of terms to be averaged

w_i = weights applied to x values

X_i = data values to be averaged

Kruskal Wallis Test

The Kruskal-Wallis Test is similar to ANOVA in many ways. This test is used to determine the significant differences between two or more groups of an independent variable on a continuous

or ordinal (Rank) dependent variable at a time. In this study, data on order of preference regarding a selected number of investment avenues by households are collected by using an ordinal scale. Socio-economic profile of age, educational qualification and occupational status of the households are compared with preferences of households by using Kruskal Wallis test.

The test determines whether the medians of two or more groups are different. The Kruskal Wallis test will tell you if there is a significant difference between groups. However, it won't tell you *which* groups are different. For that, you'll need to run a Post Hoc test.

$$H = \left[\frac{12}{n(n+1)} \sum_{j=1}^c \frac{T_j^2}{n_j} \right] - 3(n+1)$$

Where:

n = sum of sample sizes for all samples,

c = number of samples,

T_j = sum of ranks in the jth sample,

n_j = size of the jth sample

The H value is compared to the critical chi-square value obtained using c – 1 Degrees of Freedom.

If the critical chi-square value is less than the H statistic, then null hypothesis is rejected.

If the chi-square value is not less than the H statistic, there is not enough evidence to reject the null hypothesis.

1.8 LIMITATIONS OF STUDY

1. Though efforts have been made to motivate and convince the respondents about the overall objectives of the study at the time of primary data collection; the chances of hiding confidential and private information at the time of collecting responses are not overruled.
2. The constraints of time and money have limited this study to a modest sample. An extensive study would be more comprehensive.
3. The total number of financial instruments in the market is so large that it needs a lot of resources to analyze them all and since this was not possible only a give number of selected instruments were used in this study.
4. This Study used only some factors to analyze the factors effecting investment behavior of individual investor.

However, reasonable efforts have been made by the researcher to convince the respondents about the gravity of the academic exercise. They were assured that individual opinions will not be mentioned anywhere, and that the information gathered will be used only for the purpose of the research.

1.9 CHAPTER LAYOUT

In order to have a clear dissemination of the information, the report is divided into six chapters.

Chapter 1: **Introduction:** This includes introduction to savings and investment, statement of the research problem, scope and significance of the study, objectives, methodology and limitations of the study.

Chapter 2: **Review of Literature:** This includes the review of important studies pertaining to the field of study and the comparison with other relevant studies towards building more insights.

Chapter 3: **Overview and Conceptual Definitions**

Chapter 4: **Data Analysis and Interpretations:** The deliberations relating to the investors' perceptions and behaviour, and factors influencing the same are analyzed and presented in this chapter.

Chapter 5 The last and final chapter presents the **Conclusion and Suggestions** emerging from the research study.

CHAPTER 2

REVIEW OF LITERATURE

1. **'How India Earns, Spends and Saves: Unmasking Real India'** brought out in 2007 by NCAER is one of the most comprehensive reports on India's consumer economy. Bank deposits and keeping money at home emerged as the two most preferred modes of saving for Indian households according to this book. The levels of investment in jewellery among different household categories were seen to bear an inverse relationship with the levels of education of the chief earner and so did the liquid cash levels in different household categories. Two trends were observed as the chief earner (across households) got older. First, the motivation to save tends to change; increasingly, the household feels the need to save for old age. Second, in absolute as well as relative terms, the saving level increases. As the chief earner ages, the percentage share of savings that is kept at home as cash declines, conversely, bank deposit percentages increases. Also, the proportion of savings allocated to cash, financial investments, and physical investments, are almost identical in households where the chief earner is a graduate and those where the chief earner is a higher secondary level pass out. When it comes to motivation for saving the key priorities for which Indian households invested their savings emerged in this order :-Emergencies, children's education, financial security during old age, marriages, births, and other social ceremonies, to build a house and to expand business operations and finally to buy consumer durables.
2. **Velmurugan, Selvam, & Nazar (2015)** in their empirical study emphasized that the aged and high-income investors prefer to invest only in post office and bank deposits for safety investment reason.
3. **Pandya and Popat (2018)** suggested that financial Knowledge score of rural investors is higher than that of urban investors. Urban respondents are however more aware about new financial options available in the market than rural respondents, still investment is more in conventional investment avenues. This shows that financial knowledge score doesn't carry such a huge difference on investment by investors
4. **Sathiyamoorthy, Krishnamurthy & Vedachalam (2015)** reveal that bank deposit still remains the most preferred investment avenues of the households. The results also highlight that certain factors like education level, age of investors, number of family members etc. make significant impact while deciding on the avenues for investment. The data has been analyzed using chi-square test. The main avenues of investment are Bank deposits, and the main purpose of investment is for children education, marriage, and security after retirement.
5. **Charles & Kasilingam (2016)** in their study found a significant association between the demographic variable of investor's income and various variables related to investment.

Findings of this study reveal that income has significant influence of determining the investment behaviour of investors. Further results suggest that investors who are earning less have low financial literacy when compared to moderate- and high-income group investors. Higher income investors have more longer-term goals and are better at managing their portfolios. Thus, it reveals that individuals' income is directly proportional to their financial literacy.

6. **Banerji & Farooqi (2016)** findings show that demographic variables age, academic qualification, marital status, employment status, and income have significant impact on credit card selection criteria. For age, the credit card usage is divided evenly among the young and middle age group and declines with further increase in age. Credit card usage also increases with education level.
7. **Athira K and Mohamed Kutty Kakkakunnan(2020)** concluded that factors like demography and personality have a strong influence on an investor's risk-bearing capacity. Majority of respondents relied on self-analysis as the major source of decisions. The first rank for the most preferred product was secured by the bank deposit, Insurance was given the position of the second most preferred product, followed by gold and silver. Further neuroticism trait was found to have a negative correlation with risk-bearing capacity whereas; agreeableness, extraversion, and conscientiousness were found to have a positive relation.
8. **Mehtab and Nagaraj (2019)** studies four behavioral biases i.e. Confirmation, Representative, Herding and Familiarity bias of male and female individual investors in India. They clearly showed that behavioral biases exist in the investment decisions of all the individual investors in India while female investors are more effected from all the four than male investors.
9. **Sanjay Kanti Das (2012)** observes from saving and investment pattern of the middle class income households in Nagaon districts of Assam that Bank deposits (35.33%) are considered as the preferred investment option among the middle class investors of the district. Primary data was collected from 150 households which were selected from each of the three income slabs as defined by NCAER.
10. The study undertaken by **Saikia (2015)** and published by the BSE focused on students working or having an earning source and studying at the same time. The analysis indicated that Safety and security which were always important reasons for investment are still influential in determining the direction of investment. Tax saving is one of the reasons behind investment by the youth. Traditional saving schemes do not provide any tax benefits and are, therefore, keeping the youngsters away from them. Mutual fund has gained the favor of the youngsters today. Investment in mutual funds through the Systematic Investment Plan (SIP) was found to be a favored investment option for the youngsters.
11. According to the **SEBI Investor Survey 2015** household awareness of savings schemes is significantly higher than a cognizance of investment instruments. Primary motivation for investing is capital gains, closely followed by lifestyle improvement plans. About 15

Percent of survey respondents participate in securities markets. The SIS data finds that even among households that invest, it is education and occupation and not factors such as age, household size or marital status that are primary drivers. There is also a direct linear correlation between higher education levels and superior portfolio diversification. According to the SIS data, income and education significantly influence investment choices while variables like age seem to have a very limited effect on whether a respondent chooses to invest or not. Marital status and household size show no significant effect on the choice to invest. However, government and private employees show a considerable disparity in their predilection to invest, it may possibly be an effect of the steady incomes amongst government employees. The Survey findings reveal that India has the highest incidence of life insurance buyers in the world. Predictably, post office savings schemes with their wide reach and network and risk-free schemes are also a crucial savings instrument. However, there is a crucial bias towards precious metals and real estate. 50 percent of all Indian investors are from the West zone while a mere 7 percent reside in the South zone. The North and East zones constitute 26 percent and 15 percent, respectively. Even after controlling for other factors like income and education, cultural/ geographical influences strongly impact investment decisions. This strong regional incongruence persists even amongst high income and high education groups that tend to invest more in the markets. Remarkably, according to data from National Securities Depository Limited (NSDL), only two states in the West zone (Maharashtra and Gujarat) account for nearly 40 percent of DEMAT accounts in India. Investors in the South have the lowest investments in the riskier derivatives and futures instruments, while it is the North which leads in investments in these instruments.

12. Agrawal (2020) research on household portfolios across various states in India suggests that some of the worst performing states in terms of participation across financial instruments belong to the North-eastern region. Chit Fund is found to be eminent among southern states like Telangana, where 38.75% of the households have invested in chit funds, Kerala, where 33% of the households have invested in a chit fund, Karnataka, where 22% of the households have invested in Chit Fund, and Tamil Nadu, where 20.5% of the households have invested in a chit fund. The reason for this high penetration of chit funds in the southern states is because even before the National Chit Funds Act, 1982 was established, the first State Governments to enact legislation on Chit Funds were Tamil Nadu (The Tamil Nadu Chit Funds Act, 1961), Andhra Pradesh (The Andhra Pradesh Chit Funds Act, 1971), and Kerala (The Kerala Chitties Act, 1975). In only 6 states, more than 95% of the households have at least one outstanding investment in Fixed Deposits, Himachal Pradesh, Jammu & Kashmir, Delhi, Kerala, Punjab, and Rajasthan. Investment in Mutual Funds remain lower than 5% for all states. Similarly, investment in Equity is even lower than that in MFs, the investment in listed shares for households in all states remain below 3%. The statistics are much better in terms of Life Insurance, as overall almost 50% of the households in India are covered under Life Insurance.

- 13. Debt and Investment in Kerala** report revealed that land and building together comprises the major share in household assets, in rural sector it is 94% and in urban sector it is 93% of the total share. For the indebted households in both rural and urban sector almost 90% of the households were indebted to institutional agencies like Government, Banks, Insurance companies, PFs, Financial companies, Self-Help groups, etc. This report is based on the data collected through NSS 70th round All India Debt and Investment Survey and was carried out during January 2013 to December 2013.
- 14. Gangwar & Singh (2018)** evaluated levels of financial literacy in respondents using the Lusardi and Mitchell questions. It presented evidence that financial literacy levels were low and that key financial concepts like calculation of interest, the effect of inflation, and risk diversification due to multiple investments were not completely understood by the respondents in India. Only 14% of all respondents got all three financial literacy questions correct. The study's findings corroborate other findings that financial literacy follows an inverted-U shape with respect to age and is least in young and elderly people. It was also found that women were less likely to answer all three of the financial literacy questions accurately. Finally, social interaction with non-family members in form of being a part of a social club had a small but significant impact on financial literacy. In this study's sample, no evidence was found for the anticipated positive association between financial literacy and stock market participation- often found in studies in developed nations. However, it was observed that sociodemographic, economic, and family characteristics were important predictors of whether a respondent would own stocks, mutual funds and/or fixed income securities.
- 15. Agarwalla, Barua, Jacob & Varma (2013)** follows the approach adopted by the OECD in their financial literacy survey. The financial literacy score for each respondent was computed by adding the scores in the three underlying dimensions, namely, financial knowledge, behaviour, and attitude. While India scored low in terms of financial knowledge, overall, the level of financial literacy among the working young in urban India is similar to the levels that prevail among comparable groups in other countries. The inferences reached by the study on the influence of several socio-demographic variables in the Indian context also confirm inferences reached by studies elsewhere. For example, the influence of family income and gender on various dimensions of financial literacy is similar to the influence recorded in other studies. There are however differences that are worthy of note. Despite the education levels of the respondents in the sample being high (large proportion being graduate and post-graduate), that does not translate into adequate financial literacy. This is likely to be due to absence of inputs relevant to financial literacy in the general education process.
- 16. One of the clearest findings from ANZ Survey of Adult Financial Literacy in Australia(2005)** was the strong correlation between financial literacy and socio-economic status. The lowest levels of financial literacy were associated with those having lower education, those who are unemployed, those with lower incomes, lower

savings levels ,single people, and people at both extremes of the age profile (18–24-year-olds and those aged 70 years and over).

- 17. Von Gaudecker (2015)** on the basis of results obtained in his assessment of Dutch household portfolios establishes that The largest losses resulting from under diversification are incurred by those who neither turn to external help with their investments nor have good skills in basic financial numerical operations and concepts. Whereas nearly all households that score high on financial literacy or rely on professionals or private contacts for advice achieve reasonable investment outcomes. Thus, compared to these groups, households with below-median financial literacy that trust their own decision-making capabilities lose an expected 50 bps on average. Financial numerical skill is more important than financial knowledge in terms of its influence on portfolio outcomes.
- 18. Calvet, Campbell & Sodini (2009)** in their paper, confirmed earlier evidence that richer, educated households of larger size are less prone to making financial mistakes than other households. Financial sophistication increases strongly with financial wealth and household size, and to a lesser extent with education and proxies for financial experience but is lower for self-employed and immigrant households. They have also reported a strong positive correlation between a household’s financial sophistication and its share of risky assets.
- 19. Cohn, Lewellen, Lease and Schlarbaum (1975)** in their study yielded data that suggests a strong pattern of decreasing relative risk aversion as wealth increases a higher proportion of the total is committed by the individual involved to risky assets.
- 20. Brown, Ivkovich, Smith and Weisbenner (2017)** provides evidence of causal community effects in the context of stock-market participation. Consistent with a “word-of-mouth” interpretation, this community effect is stronger in more “sociable” communities. They demonstrate that a ten percentage-point increase in community stock ownership makes an individual approximately four percentage points more likely to participate in the stock market.
- 21. PGIM India Mutual Fund Retirement Readiness Survey 2020 conducted by Nielsen** reveals that more than half of urban Indians have made no retirement plans at all. Indians start planning for retirement, in practice, by the age of 33 (on average). Retirement is at the bottom of most people’s list of priorities – their children’s needs (education, marriage etc.) and financial security come first. Urban Indians today are saving and investing less. Nielsen’s Survey finds that allocation of household income to savings and investments has fallen from 34% to 30% over the past two years. The decline of the joint family system is driving Indians to want to become more financially self-sufficient. 41% of respondents said they had focused their retirement investments on life insurance, while 37% preferred fixed deposits. This underlines the essential conservatism of most retirement planning. Indians tend to account for expected personal events (marriage, expenses, vacations, EMIs etc.)and unexpected personal events(hospitalization, sudden disability, critical illness etc.), but neglect external events

like economic slowdown, inflation, stock market volatility or instability in government regulations or interest rates when planning for retirement. On average, urban Indians aim to gather a corpus of about `50 lakh

22. Badarinza ,Campbell and Ramadorai (2016) compare household balance sheets of 13 developed countries. This comparison reveals considerable variation across countries in the participation rates for directly held stocks and mutual funds, which is substantially lower in mutual funds than in directly held stocks. On the liabilities side too there is substantial cross-country heterogeneity despite all countries in the sample being well developed industrialized nations with mature market economies and most of them members of the same currency area. Countries also differ with respect to the preferred methods of short-term financing. Thus, it shows an interesting contrast between northern and southern European balance sheets. Within financial assets though , the highest participation rate is for bank deposits and transaction accounts in most countries while the second highest participation rate is for retirement assets held in defined-contribution pension plans.

23. Nalin (2013) investigates determinants of savings and portfolio choice of Turkish investors. The results support the view that households with higher education tend to invest more in capital market investment vehicles compared to other alternatives. The employment status of the household head is also a significant determinant of portfolio choice. In addition, household size also plays a role in the household's portfolio decisions.

CHAPTER 3

OVERVIEW AND DEFINITIONS

3.1 DEFINITIONS OF INVESTMENT

In the words of **Joan Robinson**, “By investment is meant an addition to capital, such as occurs when a new house is built, or a new factory is built. Investment means making an addition to the stock of goods in existence.”

According to **Benjamin Graham**, “An Investment operation is one which upon thorough analysis promises safety of principal and adequate return. Operations not meeting this requirement are speculative.”

According to **F.Amling**, “Investment is the purchase of a financial asset that produces a yield that is proportional to the risk assumed over some future investment period”.

According to **William .F.Sharpe**, ”investment is sacrifice of certain present value for some uncertain future values”.

3.2 DIFFERENECE BETWEEN ECONOMIC INVESTMENT AND FINANCIAL INVESTMENT

Economic Investment

The concept of economic investment means net addition to the capital stock of the society. The capital stock of the society is the goods which are used in the production of other goods. The term investment implies the formation of new and productive capital in the form of new construction and produces durable instrument such as plant and machinery. Inventories and human capital are also included in this concept. Thus, an investment, in economic terms, means an increase in building, equipment, and inventory.

Financial Investment

In contrast, financial investment is a far broader concept. It includes economic investment and much more. Financial investment refers to investment in assets you expect to yield some sort of yield or dividend over a period. It involves investment either in financial assets (such as stocks, bonds, and futures contracts) or real assets (such as land, factories, construction equipment, and retail stores).

Generally, the more developed economies mostly focus on a financial investment as compared to economic investment.

3.3 INVESTMENT AVENUES

Investment avenues can be divided into investment in physical instruments and investment in financial instruments

3.3.1 Physical Instruments

The major physical investments are as follows;

Real estate

Real estate is basically defined as immovable property such as land and everything permanently attached to it like buildings. In the long run real estate offers a superior rate of return. Real estate investments cannot be encashed quickly. They involve high transaction cost. The asset must be managed, i.e., painting, repair, maintenance etc.

Bullion (Gold and silver)

For ages, gold and silver have been considered as a form of investment. They are considered as best hedge against inflation. Many Indian investors tend to invest in jewelry instead of pure gold. Gold prices are soaring to the new highs in recent years comparing to the previous decades because whenever the signs of an economic crisis arise in the world, markets may find shelter in gold as safest asset class for investors all around the world.

3.3.2 Financial Instruments

They include:-

Bank Deposits:

It is the simplest avenue open for the investors. Investors have to open an account with a bank and deposit money. Banks maintain different type of accounts for receiving deposits from every class of people. They are;

- Fixed Deposit
- Current Deposit
- Saving Deposit
- Recurring Deposit

Post office Deposits:

Like the commercial bank, post office also offers fixed deposit facilities and monthly income scheme. The post office fixed deposit (POFD), also known as 'post office time deposit' is a convenient alternative to the fixed deposits provided by banks. Through this fixed deposit scheme that is offered by the Indian Postal Services, an individual can earn a guaranteed return on the money deposited for a fixed period of time.

Small Savings Schemes

Small savings schemes are designed to provide safe and attractive investment options to the public and at the same time to mobilise resources for development. These schemes are operated through about 1.54 lakh post offices throughout the country. All the post office investment schemes are tax-exempt under **Section 80C**, i.e. tax exemption up to Rs. 1,50,000 is allowed. Some small saving schemes offered by Post Office are Public Provident Fund (PPF), Sukanya

Samriddhi Yojana (SSY), National Savings Certificate (NSC), Post Office Time Deposit for a 5 Year Term, and Senior Citizen Savings Scheme (SCSS).

Public Provident Fund Scheme

It is a savings-cum-tax-saving instrument in India. It also serves as a retirement planning tool for many of those do not have any structured pension plan covering them. A PPF account can be opened at any nationalized bank branch or the post office. It is a fifteen -year saving scheme. The Finance Ministry set the interest rate every year, which is paid on 31st March.

National Pension Scheme (NPS)

National Pension Scheme is a voluntary and long-term investment plan for retirement under the purview of the Pension Fund Regulatory and Development Authority (PFRDA) and Central Government. The scheme encourages people to invest in a pension account at regular intervals during the course of their employment. After retirement, the subscribers can take out a certain percentage of the corpus. As an NPS account holder, you will receive the remaining amount as a monthly pension post your retirement

National saving certificate (NSC):

This scheme is offered by the post office where certificates come in denominations of Rs 500, 1000, 5000 and 10,000. The duration of the scheme is 5 years . Indian Government decides the interest rates of the scheme on a quarterly basis. The minimum contribution that must be made towards the scheme is Rs.100 and there is no limit to the amount of contribution that can be made.

Chit Funds

A chit fund is both a savings and credit product. It bears a pre-determined value and is of a fixed duration, mostly two to three years. Each scheme admits a specific number of members whose monthly contributions adds up to the total value of the chit fund at the end of the term The system acts as a borrowing scheme, because subscribers are able to access large sums of money before they have paid the full amount. It also acts as a savings system, because each subscriber contributes every month and may retrieve a large sum in the future while receiving their share of the surpluses. Chit fund is defined as per the Section 2(b) of the Chit Fund Act, 1982 The Chit Funds in India are regulated by the Chit Fund Act, 1982. There are over 10,000 registered chit funds in India and many unregistered ones. The first state-run chit fund is the Kerala State Financial Enterprises established in 1969 by the Kerala government.

Equity shares

These securities carry more risk than investing in debt instruments. They have associated ownership benefits provided to an investor, wherein the individual becomes an owner to the extent of the capital invested. An individual possessing a large number of these types of equity shares have substantial voting rights. Investors earn returns through dividends.

Fixed income securities

These are the securities which yield certain fixed income to a regular interval of time. Securities which come under this category as follows;

Preference shares

These are the shares which have some preferential rights. The characteristics of the preference share are hybrid in nature. Some of its features resemble the bond and others resemble equity shares. Like bonds, their claims on the company's incomes are limited and they receive fixed dividend. At the same time like equity, it is a perpetual liability of the corporate. These holders do not enjoy any of the voting powers except when any dissolution affects their right. Preference share also called 'non-voting shares.

Debentures

A debenture is a type of bond or other debt instrument that is unsecured by collateral. Since debentures have no collateral backing, they must rely on the creditworthiness and reputation of the issuer for support. Both corporations and governments frequently issue debentures to raise capital or funds. An investment in debentures fetches a fixed and regular rate of interest.

Bonds

Bond is a long-term debt instrument that promises to pay a fixed annual sum as interest for a specified period of time. Debentures and bonds are very similar. In India, generally debt issued by government is known as bond, if it issued by private the sector, it is known as debenture. Bonds are considered to be very safe in the investing world. Highly rated corporate or government bonds come with little perceived default risk.

Life insurance

Life Insurance is a contract between an insurance policyholder and an insurance company, where the insurer promises to pay a sum of money in exchange for a premium after a set period or upon the death of an insured person. The policy holder typically pays a premium, either regularly or as one lump sum LIC has introduced various schemes to suite the requirements of different people. At present, the policies offered are:- term insurance policy, unit linked insurance policy, endowment assurance policy etc.

Mutual funds

Recently, mutual funds have become popular all over the world, mutual funds carry benefits in the form of safety of principal, capital appreciation and interest or dividend. Under mutual fund scheme an investor even with a little money can be a participant in investing in big companies, which are otherwise inaccessible to him because of his small investment. Mutual funds collect the savings of small investors, invest them in Government and other corporate securities and earn income in the form of interest and dividend. The income and capital appreciation arising out of investment are shared among the investors by careful selection of securities over a diversified portfolio, covering large number of companies and industries. Mutual funds are able to perform better than an individual investor.

Derivatives

Derivatives are secondary securities whose value is solely based (derived) on the value of the primary security that they are linked to—called the underlying. Typically, derivatives are considered advanced investing.

There are two classes of derivative products: "lock" and "option." Lock products (e.g., swaps, futures, or forwards) bind the respective parties from the outset to the agreed-upon terms over the life of the contract. Option products (e.g., stock options), on the other hand, offer the holder the right, but not the obligation, to buy or sell the underlying asset or security at a specific price on or before the option's expiration date. While a derivative's value is based on an asset, ownership of a derivative does not mean ownership of the asset. Futures contracts, forward contracts, options, swaps, and warrants are commonly used derivatives.

Commodity Futures

A commodity futures contract is an agreement to buy or sell a predetermined amount of a commodity at a specific price on a specific date in the future. Commodity futures can be used to hedge or protect an investment position or to bet on the directional move of the underlying asset.

3.4 SAVINGS INVESTMENT DYNAMICS IN INDIA

The study of dynamic relation between savings and investment has received considerable attention in recent years especially in emerging economies like India. The role of savings and investment in promoting economic growth of India has been given paramount importance since independence. The genesis of the study of saving - investment relationship in the empirical economics literature may be attributed to the seminal study by Fledstein and Horioka (1980). They examined the degree of the association between saving and investment rates across 16 OECD countries using data for the time period 1960-74 and found a high degree of correlation between domestic savings and investment that suggested the existence of limited capital mobility. Following this finding, the relationship between saving and investment has been the subject matter of intense research over the past three decades. The correlation between gross domestic savings and gross domestic capital formation in India during the whole sample period, that is from 1950-51 to 2008-09, is very high which indicates a strong association between them.

The relationship between domestic saving and investment provides some indication about the amount of domestic resources being translated into capital accumulation to fuel long-term growth. If there is no relationship between domestic saving and investment, higher domestic saving does not necessarily lead to higher investment and growth. Changes in domestic saving and investment may be completely independent, however, if capital is internationally mobile. This is because saving accumulated in one country can be easily transferred to and invested in another country. Hence, the study of saving-investment relationship is closely related to the degree of capital mobility. The estimated results based on annual data for the period 1959-2005 suggest that saving and investment are strongly related, both in the short run and long run.

Definition of Household

According to census 2011 A ‘household’ is usually a group of persons who normally live together and take their meals from a common kitchen unless the exigencies of work prevent any of them from doing so. While the United States census bureau defines a household as consisting of all the people who occupy a housing unit.

3.5 Interesting patterns in Investment among Keralites

Kerala lags behind in financial asset investments

According to PR Dileep, Managing Director of Impetus Wealth Management, a Mumbai-based portfolio manager, participation by investors from Kerala in mutual funds is not very impressive, with total assets of hardly ₹19,300 crore out of the industry’s total assets under management of ₹21 lakh crore thus indicating that Kerala seems to lag behind in financial asset investment. This was in 2017.

Low Insurance Penetration

The initial estimates of general insurance claims from Kerala floods, reportedly at Rs 10 billion, is lower than the total claims during the Chennai floods in 2015. This shows that the penetration of insurance was low in households of the state. The state government had estimated a loss of about Rs 195 billion. It (insurance claims) is not even 10 per cent (of estimated loss). In comparison after the Chennai floods, insurance companies had got 50,000 claims worth Rs 48 billion.

In other countries, insurance penetration is much better. According to Prudential Insurance Brokers, the proportion of insured losses to overall losses in US in May was 75%; the proportion of insured loss was 52.5% from Winter damage in Japan in February 2014 and 80% across Western Europe for severe storm damage in June 2014. Most of the claims filed by the flood affected people have come from property, resorts, automobiles, restaurants and small units.

Keralite’s Lottery Addiction

In FY18, Kerala households saved approximately ₹17,000 crore in fixed deposits, non-resident Keralites also saved approximately ₹17,500 crore. On the other hand, in the FY20 households in Kerala have spent close to ₹12,000 crore on lotteries. For many, especially at the bottom of the pyramid, a lottery appears a way out of their current miseries. The fact that the draws are made only on luck (without any scope for manipulation or gaming) and the results are near instantaneous add to the allure of lotteries. Over 79 million lottery tickets are sold every week in the state which has a population of 33 million. There are close to eight million households in Kerala, which means in a year, an average household buys about 500 lottery tickets. Households now spend around ₹15,000 per year on lotteries, not a small sum by any imagination. To contrast, during the same fiscal, Keralites spent approximately ₹8,000 crore on medicines. In the last 10 years, Keralites’ spend on lotteries has grown 20 times from ₹625 crore to ₹12,000 crore. The profits of Kerala Lotteries have also kept pace—from approximately ₹100 crore in FY11,

according to Keralalotteries.com, to an estimate ₹2,500 crore in FY20 . At this scale of profits, Kerala Lotteries would be among the top 50 profitable listed firms in India.

In Kerala 88% of the Poor households are Indebted; Cooperatives , Kudumbasree the main loan sources: CSES

A study of poor households spread across Kerala ,carried out by Kochi-based Centre For Socio-Economic and Environment Studies(CSES) noticed ,in contrast to the popular perception a higher dependence of poor households on formal sources such as commercial banks, cooperative credit institutions, NBFCs, private MFIs, Kudumbashree and other self-help groups than informal sources such as money lenders, friends and relatives. It also found that one-third of the poor households in Kerala are insolvent/over-indebted in the sense that their monthly loan repayment exceeds their monthly family income. The study has also found that, the poor in rural areas of the state largely depend on cooperative establishments and Kudumbasree for their loan needs.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

4.1 SOCIO ECONOMIC PROFILE OF THE HOUSEHOLDS

Percentage analysis is one of the primary statistical tools that is used to analyse and interpret the collected data for a better understanding. It describes the frequency distribution and percentage of the total population. The frequency deals with the response given by the households to a particular question and percentage arrive from the total. In this study, percentage analysis applied for the socio-economic profile of the households and other relevant aspect related to household's savings and investment pattern.

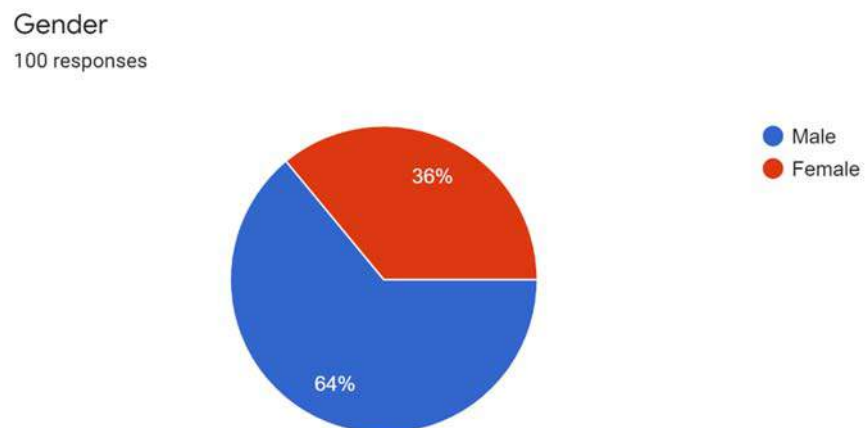
Socio-economic profile of the households is significant for this study as it influences the choice made by a household. Households with different Socio-Economic characteristics of age, gender, educational qualification, occupational status, family income etc. are likely to have different attitudes and behaviour as it plays a significant role in decision-making. In this study data regarding the demographic factors of the respondents was also collected.

Gender

Table 1 : Gender wise distribution of Households.

Gender of Household Head	No. of Households	Percentage
Male	64	64
Female	36	36

Chart 1.1 : Gender wise distribution of Households

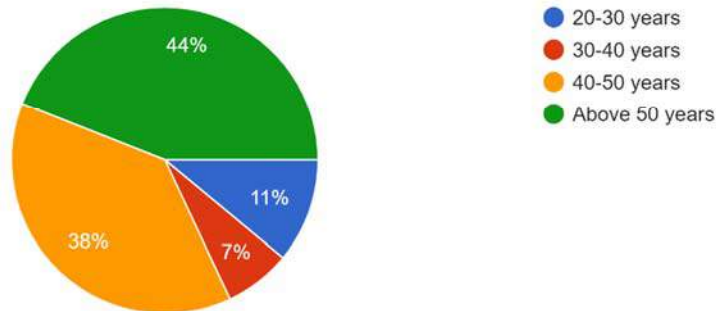


According to the data collected about 64% of the 100 households that participated in the study are male headed households while 36% are female headed households.

Age

Chart 1.2 : Age wise distribution of Households

Age Group
100 responses

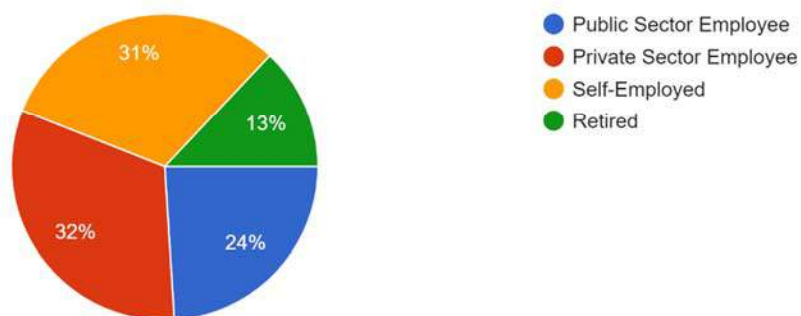


According to the pie chart given above the age distribution of the head of the family reveals that 11% of them fall within the age group of 20-30 years, 7% fall within the 30-40 years, 38% fall within 40-50 years and 44% are above the age of 50.

Occupation

Chart 1.3 : Occupation wise distribution of Households

Occupation
100 responses

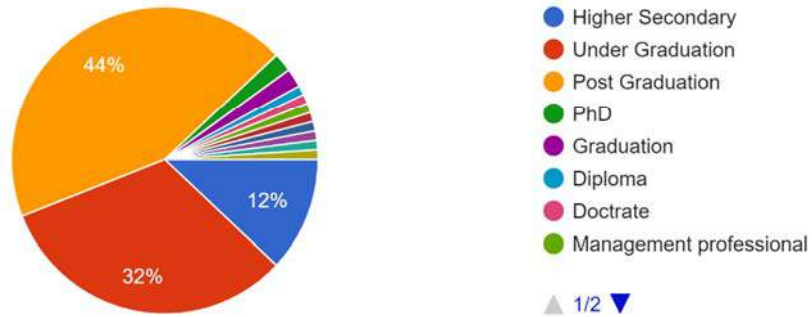


The data collected on the occupational status of heads of the households indicates that 32% of respondents are 'Private Sector Employees', while 31% are 'Self Employed', 24% work as 'Public Sector Employees' and 13% are 'Retired'.

Educational Qualification

Chart 1.4 : Education wise distribution of Households

Educational Qualification
100 responses

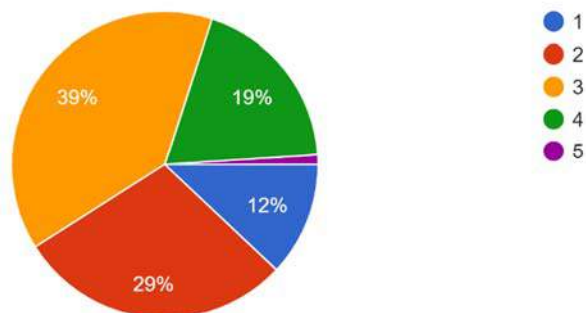


As many as 44% of household heads have completed their 'Post Graduation', 33% have done their 'Under Graduation' and 12% have completed their 'Higher Secondary' level, while the remaining opted for 'Other' and the entries suggested that remaining 12% of respondents were holders of Diplomas, PhDs, Doctorate, Professionals etc.

Number of Dependents

Chart 1.5 : Distribution of Households on the basis of Number of Dependents

100 responses

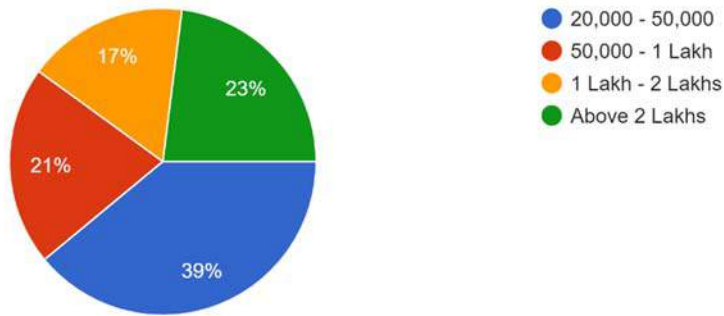


In terms of the number of dependents, a majority of 39% of households have '3' dependents, 29% of households have '2' dependents, 19% of households have '4' dependents, 12% of them have '1' dependent while a mere 1% has '5' dependents.

Monthly Income of Households

Chart 1.6 : Distribution of Households on the basis of Monthly Income

Total Monthly Income of your Family
100 responses

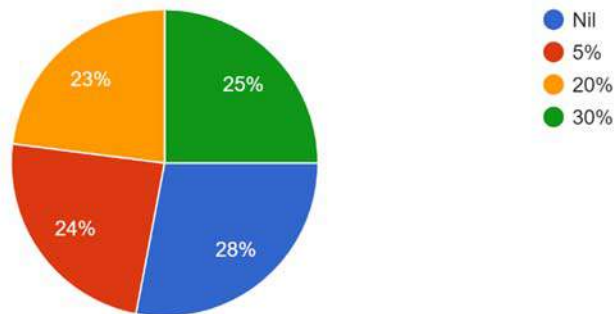


In terms of monthly income 39% out of the total 100 households receive income in the range of '20,000-50,000', 23% make income 'Above 2 Lakhs', 21% of households have their monthly income in the range of '50,000-1 Lakh' and 17% make between '1 Lakh-2 Lakh' per month.

Tax Bracket

Chart 1.7 : Distribution of Households on the basis of their Tax Bracket

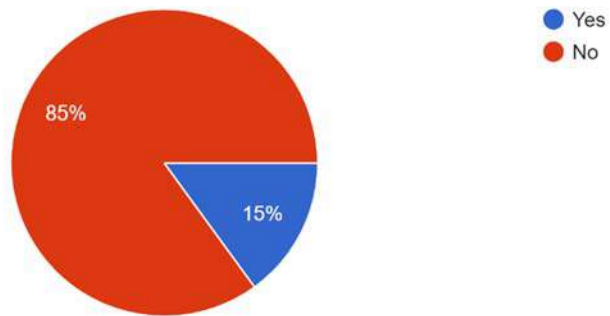
What tax bracket do you fall in ?
100 responses



Respondents who have had formal training in Finance

Chart 1.8 : Distribution of Households on the basis of whether Household heads are formally trained in Finance

Have you had any formal training in finance?
100 responses

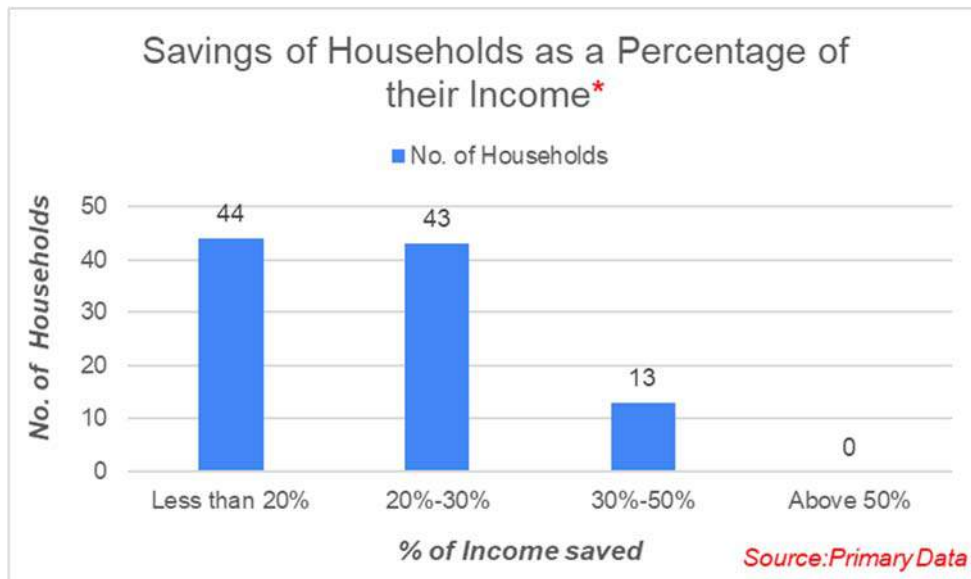


The pie chart above reveals that only 15% of Household heads have had formal training in Finance

4.2 SAVINGS AND INVESTMENT PATTERN OF HOUSEHOLDS

4.2.1 Savings of Households

Graph 1.1 : Savings of Households as a percentage of their Income



44% of households save Less than 20% of their income while a slightly lower 43% of households save 20% – 30% of their income. Only 13% of households save 30% - 50% of their income.

4.2.2 Sources on which people rely for making Investment related decisions

Table 2.1 : Sources on which people rely for making Investment related decisions

Source for making decisions	Frequency
Self-decision	42
Family members	41
Friends	10
Financial Advisor	5
Internet	2

4.2.3 Frequency with which people keep track of their Investment

Table 2.2 : Regularity with which people follow their investments

How regulary people follow their investment	Frequency
Weekly	5
Monthly	32
Quarterly	8
Annually	12
Occasionally	33
Never	10

33% of respondents reported following their investments only occasionally while 32% reported this as being a monthly exercise.12% keep track of investments annually,10% never check their investment,8% do it quarterly while a mere 5% maintain do a weekly follow up on their investments.

4.2.4 Factors considered while making an Investment

Table 2.3 : Importance given to various characteristics of the instrument while making an investment

Factor	Total	Rank
Safety and Security	375	1
Liquidity	308	4
Tax Benefits	306	5
High Returns	313	3
Low Risk	338	2

From the above table it can be seen that safety and security is the most important aspect that is considered by respondents at the time of investing, secondly respondents look for instruments that carry very low risk. The returns given by the investment is only considered after its safety and risk. Liquidity is given less importance whereas tax benefits are considered last.

4.2.5 Motives for Investing

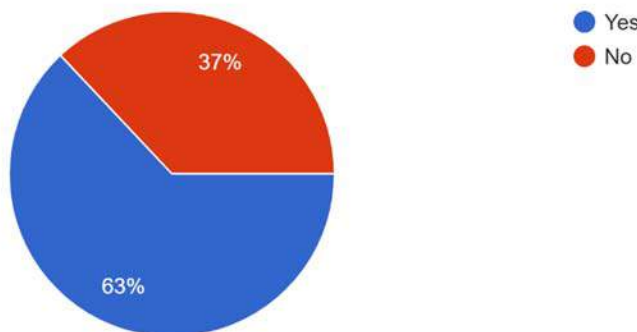
Table 2.4 : Motives for Investing

Motive for Investing	Total Score	Rank
To meet Education expenses of children	462	1
To meet Marriage expenses of children	355	6
To meet emergencies	454	2
To buy assets (House,Car)	356	5
To save for Old Age	403	4
To start a Business	233	8
To meet Medical expenses	431	3
Hedge against Infation	285	7

The table above displays the various motives for which people might invest. For many people meeting the educational expense of their children is of the topmost priority, meeting emergencies ranks 2nd, medical expenses come 3rd, saving for old age is 4th, in the 5th spot comes saving for assets, and 6th is meeting marriage expenses. Hedging against inflation and investing to start a business have been relegated the last two ranks. The data from this table seems to indicate that people do not take into consideration inflation while investing.

4.2.6 Credit Card Culture

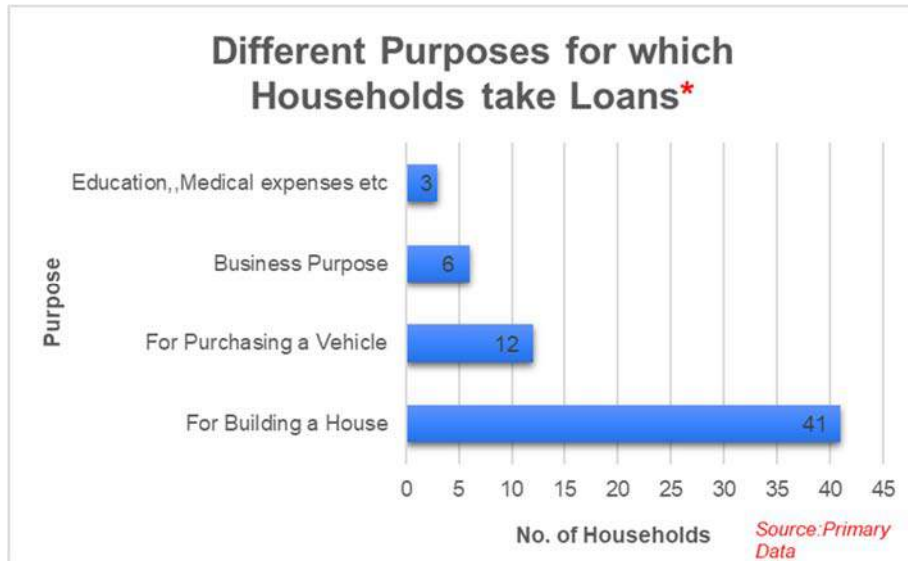
Chart 1.9 : Distribution of Households on the basis of Credit card usage



Of the total 100 households a majority of 63% households affirmed that they were credit card users .

4.2.7 Purposes for which Households take Loans

Graph 1.2 : Different Purposes for which Households take loans

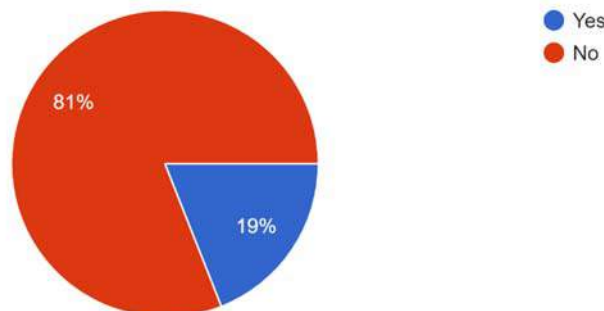


62 out of 100 households revealed that they had taken loans. The purpose for which these loans were taken has been graphically represented in the above figure. Here housing emerges as the most frequently stated reason for most households (41), the 2nd most widely seen reason is for vehicle loans (12), even fewer people (6) have taken Business loans whereas a negligible (3) number of people had taken loans for other purposes like education, medical expenses etc. An additional aspect that was revealed is that majority of the households had taken loans from institutional sources.

4.2.8 Respondents who Invested in Mutual Funds

Chart 1.10 : Distribution of Households on the basis of whether they invest in Mutual Funds

Do you invest in Mutual Funds?
100 responses



4.3 SOCIO ECONOMIC PROFILE AND INVESTMENT AVENUES

4.3.1 Relationship between Employment and Investment preferences

Investment Preferences among Private Sector Employees

Table 2.5.1: Frequency Distribution Table of Investment Preferences among Private Sector Employees

Rank	Bank Deposits	Real Estate	Bullion	Mutual Funds	Shares and Debentures	Insurance	Bonds	Small Savings Schemes
1	8	16	10	12	14	10	17	5
2	4	5	9	5	8	4	2	9
3	3	3	4	5	4	7	5	5
4	3	1	1	3	3	3	1	1
5	1	1	4	2	2	2	3	3
6	2	2	3	4	1	1	3	2
7	1	3	1	0	0	2	0	2
8	10	1	0	1	0	3	1	5
Total	32	32	32	32	32	32	32	32

Table 2.5.2 : Relative Frequency Distribution Table of Investment Preferences among Private Sector Employees

Rank	Bank Deposits	Real Estate	Bullion	Mutual Funds	Shares and Debentures	Insurance	Bonds	Small Savings Schemes
1	25.00	50.00	31.25	37.50	43.75	31.25	53.13	15.63
2	12.50	15.63	28.13	15.63	25.00	12.50	6.25	28.13
3	9.38	9.38	12.50	15.63	12.50	21.88	15.63	15.63
4	9.38	3.13	3.13	9.38	9.38	9.38	3.13	3.13
5	3.13	3.13	12.50	6.25	6.25	6.25	9.38	9.38
6	6.25	6.25	9.38	12.50	3.13	3.13	9.38	6.25
7	3.13	9.38	3.13	0.00	0.00	6.25	0.00	6.25
8	31.25	3.13	0.00	3.13	0.00	9.38	3.13	15.63
Total	100	100	100	100	100	100	100	100

Table 2.5.3: Ranking of Investment Avenues by Private Sector Employees according to their preference by use of Weighted Average

Investment Avenues	Weighted Average	Rank
Bank Deposits	12.24	1
Real Estate	7.38	6
Bullion	7.73	5
Mutual Funds	7.90	4
Shares and Debentures	6.08	8
Insurance	9.11	3
Bonds	7.03	7
Small Savings Schemes	10.68	2

Investment preferences among Public Sector Employees

Table 2.5.4: Frequency Distribution Table of Investment preferences of Public Sector Employees

Rank	Bank Deposits	Real Estate	Bullion	Mutual Funds	Shares and Debentures	Insurance	Bonds	Small Savings Schemes
1	4	10	6	8	9	5	9	5
2	2	3	3	5	5	3	6	2
3	5	4	7	3	1	6	3	6
4	2	1	3	4	5	4	3	4
5	0	1	2	1	2	3	2	0
6	1	5	1	0	2	0	1	1
7	3	0	2	3	0	1	0	1
8	7	0	0	0	0	2	0	5
Total	24	24	24	24	24	24	24	24

Table 2.5.5 : Relative Frequency Distribution Table of Investment preferences of Public Sector Employees

Bank Deposits	Real Estate	Bullion	Mutual Funds	Shares and Debentures	Insurance	Bonds	Small Savings Schemes
16.67	41.67	25.00	33.33	37.50	20.83	37.50	20.83
8.33	12.50	12.50	20.83	20.83	12.50	25.00	8.33
20.83	16.67	29.17	12.50	4.17	25.00	12.50	25.00
8.33	4.17	12.50	16.67	20.83	16.67	12.50	16.67
0.00	4.17	8.33	4.17	8.33	12.50	8.33	0.00
4.17	20.83	4.17	0.00	8.33	0.00	4.17	4.17
12.50	0.00	8.33	12.50	0.00	4.17	0.00	4.17
29.17	0.00	0.00	0.00	0.00	8.33	0.00	20.83

Table 2.5.6 : Ranking of Investment preferences of Public Sector Employees using Weighted Average

Investment Avenues	Weighted Average	Rank
Bank Deposits	13.19	1
Real Estate	7.75	6
Bullion	8.68	4
Mutual Funds	7.99	5
Shares and Debebtures	7.41	7
Insurance	9.61	3
Bonds	6.71	8
Small Savings Scheme	11.11	2

Investment Preferences among the Retired

Table 2.5.7 : Frequency Distribution Table of Investment Preferences of Retired Individuals

Rank	Bank Deposits	Real Estate	Bullion	Mutual Funds	Shares and Debentures	Insurance	Bonds	Small Savings Schemes
1	0	7	3	3	5	2	5	1
2	1	2	2	5	3	1	5	1
3	1	1	1	1	2	2	2	2
4	0	1	0	2	2	1	0	1
5	1	0	1	0	0	2	0	3
6	1	0	3	1	0	3	1	2
7	1	2	3	1	1	1	0	2
8	8	0	0	0	0	1	0	1
Total	13	13	13	13	13	13	13	13

Table 2.5.8 : Relative Frequency Distribution Table of Investment Preferences of Retired Individuals

Rank	Bank Deposits	Real Estate	Bullion	Mutual Funds	Shares and Debentures	Insurance	Bonds	Small Savings Scheme
1	0.00	53.85	23.08	23.08	38.46	15.38	38.46	7.69
2	7.69	15.38	15.38	38.46	23.08	7.69	38.46	7.69
3	7.69	7.69	7.69	7.69	15.38	15.38	15.38	15.38
4	0.00	7.69	0.00	15.38	15.38	7.69	0.00	7.69
5	7.69	0.00	7.69	0.00	0.00	15.38	0.00	23.08
6	7.69	0.00	23.08	7.69	0.00	23.08	7.69	15.38
7	7.69	15.38	23.08	7.69	7.69	7.69	0.00	15.38
8	61.54	0.00	0.00	0.00	0.00	7.69	0.00	7.69

Table 2.5.9 : Ranking of Investment Avenues by Retired Individuals using Weighted Average

Investment Avenues	Weighted Average	Rank
Bank Deposits	18.59	1
Real Estate	6.84	7
Bullion	11.54	4
Mutual Funds	7.91	5
Shares and Debebtures	6.84	6
Insurance	12.18	3
Bonds	5.77	8
Small Savings Scheme	13.25	2

Investment preferences among the Self Employed

Table 2.5.10 : Frequency Distribution Table of Investment Preferences of the Self Employed

Rank	Bank Deposits	Real Estate	Bullion	Mutual Funds	Shares and Debentures	Insurance	Bonds	Small Savings Schemes
1	4	7	5	10	8	2	14	6
2	2	6	4	4	7	4	3	2
3	3	8	9	7	4	6	5	4
4	2	1	6	4	5	2	2	5
5	3	3	3	3	3	1	1	1
6	3	5	1	3	2	5	2	2
7	5	0	1	0	0	3	1	4
8	9	1	2	0	2	8	3	7
Total	31	31	31	31	31	31	31	31

Table 2.5.11 : Relative Frequency Distribution Table of Investment Preferences of the Self Employed

Rank	Bank Deposits	Real Estate	Bullion	Mutual Funds	Shares and Debentures	Insurance	Bonds	Small Savings Schemes
1	12.90	22.58	16.13	32.26	25.81	6.45	45.16	19.35
2	6.45	19.35	12.90	12.90	22.58	12.90	9.68	6.45
3	9.68	25.81	29.03	22.58	12.90	19.35	16.13	12.90
4	6.45	3.23	19.35	12.90	16.13	6.45	6.45	16.13
5	9.68	9.68	9.68	9.68	9.68	3.23	3.23	3.23
6	9.68	16.13	3.23	9.68	6.45	16.13	6.45	6.45
7	16.13	0.00	3.23	0.00	0.00	9.68	3.23	12.90
8	29.03	3.23	6.45	0.00	6.45	25.81	9.68	22.58

Table 2.5.12 : Ranking of Investment Avenues by the Self Employed using Weighted Average

Investment Avenues	Weighted Average	Rank
Bank Deposits	14.78	1
Real Estate	8.96	5
Bullion	9.68	4
Mutual Funds	7.89	8
Shares and Debebtures	8.69	6
Insurance	13.98	2
Bonds	8.15	7
Small Savings Scheme	12.81	3

4.4 SOCIO ECONOMIC PROFILE OF HOUSEHOLDS AND LEVEL OF AWARENESS

4.4.1 Education Qualification of respondents and their Awareness of Investment Avenues

Awareness among Post Graduates

Table 2.6.1 : Frequency Distribution Table Of Awareness Among Post Graduates

Awareness	Bank Deposits	Real Estate	Bullion	Mutual Funds	Equity Shares	Bonds	Small Savings Scheme	Insurance	Commodity Futures	Derivatives
Highly Aware	30	11	14	9	9	10	20	21	7	8
Moderately Aware	14	24	23	24	17	14	21	21	16	14
No Awareness	0	9	7	11	18	20	3	2	21	22
Total	44	44	44	44	44	44	44	44	44	44

Table 2.6.2 : Relative Frequency Distribution Table Of Awareness Among Post Graduates

Awareness	Bank Deposits	Real Estate	Bullion	Mutual Funds	Equity Shares	Bonds	Small Savings Scheme	Insurance	Commodity Futures	Derivatives
Highly Aware	68.18	25.00	31.82	20.45	20.45	22.73	45.45	47.73	15.91	18.18
Moderately Aware	31.82	54.55	52.27	54.55	38.64	31.82	47.73	47.73	36.36	31.82
No Awareness	0.00	20.45	15.91	25.00	40.91	45.45	6.82	4.55	47.73	50.00

Table 2.6.3 : Ranking based on Awareness of Post Graduates using Weighted Average

Investment Avenues	Weighted Average	Rank
Bank Deposits	44.70	1
Real Estate	34.09	5
Bullion	35.98	4
Mutual Funds	32.58	6
Equity Shares	29.92	7
Bonds	29.55	8
Small Savings Scheme	39.77	3
Insurance	40.53	2
Commodity Futures	28.03	9.5
Derivatives	28.03	9.5

Awareness among Under Graduates

Table 2.6.4 : Frequency Distribution Table Of Awareness Among Under Graduates

Awareness	Bank Deposits	Real Estate	Bullion	Mutual Funds	Equity Shares	Bonds	Small Savings Schemes	Insurance	Commodity Futures	Derivatives
Highly Aware	25	10	16	8	6	6	22	23	5	6
Moderately Aware	7	18	15	15	15	17	9	8	15	12
No Awareness	2	6	3	11	13	11	3	3	14	16
Total	34	34	34	34	34	34	34	34	34	34

Table 2.6.5 : Relative Frequency Distribution Table Of Awareness Among Under Graduates

Awareness	Bank Deposits	Real Estate	Bullion	Mutual Funds	Equity Shares	Bonds	Small Savings Schemes	Insurance	Commodity Futures	Derivatives
Highly Aware	73.53	29.41	47.08	23.53	17.65	17.65	64.71	64.71	14.71	17.65
Moderately Aware	20.59	52.94	44.12	44.12	44.12	50.00	26.47	23.53	44.12	35.29
No Awareness	5.88	17.65	8.82	32.35	38.24	32.35	8.82	8.82	41.18	47.06

Table 2.6.6 : Ranking based on Awareness of Under Graduates using Weighted Average

Investment Avenues	Weighted Average	Rank
Bank Deposits	44.61	1
Real Estate	35.29	5
Bullion	39.71	4
Mutual Funds	31.86	6
Equity Shares	29.90	8
Bonds	30.88	7
Small Savings Scheme	42.65	3
Insurance	43.14	2
Commodity Futures	28.92	9
Derivatives	28.43	10

Awareness among Higher Secondary pass outs

Table 2.6.7 : Frequency Distribution Table Of Awareness Among Higher Secondary Pass Outs

Awareness	Bank Deposits	Real Estate	Bullion	Mutual Funds	Equity Shares	Bonds	Small Savings Scheme	Insurance	Commodity Futures	Derivatives
Highly Aware	7	1	6	2	1	2	9	5	3	0
Moderately Aware	4	6	3	5	4	4	2	7	3	4
No Awareness	1	5	3	5	7	6	1	0	6	8
Total	12	12	12	12	12	12	12	12	12	12

Table 2.6.8 : Relative Frequency Distribution Table Of Awareness Among Higher Secondary Pass Outs

Awareness	Bank Deposits	Real Estate	Bullion	Mutual Funds	Equity Shares	Bonds	Small Savings Scheme	Insurance	Commodity Futures	Derivatives
Highly Aware	58.33	8.33	50.00	16.67	8.33	16.67	75.00	41.67	25.00	0.00
Moderately Aware	33.33	50.00	25.00	41.67	33.33	33.33	16.67	58.33	25.00	33.33
No Awareness	8.33	41.67	25.00	41.67	58.33	50.00	8.33	0.00	50.00	66.67

Table 2.6.9 : Ranking based Awareness of Higher Secondary Pass Outs using Weighted Average

Investment Avenues	Weighted Average	Rank
Bank Deposits	41.67	2
Real Estate	27.78	7
Bullion	37.50	4
Mutual Funds	29.17	5.5
Equity Shares	25.00	9
Bonds	27.78	8
Small Savings Scheme	44.44	1
Insurance	40.28	3
Commodity Futures	29.17	5.5
Derivatives	22.22	10

Awareness among Professionals

Table 2.6.10 : Frequency Distribution Table Of Awareness Among Professionals

Awareness	Bank Deposits	Real Estate	Bullion	Mutual Funds	Equity Shares	Bonds	Small Savings Scheme	Insurance	Commodity Futures	Derivatives
Highly Aware	4	1	0	1	1	1	1	1	0	0
Moderately Aware	6	6	8	5	5	4	8	7	6	6
No Awareness	0	3	2	4	4	5	1	2	4	4
Total	10	10	10	10	10	10	10	10	10	10

Table 2.6.11 : Relative Frequency Distribution Table Of Awareness Among Professionals

Awareness	Bank Deposits	Real Estate	Bullion	Mutual Funds	Equity Shares	Bonds	Small Savings Scheme	Insurance	Commodity Futures	Derivatives
Highly Aware	40.00	10.00	0.00	10.00	10.00	10.00	10.00	10.00	0.00	0.00
Moderately Aware	60.00	60.00	80.00	50.00	50.00	40.00	80.00	70.00	60.00	60.00
No Awareness	0.00	30.00	20.00	40.00	40.00	50.00	10.00	20.00	40.00	40.00

Table 2.6.12 : Ranking based on Awareness of Professionals using Weighted Average

Investment Avenues	Weighted Average	Rank
Bank Deposits	40.00	1
Real Estate	30.00	5
Bullion	36.00	2
Mutual Funds	28.33	6.5
Equity Shares	28.33	6.5
Bonds	26.67	9
Small Savings Scheme	33.33	3
Insurance	31.67	4
Commodity Futures	26.67	9
Derivatives	26.67	9

CHAPTER 5

CONCLUSION AND SUGGESTIONS

This chapter deals with the conclusion of this study based on the findings in the previous chapter. It provides insight into the observations.

5.1 CONCLUSION

This study reflects the investment preferences of people living in Thiruvananthapuram .Based on this study it is concluded that Bank Deposits, Real Estate, Bullion and Mutual Funds are the most preferred instruments in the given order while shares and debentures, Insurance, Bonds and Small Savings Schemes are less preferred. Less than 20% of the respondents were found to invest in Mutual Funds and only 9% invest directly in the stock market. Thus, it can be inferred from this that investors in Thiruvananthapuram are risk averse. SEBI Investor Survey of 2015 also classified investors from the south of India as being the most risk averse in comparison to the other three zones. This could perhaps be due to the fact that only 15% of respondents have received formal training in Finance.

Regarding the influence of demographic factors, using hypothesis testing it was concluded that there was no significant influence of employment on preference in investment avenues and also no influence of education on awareness in investment avenues. However, many other studies have established a relationship between demographic variables and investment pattern.

When it comes to decision making on matters of investing money, fewer people rely on the Internet and financial advisors, as compared to relying on Friends in such matters. Most people either make a decision themselves or rely on Family members to do so.42% of the respondents make their own decisions, the rest depend on various people and mediums. This aligns with Nielsen's Survey which shows that Indians are more dependent on others while taking decisions for investments through internet compared to their global peers, The survey, however, said compared to ordinary customers, net savvy Indians are more independent while taking investment decisions. Nielsen's survey shows that when making personal finance or investment decisions, nearly half (49%) of global online consumers rely only on themselves.

The level of Safety and Security of the investment is the most important factor for investors, this is followed by its riskiness, the returns it yields, liquidity, and tax benefits. In terms of how regularly respondents keep track of their investments,33% indicated they check their investments only occasionally while a slightly lower proportion of 32% indicated that they check their investments monthly. Approximately a tenth of the participants of the study follow investments annually while exactly a tenth never check their investments.

This study also revealed that a vast majority of people who take loans do so for the purpose of building a house. After home loans ,vehicle loans are the next most popular loans. Very few people take loans for business purposes. While loans for educational and medical purposes

comes in last. All the respondents confirmed that they had taken loans from Institutional sources. 63% of respondents in the study are credit card users. This might indicate an improvement in credit card penetration since a study conducted by Credit Information Bureau (India) Limited (CIBIL) in 2014 showed that Kerala had a very low penetration of credit cards.

Different people invest money for different purposes. According to the data analysis in chapter 3 people invest primarily to meet educational expenses of their children, to tide over emergencies, to pay for medical expenses and to buy assets like a house or a car. They do not take into account inflation while investing money which would probably explain their preference for low interest yielding instruments like Bank deposits.

To sum up it is clear that households have enough awareness only about certain traditional avenues and not regarding others, mainly financial instruments. Growth of the capital market is imperative for Indian economy to achieve the \$5 trillion mark, as remarked by Vikram Limaye, managing director and CEO of National Stock Exchange. In India, the level of capital market penetration is still 5 per cent, whereas in the developed markets, the same level is at 35-40 per cent. This study therefore brings attention to the fact that there is much to be done regarding financial literacy of the residents of Thiruvananthapuram.

5.2 SUGGESTIONS

- It is clearly observed that most of the respondents have lack of awareness regarding the stock market. Moreover, they do not have much awareness of most instruments present in the market. Hence, it is suggested that the print and electronic media be strengthened to disseminate information among the general public.
- It is also suggested that people be made aware of concepts like time value of money since people do not take into account the effects of inflation while investing.
- A wealth of information is required to make savings and investment decisions. For many households, only the head of the household, the family members and friends take financial decisions on behalf of the households. It is vital that banks and financial institutions like brokerage firms, registered investment advisors other and financial services companies provide more information to households so that they can make better decisions
- Households should also seek information from Business periodicals, Government publications, corporate reports, Investor's newsletters, Personal financial management websites to take effective decisions on their saving and investments options.
- Investor education programmes should be strengthened by the regulators so as to help the investors' grow in confidence while they consider investing in various investment avenues.

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APPENDIX

A Study of the Investment Pattern of Households in Thiruvananthapuram

The information collected through this questionnaire will be used only for academic purposes and kept confidential. Kindly extend your full Cooperation.

* Required

This questionnaire is to be filled out by the head of the household(i.e. whoever makes the financial decisions in the family).

Demographic Profile of Households

Following questions will be used to understand the socio-economic profile of households included in this study.

1. Gender *

- Male
 Female

2. Age Group *

- 20-30 years
 30-40 years
 40-50 years
 Above 50 years

3. Occupation *

- Public Sector Employee
- Private Sector Employee
- Self-Employed
- Retired

4. Educational Qualification *

- Higher Secondary
- Under Graduation
- Post-
- Graduation

Other :

5. Number of Dependents *

- 1
 - 2
 - 3
 - 4
 - Other:
-

6. Total Monthly Income of your Family *

- 20,000 - 50,000
- 50,000 - 1 Lakh
- 1 Lakh - 2 Lakhs
- Above 2 Lakhs

7. What tax bracket do you fall in ? *

- Nil
- 5%
- 20%
- 30%

Assessment of Investment Pattern and Household Perception regarding various Financial Instruments

The following questions seek to obtain information necessary to determine the investment pattern of Households.

8. What percentage of your income do you save? *

- Less than 20%
- 20% - 30%
- 30% - 50%
- More than 50%

9. Have you had any formal training in finance? *

- Yes
- No

10. Whom do you consult for making investment related decisions? *

- Self-decision
- Family members
- Friends
- Financial Advisor
- Internet
- Newspaper
- Other:

11. How frequently do you follow your investments? *

- Weekly
- Monthly
- Quarterly
- Annually
- Occasionally
- Never

12. State the reason for your investments as per your order of preference(Rank) Here 8 = Highest and 1 = Lowest *

Mark only one oval per row.

	1	2	3	4	5	6	7	8
To meet Education expenses of children	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To meet marriage expenses of children	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To meet emergencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To buy assets (House,Car)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To save for old age	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To start a business	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To meet medical expenses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hedge against infation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. What are the factors that you consider while making investment decisions? Rank them according to your order of preference. Here 5 is the Most Important factor and 1 is the Least Important factor *

Mark only one oval per row.

	1	2	3	4	5
Safety and Security	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Liquidity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tax Benefits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High Returns	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Low Risk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. Rank the below given financial instruments according to order of preference. Where 8 = Most preferred and 1 = Least preferred *

Mark only one oval per row.

	1	2	3	4	5	6	7	8
Bank Deposits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Real Estate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bullion (Gold,Silver)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mutual Funds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shares and Debentures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Insurance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bonds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Small Savings Scheme (eg:-Chit Fund, Public Provident Fund etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. Do you use a credit card? *

Yes

No

16. Have you taken life insurance? *

Yes

No

17. Have you ever taken a loan ?If Yes ,then state your source and purpose for borrowing.

18. How aware are you about the following financial instruments? *

Mark only one oval per row.

	Highly Aware	Moderately Aware	No Awareness
Bank Deposits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Real Estate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bullion (Gold,Silver)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mutual Funds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Equity Shares	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bonds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Small Savings Scheme(eg:- Chit Fund, Public Provident Fund etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Insurance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Commodity Futures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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19. Do you invest in Mutual Funds? *

Yes

No

20. If you are an investor in Mutual Funds, please specify below the year from when you first started investing in Mutual Funds. If you do not invest in mutual funds you may leave the question unattended.

21. Do you participate in the stock market? *

Yes

No

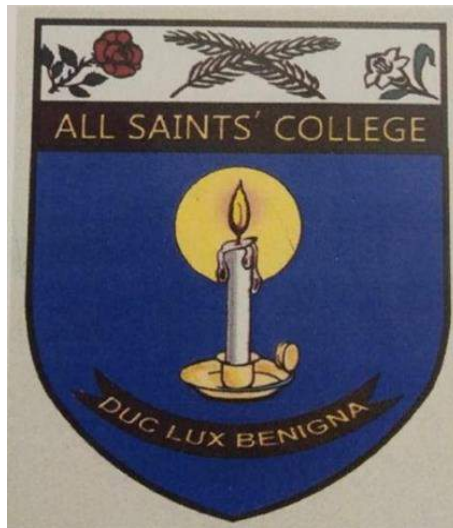
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**EMPOWERMENT OF WOMEN THROUGH MNREGP SCHEME: A
CASE STUDY IN KADINAMKULAM PANCHAYAT, TRIVANDRUM**

**First Degree Programme
In
Economics under CBCS system**

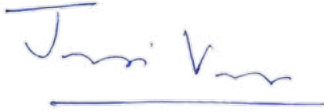
ALL SAINTS' COLLEGE



YEAR: 2020-2021

CERTIFICATE

This is to certify that the dissertation titled “**Empowerment of women through MNREGP scheme: A case study in Kadinamkulam panchayat, Trivandrum**” is a record of studies carried out by Archa Sanil.S, Divya.P, Nikitha, Fathima, Aswathy at the Department of Economics, All Saints’ College, under my guidance and submitted to the University of Kerala in partial fulfilment of the Degree of Bachelor of Arts, First Degree Programme in Economics under CBCS System.



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CHAPTER NO – 01

WOMEN EMPOWERMENT THROUGH MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE PROGRAM

1.1 INTRODUCTION:

“Empowerment of women is an essential requirement for building of a good nation, when woman is empowered, then stability of society is sure. Empowerment of women is very important as their effects leads to the development of a good family, good society and ultimately good nation”.

DR. A.P.J. Abdul Kalam

Gandhiji once said, “In a country like India women are the part and parcel of the vast Indian society. They should be alerted with proper education and also they should be entrusted with all sorts of jobs as per their physical ability.” Women are essential part of a society. They play vital role in the development of the society as well as the country. The definition of women is different for different people but there is an underlying base that cannot change regardless of nationality, caste, colour or profession. When women are supported to empower themselves, the whole society benefits and families are healthier. Therefore, it is very essential to empower women. Women empowerment refers to the power of having decision making of their own. Present day the word “empower” has become synonymous with the “women”. According to Investment Banker, “Women empowerment would mean that women are empower to think, dream though whatever they aspire for not dictated by society and usual stereo - type” Now days it is generally seen that women are not lagging of man. They play an important role in making their family financially independence. Economic empowerment is very important because only women who earn their livelihood can challenge social and gender relations and bring in gender equality. Now days it is observed that women are engaged in all sectors of the country and greatly contribute for development of the country. The central government takes various initiatives for empowering women. Among of all the initiatives taken by government we have tried to partially study the role of MGNRGA for empowering women in Kadinamkulam panchayat Trivandrum district. In the region large number of a women populations are engaged as daily waged workers. Most of them are engaged as labour in household work, tea garden, house construction, road construction, shopping complex (as cleaning and sweeper) and so on. The Mahatma Gandhi National Rural Employment Guarantee Act2005(MGNREGA) is an Indian law that aims to guarantee the 'right to work' and ensure livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work. The MGNREGA Programme is the first programme to provide guaranteed livelihood security to India’s rural poor. It is an innovative programme to boost:

- (a) The rural economy,
 - (b) Stabilize agricultural production and,
 - (c) To provide livelihood security to the poor and there by transform the scenario of poverty.
- The MGNREGA, by providing legal guarantee to work, marks a paradigm shift from all

earlier wage employment programs. It is an inclusive programme covering all the disadvantaged sections of the society. This programme plays a vital role for the upliftment of the women in the rural areas.

1.1.1 MNREGP AND WOMEN EMPOWERMENT:

Women empowerment means overall development of women and it include social, economic and political development of life. And economic independence is inter-related to other needs of life. Because Economic security and freedom increases purchasing power, increases social dignity, power of decision making and capacity of earning money. And economic security requires employment and an assured source of basic income adequate for meeting one's basic needs. It is true that women occupy almost 50% of total economy of India. But the picture of the rural area is quite different. Rural women are traditionally homebound. They did not have any space to come out of their daily life and women engaged in any job was seemed like an offence. But the introduction of National Rural Employment Guarantee Act 2005 which was renamed as MGNREGA or Mahatma Gandhi National Rural Employment Guarantee Act has given a space to them to make their lives better. This Act was brought into force by the Union Government in February 2006 and playing a significant role for the betterment for the women empowerment and development of rural population. The scheme is attractive especially for women because it stipulates that 1/3rd of the total workers should be women.

The extensive participation of women in MGNREGA has meant that women are coming out of their homes, not only to work but also to visit banks and Panchayat offices, which they may not have done previously. This enhanced mobility comes with the higher status of being income-earning workers. Although this study did not find any evidence of changing gender roles within the household as a result of women working on MGNREGS sites, it finds evidence of increased confidence and decision-making skills among women. Women remain embedded in family relations in employment and in the formulation of social protection policy. There is a refusal to accept women's double day or the issue of care responsibilities as a collective concern of the state. Because women remain care givers even if they take on paid work, their preference is for work near the home, flexible timings, etc all of which are fulfilled by the MGNREGA. The empowerment of women is one of the major issues in the process of development of countries all over the world. Self-reliance as well as to provide freedom to women to do something by herself. Empowerment is the one of the main factors in determining the progress of development in the status and Position of women in the society. This means that if women are neglected in development process, then all the efforts done for human resources are waste. Presently, the MGNREGA is being implemented in all rural districts of the country. MGNREGA has resulted into major financial inclusion where in bank/post office accounts have been opened for the families getting employment. Ministry has advised all the states to ensure payment of wages fully through the accounts. The figures from the survey conducted in different state indicates an impressive participation of women in the employment generated through MGNREGA. The highest employment status amongst women in terms of percentage can be seen in Kerala (92.75%) and the lowest employment share of women is represented by Uttar Pradesh with 26.97 percent. It is commendable that most of the States and UTs have employed more than one third of women as work force resulting in women employment. MGNREGA is an Act that aims to strengthen the women employment by enforcing that about 33 percent of total work force should be women and that there will be equal wages for men and women. It is playing a substantial role in creating

employment for women there by, leading to greater independence and self-respect among women. The present paper has tried to study the impact of MGNREGA on socio-economic development and women empowerment. Women worker feels highly satisfied with the MNREGA employment as now they get the wages equal to the male workers and, she can participate in the upliftment of her family by becoming an earning member of the family thus, MNREGA has brought economic independence among women, which was the main aim of MNREGA.

1.2 STATEMENT OF THE PROBLEM:

MGNREGP is an important initiative taken by the Central Government towards the rural development. The Act is different from the previous rural welfare programmes and is more attractive and beneficial to the rural poor people for the reason that the Act mandates one-third of beneficiaries shall be women and providing equal work and wages for both male and female beneficiaries within the locality. In case, work is provided beyond the vicinity of 5kms extra wages of 10 per cent are payable to meet additional transportation and living expenses. Further, the allocation of 100 days of work to the household is left to the household members which allows space for the participation of unemployed family members including women. An overview of the available studies reveals that though many studies are undertaken on achievement of women empowerment, no serious attempt is made to analyse the socio-economic empowerment of women through government schemes like MNREGA. Therefore, the present study is an attempt to analyse the empowerment for women through MNREGP scheme initiated by the Government of India.

1.3 SCOPE OF THE STUDY:

The Government of India has repeatedly redesigned various employment generation programmes to meet the problem of poverty and unemployment from time to time. The scope of this study is limited to MGNREGA which is the first programme in India that has promised to provide the legal right to work. Though the main aim of the Act is to generate employment in rural areas, but apart from this, there are several secondary benefits lies in the Act in the form of women empowerment. The geographical scope of this study is limited to Kadinamkulam panchayath from which the primary data is collected. Therefore, it is necessary to know their opinion regarding the programme to get a clear picture about the success of MGNREGA. Though many studies have been conducted on women empowerment through MGNREGA, Kadinamkulam block of Trivandrum district remains under-researched in this aspect. Hence the present study aims to fill this gap.

1.4 OBJECTIVES:

1. To assess the contribution of MNREGA in improving the socio-economic empowerment for women.
2. To study the worksite problems faced by women workers while working under MGNREGA.
3. To find out whether the women beneficiaries are aware about the scheme.

1.5 HYPOTHESIS:

1. MNREGA has a positive role in the upliftment of women both socially and economically.

2. MNREGA has been successful in creating awareness among women regarding the provisions of the scheme.

1.6 RESEARCH METHODOLOGY:

Empowerment of women through MNREGP in Kadinamkulam Panchayath in Trivandrum district is selected. Primary data is collected through questionnaire by conducting online survey. Among them 60 samples were selected.

PRIMARY DATA:

The primary data has been collected through questionnaire by online survey. It contains the information regarding the socio - economic empowerment of women under MNREGP, awareness about the provisions of the scheme and the problems faced in the worksites by the seekers.

SECONDARY DATA:

The secondary data is collected in the form of published works such as Books, Journals, Articles both National and International reports published by the Government collected through the libraries and websites also.

TOOLS OF ANALYSIS:

Appropriate statistical tools are used for analysing data such as bar diagram, pie diagram to represent social and economic parameters, awareness level, worksite facilities etc.

SAMPLE DESIGN:

60 respondents are used for collecting data

SAMPLE TECHNIQUES:

Random sampling technique is used for the study.

1.7 LIMITATIONS:

The study is subjected to certain limitations. The sample respondents may not represent the entire population. The study based on empowerment of rural women through MNREGP is based on a structured questionnaire which suffers from basic limitations that is, what is recorded and what is the truth. The respondents may hide some information while filling the questionnaire. No matter how carefully the questionnaire has been prepared and the field investigation has been conducted, information provided by the respondents may not be accurate. There is a lack of cooperation and it is very difficult to collect data in the middle of the pandemic situation.

1.8 CHAPTER SCHEME:

The first chapter deals with the introduction which includes an overview of MNREGA initiated by Government of India to provide employment opportunities in rural areas. The chapter also deals with the statement of the problem, scope of study, and the objectives of the

study along with hypothesis. Further the limitations of the project were stated. Review of literature served to identify the known parameters of this study and enabled to have acquaintance with the topic in a general manner. The second chapter outlines the role of MNREGP scheme in empowering rural women in India, in Kerala and ultimately the target area of this study – Trivandrum, Kadinamkulam panchayat. The third chapter deals with the data analysis and interpretation and the fourth chapter inculcates the findings, suggestions, and conclusions derived from the study.

1.9 REVIEW OF LITERATURE:

The literature review on MNREGP in women empowerment reflects the findings of various researchers and academicians on MGNREGA through reputed national and international journals, magazines and annual reports are presented by the authors below for easy understanding. In this study I have reviewed only few important ones to understand the concept and to link them. These are:

1. Prasad (2012) studied concept, status and performance and funding pattern of MGNREGA using secondary data. Major findings are this scheme is providing 100days work to the people of rural areas, so migration is reducing, living standard has a little bit improved. This scheme has helped in rural asset creation and the problem of disguised unemployment has been removed.
2. Lavanya and Mahima (2013) in their study focused on analysing empowerment of rural women through MGNREGA with special references to Palakkad. The findings of the study revealed that women are benefited individually because they are able to earn independently spend some money for their own hands, contribute for their family expenditure. The study concluded that MGNREGA is economically empowering women and laying the basis for greater independence and self-esteem.
3. Das (2013) studied that MGNREGA ensured the economic security of rural poor by providing them employment. Using secondary data, it was found that in Assam 158.63 lakhs households were provided with job cards. Highest participation of women was in Kerala and Pondicherry. It was less in states like Bihar, Punjab, West Bengal and most of North Eastern States of India. MGNREGA empowered women by giving them a scope of independent earning. MGNREGA has enhanced the choice of women to use earnings.
4. Jandu (2008) studied socio economic empowerment of women who worked under MGNREGA. The survey was carried in: Rajnandgaon (Chhattisgarh), Jhabua (Madhya Pradesh), Mayurbhanj (Orissa) and Cuddalore (Tamil Nadu). NREGA is a program that has begun to make a difference in the lives of women. In Rajnandgaon 93% of women have started taking their own decision. In Jhabua 91% of women have collected their own wages. Furthermore, it is popular among the workers, who routinely ask if more work could be made available to them under the NREGA.
5. Pankaj (2010) studied the empowerment effects of NREGA on rural women of Bihar, Jharkhand, Rajasthan and Himachal Pradesh. In a primary survey, main focus was given on Income-consumption effects, Intra-household effects (decision- making role), Enhancement of choice and capability. Women have become economically independent and also independent in decision making.

6. Vanitha and Srikantha (2011) considers that the MGNREGA women participants had better control over family expenditure, savings and social participation and participated more in household management decisions and financial management decisions compared to the non-participant women. The reason the authors cited is, the participation in MGNREGA gave them more confidence as they earned their own livelihood and also had opportunity to mingle and work with other people in the society.

7. Sharma (2012) identified that seasonal migration was almost stopped with the implementation of the MGNREGA. The reason behind it was that MGNREGA provided continuous work in their native place and the flow of income was steady and reliable. Survey was conducted in Chhattisgarh, Madhya Pradesh, Orissa and Tamil Nadu. Study revealed that by putting cash into the hands of women degree of economic independence was increased. Most of the women joined MGNREGA with their own decision. 91% of women are collected their own wages. Migration trend was changed among people the study also concluded that difference in economic, social, and cultural background also took place.

8. Singh (2013) studied effect of MGNREGA on economic conditions of the workers in Sangrur district of Punjab. From a primary survey it has ensured that MGNREGA is helpful in uplifting the economic condition of the poor. Study reveals that there is increase in wage rate and increased income is being used by poor on household needs. According to this study major employments being provided are rural connectivity, water conservation, cleaning of village ponds etc. MGNREGA is specially providing opportunities for women to get employment.

9. Arora (2013) aimed to analyse the relevance of MNREGS on women empowerment in the Rohtak district of Haryana State. Data were drawn from 250 responders through a field survey using the random stratified sampling technique. It helped in meeting the beneficiaries, investigating motives and feelings, etc. Significant benefit reported by the study includes success in raising the level of employment and income of the rural household women, thereby enhancing their purchasing power, satisfaction, confidence etc.

10. Shihabudheen (2013) in his paper looks into the salient features of the Act, its efficacy in empowering rural women, along with its major problems and prospects; The Empowerment of Women through MGNREGA in Nadia District of West Bengal study has shown that there is quite high level of potential for MGNREGA for socio economic empowerment of women, and reasonable level of political empowerment too.

11. Xavier and Mari (2014) in their study try to evaluate the impact of MGNREGA on socio-economic empowerment of women in Kalakkanmoi panchayat of Sivaganga district, Tamil Nadu. The study finds that the MGNREGA increases income and expenditure of the households compared over the pre MGNREGA period and the scheme significantly enhances the social and economic decision-making power to women in the men dominated rural society. Hence the scheme ensures improved standard of living of the vulnerable poor, more specifically among women.

12. Ahangar (2014) analysed women empowerment through MGNREGA with special reference to Shahabad. The main objectives of this study are to find growth rate of women participation of NREGA and to know to what extent this program is successful in achieving women empowerment. Primary data from 100 beneficiaries has been collected through

questionnaire to know about social and economic condition of beneficiaries. Among the total surveyed people, 70 percent of the workers were felt that their income has increased after joining under in this scheme. Thus, the collected data shows that NREGP played a significant role in increasing the earnings of the rural poor.

13. Ramesh & Kumar (2009) in their study also found that MGNREGA holds the powerful prospect of bringing major changes in the lives of women. MGNREGA is playing a substantial role in empowering women economically and laying the basis for greater independence and self-esteem.

14. Arora et (2013) analyse the relevance of MGNREGA on women empowerment in their study in Rohtak district of Haryana with 250 respondents through a field survey. Significant benefits reported by the study includes success in raising the level of employment and income of the rural household women, thereby enhancing their purchasing power, satisfaction and confidence etc. 95 percent of the beneficiaries believe that the program enhanced their credit worthiness and 78 percent women believe that they could start saving money only because of the MGNREGA.

15. Vilas (2012) studied impact of MGNREGA in Karnataka by using primary and secondary data from 120 beneficiaries. The main objectives of his study are to assess the socio-economic background and perception of the beneficiaries of the act and to find out main problems in the implementation of the act. Major findings reveal that 60% of them got job for 20 days in a year. 68% of them are not getting pure drinking water facility, first aid and 68% of them are not getting their wages on time. 67% are of the opinion that wages provided are inadequate.

16. Carswell (2013) in his paper ensured that women are easily accessing works and are also getting decent working conditions, are getting equal wages and have become independent in decision making. Status of women has been uplifted. A large percentage of wages women spend their money to avoid hunger, repay small debts, paying their child's schooling etc. The study is based on the secondary data collected from the site of MGNREGA. In the study main findings are the outcomes of the participation of women in MGNREGA. MGNREGA will become more effective if proper facilities at the work site will be provided to the women workers.

17. Kar (2013) studied women participation in Odisha with comparison to other states and issues and challenges for women participation in MGNREGA by analysing income consumption effects, intra household effects, community level effects. Main issues which hinder women participation are Non availability of child care facilities, low level of awareness, poor worksite facilities, nature of work, delay in payments, if all these constraints are removed than actually women can be empowered in Orissa.

18. Guravaiah (2013) ensured that women are easily acing works and are also getting decent working conditions, are getting equal wages and have become independent in decision making. Status of women has been uplifted. A large percentage of wages women spend their money to avoid hunger, repay small debts, paying their child's schooling etc. The study is based on the secondary data collected from the site of MGNREGA. In the study main findings are the outcomes of the participation of women in MGNREGA. MGNREGA will

become more effective if proper facilities at the work site will be provided to the women workers.

19. Rahman (2013) in his study using role of women in different economic spheres like household level, community level and broader areas. The study revealed that different factors of household and community level that is ability of establishing rural cooperative banks, control of own poultry farm and its utilization, control of own jewellery and enjoyment, decision-making in land or equipment selling in an emergency and independent savings have been found significantly associated with the women's economic empowerment in the studied area.

20. Neelakandan (2013) studied impact of microfinance on women empowerment by microfinance. In this study four effects of access to microfinance by female borrowers have been considered, effect over decision making on credit related issues, decision regarding expenditure related issues, decision making on children related issues and the results found that there was low level of empowerment in economic factors but there is high level of empowerment in decision making related issues.

21. Xavier (2014) showed the impact of MGNREGA on socio-economic empowerment of women in Kalakkanmoi panchayat of Sivaganga district, Tamil Nadu. It further analyses various risk associated with the women during the working time of MGNREGA. The study finds that the MGNREGA increases income and expenditure of the households compared over the pre MGNREGA period and the scheme significantly enhances the social and economic decision-making power to women in the men dominated rural society. Hence the scheme ensures improved standard of living of the vulnerable poor, more specifically among women.

22. Ashok Pankaj and Rukmini Tankha (2010) in their article 'Empowerment Effects of the NREGS on Women Workers: A Study in Four States' examines the empowerment effects of the NREGA on rural women in Bihar, Jharkhand, Rajasthan and Himachal Pradesh. In this paper, they analysed that women have gained more opportunity because of cash payment in hand through the scheme as a result they have benefitted through income consumption effects, intra-household effects, and the enhancement of choice and capability than before.

23. K. Borah & R. Bordoloi (2014) in their research paper, MGNREGA and its wages on Daily Waged Workers: A case study of Sonitpur District of Assam has discussed about the impact of MGNREGA on women empowerment and identified the obstacles in the path of the implementation of the scheme. The paper revealed that female workers have significant benefits from MGNREGA and also identified some limitations in the implementations of the Act.

24. Dinesh (2012): The paper examines the India's MGNREGA, its impacts on women participation. The analysis brings the notice that MGNREGA has positive impact on employment pattern of women. The women have benefitted both individual and community, here gained benefits of women as community can be understood by presence in the Gram Sabha, but the poor implementation across the nation (lack of child care facility, illegal presence of contractors, etc) accrued the gender sensitiveness of this act mainly in north eastern states.

25. Gowhar Bashir Ahangar (2014): paper analysed the women participation in MGNREGA special reference to Anantnag districts in Jammu & Kashmir. The study examines that 90% of the surveyed respondents believe after joining in MGNREGA their socio-economic status is improved and the participation of women in Gram Saba's is also increased. Results are interpreted with using the primary and secondary sources of data for overcoming with the specified findings.

26. Kartika K.T (2015): "Impact of MGNREGA on socio-economic development and women empowerment". The paper finds the major issue that panchayats successfully implemented to this programme in the study area and most of the workers are women (95%). This scheme improves the communication, participation, decision making among women workers and most of the workers are saving their money in the form of saving account, insurance etc.

27. Amrita Chatterjee (2011): studied Employment guarantee and women's empowerment in rural India: Assessing institutional and governance need. The study also finds that in the working place the women workers facing the many problems like time payment, low level awareness and worksite facilities etc. It finds that if women turn to home base activities as their household economic condition will be increased.

CONCLUSION:

This study shows many positive aspects of the programme. These are mainly:

- Villagers consider NREGA is promising to be a boon for improving rural livelihood.
- Provision of job within the village is very much encouraging to villagers.
- NREGA also ensured gender equality.
- The programme employed a very good proportion of scheduled caste and backward caste people.
- Involvement of SHG members improves people's NREGS awareness and this is very important for future NREGS planning.
- Financial inclusion strategies like bank account opening and rural ATM for NREGS beneficiaries has resulted in multiplier effects of savings, financial safety etc.
- Registrations are open throughout the year.
- Most of the respondents perceived that payment were received within a week.

1.10 RESEARCH GAP:

Here, a detailed review of relevant literature in connection with women empowerment through MNREGP scheme is done. It reveals that a number of studies were conducted in the area of women empowerment through MNREGP programme in India. Coming to Kerala, a well – detailed study about this empowerment of women beneficiaries under MNREGP has not been initiated. In this context, it is highly imperative to have an in dept study regarding the socio – economic empowerment of women under MNREGP especially in the rural areas of Kerala.

CHAPTER NO – 02

OVERVIEW OF MNREGA

2.1 HISTORY OF MGNREGA:

NREGA has come after almost 56 years of experience of other rural employment programmes, which include both Centrally Sponsored Schemes and those launched by State Govt. These comprise the National Rural Employment Programme (NREP) 1980- 89; Rural Landless Employment Guarantee Programme (RLEGP) 1983-89; Jawahar Rojgar Yojana (JRY) 1989-1990; Employment Assurance Scheme (EAS)1993-99; Jawahar Gram Samridhi Yojana (JGSY) 1999-2002 Sampoorna Grameen Rojgar Yojana 2 (SGRY) from 2001 National Food for Work Programme (NFFWP) from 2004 were national rural employment schemes. Among these, the SGRY and NFFWP have been merged with NREGA in 2005.

In 1991, the P.V Narasimha Rao government proposed a pilot scheme for generating employment in rural areas with the following goals:

- Employment Generation for agricultural labour during the lean season.
- Infrastructure Development
- Enhanced Food Security

This scheme was called the Employment Assurance Scheme which later evolved into the MGNREGA after the merger with the Food for Work Programme in the early 2000s. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) refers to the world's largest welfare program, run by the Government of India. It was enacted by the Indian Parliament in 2005. Unlike other schemes, MGNREGA goes beyond poverty alleviation and recognizes employment as a legal right. MGNREGA goes beyond poverty reduction and recognizes employment as a legal right. This scheme helps in not only increasing the income of the poor, but the asset creation through the process of employment generates a much-needed productive infrastructure for poverty alleviation on a permanent basis. Unlike the earlier wage employment programmes that were allocation based, MGNREGA is demand driven.

2.2 TIME- LINE OF MNREGA:

The following table 2.1. Shows the time line of MGNREGA whereby the scheme got its modifications during the years of its running.

Table 2.1: The Time line of MGNREGA

AUG 2005	FEB 2006	APR 2007	APRIL 2008	OCT 2008	16 FEB 2009	OCT 2009
NREGA legalized	Came into force in 200 districts	130 more districts included	Universalization Of the scheme	Wage transaction through banks/post offices	MOU with the postal dept.	Name changed to MGNREGA

Source: www.nrega.nic.in

As the table 1.1 depicts, when the Act got first introduced in 200 most backward districts of the country in Feb 2006, it was proposed to extend to the remaining districts only after 5 years, after seeing the popularity of the Act. But in the next year itself the Act was extended further to 130 more districts & within a year after the Act got universalized by bringing the entire country under its horizon with the exception of districts that have a hundred percent urban population & got soon named after Mahatma Gandhi (in Oct 2nd 2009) to make the Act more reachable to the masses and thus it became Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

2.3 SIGNIFICANCE OF MGNREGA:

MGNREGA aims to achieve the objective as enunciated in the Article: 41 of the Indian Constitution- “giving citizens the right to work”. The Act is significant due to the following reasons:

While the earlier wage employment programmes did not provide any guarantee of job, this Act provided guaranteed job. This guarantee for wage employment is now uniformed all over the country like never before.

It is a development initiative, chipping in with essential public investment for creation of durable assets, without which the growth process can’t be possible in the most backward regions of rural India.

Almost all the previous programmes were allocation based rather than demand based. NREGA, which was launched in 2006, is considered to be unique from this stand point.

The key element of MGNREGA is the provision of employment by the state to those people who are unable to find alternative employment, which provides a form of social safety net to the rural unemployment people.

In other wage employment programmes, anyone can be engaged as labour while in MGNREGA only job card holders that apply for employment can be engaged as laborers.

There is no time frame in other wage employment programmes but in MGNREGA, employment will be given within 15 days of demand, payment also within 15 days of work.

In other wage employment programme, the duration of employment is dependent on duration of work by implementing agency while in MGNREGA, a job card holder applies for maximum 100 days.

The other key attributes of this Act are labour-intensive work, decentralized participatory planning, women's empowerment, work-site facilities and above all transparency and accountability through the provision of social audits and right to information. The use of information technology in this programme is considered to bring about greater transparency through intensive monitoring and faster execution. The payment of wages through bank and post office accounts is other innovative step that is likely to reduce fudging of muster rolls on the part of the implementing agencies since the actual payments are beyond their reach.

Thus, MGNREGA is not only a welfare initiative but also a development effort that can take the Indian economy to a new prosperity.

2.4 GOALS OF MGNREGA:

(a) Long-term objectives of the Act include:

- Enhancement of livelihood security in rural areas by guaranteeing 100 days of wage employment in a financial year to every registered household.

- Creating productive assets
- Protecting the environment
- Reducing migration
- Empowering rural women and the poor through the provision of a right-based law.
- Fostering social equity.

- To create strong social safety net for the vulnerable groups by providing employment source, when other alternatives are inadequate.

Thus, MGNREGA has 3 distinct goals:

- Protective
 - Preventive
 - Promotive
- It protects the rural poor from vulnerabilities by providing them demand based employment. It prevents risk associated with agricultural investment and forced migration of rural poor. It brings prosperity in rural economy via increased consumption demand. Thus, MGNREGA can be considered as a growth engine.
 - Strong social safety net for the vulnerable groups by providing a fall-back employment source, when other employment alternatives are scarce or inadequate.
 - Growth engine for sustainable development of an agricultural economy. Through the process of providing employment on works that address causes of chronic poverty such as

drought, deforestation and soil erosion, the Act seeks to strengthen the natural resource base of rural livelihood and create durable assets in rural areas. If effectively implemented, MGNREGA has the potential to transform the geography of poverty.

- Empowerment of rural poor through the processes of a rights-based Law.
- New ways of doing business, as a model of governance reform anchored on the principles of transparency and grass root democracy.

2.5 SALIENT FEATURES OF MNREGA:

(I) Right based-frame work

- All adult members of a rural household willing to do unskilled manual work have the right to demand employment.

- The GP after due verification will issue a job card.

-After verification, the GP will issue a job card (contain details of the member) to the household with photograph free of cost within 15 days of application.

(ii) Time bound guarantee of employment

- Employment will be provided by the GP within 15 days of work application, else unemployment allowance will be paid.

- A household may avail to 100 days of guaranteed employment in a financial year, depending on its need.

(iii) Permissible works

-Water conservation, drought proofing (including plantation & afforestation) flood protection, land development, minor irrigation.

(iv) Labour intensive works

-A ratio of 60:40 will be maintained between wage and material.

-Contractors/machinery is not permitted.

Payment of wages:

-Wages will be paid at the wage earners through their bank/post office accounts.

-Payment of wages to be made in every week and in any case not later than a fortnight.

(v) Decentralization

- Gram Sabha (local community) will recommend works to be taken up.

- Gram panchayats will execute at least 50% of work.

- PRI will have a principal role in planning, monitoring and implementation.

(vi) Work site management and facilities

- Work should be provided within 5 km radius of the village.
- In case the number of children below the age of 6 years accompanying the women working at any site is 5 or more, provisions shall be made to assign one women worker to look after such children. The person assigned for this shall be paid the statutory minimum wage.
- Thus creche, drinking water, first-aid and shade are to be provided on the work sites.
- Timely measurement to be ensured.

(vii) Women empowerment

- At least one-third of the workers should be women.
- Equal wages will be provided to both men & women.

(viii) Transparency and Accountability

- Proactive disclosure of information.
- Social Audit by the Gram Sabha is compulsory.
- Regular monitoring at all levels.
- grievance redressal mechanism is to be set up.

(ix) Funding

- 100% wage cost is borne by Central Govt. 25% Material cost is born by the State Govt.
- Unemployment allowance is borne by State Govt.

2.6 THE IMPLEMENTATION STRUCTURE OF MNREGA:

MGNREGA has a five-tier structure of implementation starting from GP at the bottom to the central government at the top.

1. Gram Panchayat (GP):

GP is the nodal agency at the bottom level that has the authority to select, design and implement 50% of the works. Selection of works, monitoring and supervision are done by the Gram Sabha (village council). GP has the responsibility to register households, issue job cards, receive applications for employment, provide employment and monitor the NREGA works.

2. Block Panchayat:

The rest 50% may be undertaken either by the block Panchayat or the district Panchayat or both. Block Panchayat monitors and coordinates the plans and works at the block level. Computer updating of MGNREGA works, muster roll entries, etc is done at the block level under the guidance of the MGNREGA programme officer.

3. District panchayat:

District Panchayat, in addition to implementing non-mandatory works, that monitors and coordinates MGNREGA activities at the district level. Besides, it has the responsibility to

prepare both the district annual plan and the five-year perspective plan. These two plan documents are the bases which guide the implementation of MGNREGA at the village level. These documents are prepared at the district level in consultation with the GP and block Panchayats.

4. State Government:

Next in hierarchy is the state government which acts as a facilitator in the flow of MGNREGA funds and helping in preparation of manpower. It has the responsibility to set up the State Employment Guarantee Council. The latter has the role to advise the government from time to time on MGNREGA implementation in the state. Besides, the council is also entrusted with the responsibility of monitoring and evaluation of the MGNREGA in the state.

5. Central Government:

At the top of the hierarchy comes the central government. The Ministry of Rural Development, New Delhi is the nodal agency for MGNREGA implementation. It has the responsibility to set up Central Employment Guarantee Council for receiving advice on MGNREGA implementation. It may also undertake independent evaluation and monitoring of the scheme. It has the responsibility to prepare the budget and disburse funds.

2.7 DECENTRALIZED PLANNING AND MNREGA:

MNREGA is a unique Act which recognizes the legitimate role of Panchayats in addressing their fundamental duty as expressed in the 73rd constitutional Amendment of providing “economic development and social justice” in their area. The recognition of PRI as the principal agency of implementation under MGNREGA has opened up enormous opportunities for decentralizing development respecting local solutions to local people.

2.8 MNREGP IN INDIA:

The empowerment of rural women is crucial for the development of the rural Bharat. “National Rural Employment Guarantee Act (NREGA) enacted by legislation on August 25, 2005 and it was renamed as the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) on 2nd October 2009. The MGNREGA has completed ten years since its inception in India”. The aim of the scheme is to enhance livelihood security of the household in rural areas of the country by providing at least 100 days of guaranteed employment in every financial year of every household whose adult member volunteer to do the unskilled work. Women have to empower themselves from below in order to make the government to empower them from above. In the words “empowering women is a precondition for creating a good nation, when women are empowered, society with stability is assured”. The MGNREGA has positive impact on empowerment and employment pattern of women in recent years. It aims at enhancing livelihood security by providing at least 100 days of guaranteed wage employment in a financial year to every rural household especially for women. Women participation has increased significantly and perceived it giving them a sense of independence and security. Country should be alerted with proper education and also they should be entrusted with all sorts of works as per their physical capability”.

Women are needed part of the world. They play important role in the growth of the society as well as the country. The definition of women is actually different for different persons but

there is an essential base that cannot change regardless of nationality, caste, colour, profession etc., when women support to empower themselves, the whole society benefits and families are healthier. Therefore, it is very important to empower women. Empowerment of women refers to the influence of decision making of their own. The word “empower has become equal with the word women”.

The best performing states includes Tripura, Manipur, Mizoram, Nagaland and Andhra Pradesh. The average performing states includes Sikkim, Chhattisgarh, Meghalaya, Himachal Pradesh and Tamil Nadu. The poor performing states include Madhya Pradesh, Arunachal Pradesh, Assam, Rajasthan and Jharkhand. MGNREGA scheme to access development opportunities through other programmes for transiting from wage employment to sustainable livelihood. This scheme was successfully carried out in the state Bihar. MGNREGA wages plays an important role in the financial life of the job card holder’s family. But there are some areas of improvement i.e., less contribution of women, no unemployment allowance for number of work days, incomplete target of 100 days employment and no skill work for further development of human resource.

The act has been introduced aiming towards improving the purchase power of rural people and to provide job to unskilled labour interested to work. The management aspect to implement MGNREGA effectively has been discussed with a view to provide employment according to intention of act, payment of remuneration to workers, and planning and inspection of work leaving behind no lapse. “Poor administrative, planning skills, inadequate awareness, plagued with discrimination, corruption and irregularities, delay in payment of wages. So far, works related to rainwater harvesting and conservation, desalting of canal distributaries, desalting and renovation of old ponds/tanks and digging up of new farm ponds are mainly being carried out under NREGS. There is a need of development in identifying/creating new employment chances and dovetailing various programmers routed by the Central and the State Governments with NREGA”.

“MGNREGA is perhaps the most ambitious anti-poverty scheme launched anywhere in the world. It may be understood that the problems and challenges are from both, government and public”. Poor administrative and planning skills, inadequate awareness, plagued with discrimination, corruption and irregularities, delay in payment of wages. Public in adequate awareness, no purposive spending, being unorganized.

Rural poor are largely employed in agriculture which involves seasonal employment. MGNREGA helped in reducing this uncertainty, also provided additional income source. The provision of minimum wage has resulted in improvement of agriculture wages. Through transfer of funds to beneficiary accounts the Act promoted financial inclusion. The scheme provided livelihood security along with reducing distress migration. It increased bargaining power of the poor.

According to a survey 14 million people have been raised from the poverty level by this program. Also helped in reducing gender gap in wages by providing equal payment for men and women. Community assets which are created are providing better living conditions improving lifestyle. Reasonable income source helped in reducing school drop out of the rural poor children. With all above benefits the act is also blamed for not creating durable assets in rural areas, for contributing wage growth and inflation, and also for leakage of public resources, but it is true that scheme has reached targeted people.

2.9 MNREGP IN KERALA:

In Kerala, the scheme was implemented in Palakkad and Wayanad districts initially on 5 February 2006 and it was extended to all the 14 districts in the State on 1 April 2008. Kerala is a tiny state in India with very high unemployment while most of them are educated in the country. Around five lakh people among them are estimated to have willingness to do physical labour. NREGS is a substantial boost in income and purchasing power. The scheme now provides Rs 164 (National wage rate is Rs 60/- only) per person for a stipulated quantity of manual labour offered as registered worker in the local governments in Kerala. When MGNREGS was introduced in Kerala, many shared a feeling of uncertainty regarding how successful the scheme would turn out to be. Given the fact that literacy rates and prevailing market wage rates in Kerala are high, a daily wage scheme for unskilled labour work was not expected to bring about any significant change or evoke enthusiastic participation from the people. However, these assumptions proved false as MGNREGS emerged to become a unique opportunity for many women in Kerala to experience a world beyond their homes. Neither did these women possess high levels of education, nor were they financially independent. They relied on the men in the house for their financial needs. Through MGNREGS implementation, Kerala witnessed the emergence of three important features:

- Attitudinal change among women
- Skill development among women
- Renewed focus on natural resource management.

MGNREGS gained widespread popularity through active participation of women. It also generated additional gains due to conservation and development of natural resources and building of common property resources. Works related to building and maintenance of canals, renovation of ponds, wells and farm land, afforestation, etc. have contributed to increased quantity and improved quality of common property resources and natural resources within Panchayats.

Admittedly, MGNREGS has brought about significant changes to the work culture and resource development scenario in rural Kerala. However, transitioning towards the next phase is crucial. The scheme should also consider providing opportunities to educated personnel to engage in higher levels of skill acquisition, and build a sustainable livelihood in their own neighbourhood.

MGNREGA has only limited application in tackling the problem of unemployment among the people of Kerala. Yet it has an ideal attempt to provide employment opportunity for about 4 to 5 lakh people who are willing to do physical labour. It also instrumental in Women empowerment, Creation of Social capital assets and also facilitate in the process of preventing corruption. The programme was extended to Kasarkod and Idukki by February, 2007 and to the remaining districts by January 2009. The government of Kerala has issued detailed guidelines for implementing MGNREGA. The responsibility has been assigned primarily to Local self-governments. A number of micro level organisations are involved in the formulation and implementation of MGNREGA programme at the panchayath level. The panchayat governing council, which has been strengthened by decentralized planning, has a pivotal role to play in the smooth functioning of MGNREGA.

There was a widespread belief that the scheme was of little relevance to Kerala. The general perception about Kerala was that it suffered from educated unemployment rather than of simple unemployment the one associated with providing for simple labour for odd jobs. The prevalence of high wage rates was cited as evidence in support of this alleged absence of simple unemployment. Since, educated unemployment required the creation of skilled rather than unskilled manual jobs, NREGA was considered inappropriate for Kerala.

But the fact that the scheme has seen people participating in huge numbers across all districts corroborates the fact that NREGA has found its foothold in Kerala. The answer to this contradiction is that NREGA has succeeded in drawing into its fold workers belonging to the marginalized categories; the tribal people and women labour force. Tribal people, who for only a fraction of the wage offered under the NREGS, used to migrate to neighbouring states for work, found stable and more rewarding work under the scheme. Similarly, women who had simply dropped out of the labour force now command 93% of the total person-days under the scheme.

2.10 MNREGP IN TRIVANDRUM:

. The Mahatma Gandhi National Rural Employment Guarantee scheme (MGNREGS) was implemented in Trivandrum on 1st April 2008. Thiruvananthapuram has topped the state in generating the maximum number of man-days under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). Kadinamkulam is a village and gram panchayat in the Trivandrum District, state of Kerala, India. It is situated at the south west end of the district 24 km from the district headquarters at Trivandrum. Kadinamkulam panchayath is predominantly rural and has an agricultural economy Mahatma Gandhi National Rural Employment. This panchayath is a socially, economically, culturally and educationally backward area. The main occupation in this area is agriculture.

MGNREGS is to be one among them, which aims to ensure livelihood security in rural areas by providing at least 100 days of wage employment in a financial year for every household whose adult members volunteer to do unskilled manual work. MGNREGS has given more importance to women empowerment. Among these, MGNREGS has got a greater importance on the development of the rural women. Almost 80 percent of the workers in the scheme are women. Women have benefited more as workers than as community. Through this, it was protected the women Justice and rights.

The success of MGNREGS depends on the inclusion of all, especially women. By generating employment for women at fair wages in the Kadinamkulam grama panchayath, MGNREGS can play a substantial role in economically empowering women. To carry out the scheme the provisions specified in the law should be implemented. The awareness about the scheme has been made earlier through the formation of committees and through Grama Sabha in the Panchayath.

The high participation of women in the program as workers had increased the potentiality of the rural women in the Panchayath. It would make the economic contribution visible and high. The employment Guarantee act can also help to empower women, by giving them in dependent income- earning opportunities. Implementation of MGNREGS has contributed to very high levels of women empowerment.

CHAPTER NO – 03

WOMEN EMPOWERMENT THROUGH MNREGP IN KADINAMKULAM PANCHAYATH, TRIVANDRUM: AN ANALYSIS

3.1 INTRODUCTION:

The empowerment of women is very much needed for the development of a country. Thus, various provisions are made under the act and its guidelines which ensure that women have equitable and easy access to work, decent working conditions, equal payment of wages and representation on decision making process. However, the women of Kerala are socio-economically empowered when compared to women in other states due to their involvement in Self Help Groups.

This chapter discusses the data analysis from 60 respondents collected from various age group women beneficiaries of MNREGP scheme from Kadinamkulam panchayath, Trivandrum. The chapter solely focusses on presenting the gathered data in a meaningful way to facilitate the research that is to find out whether the women workers under MNREGP are socially and economically empowered or not. Tables and diagrams are used to facilitate a simplistic reader-friendly writing.

3.2 DEMOGRAPHIC PROFILE OF RESPONDENTS:

Table 3.1 categorization of workers

Details of respondents		No. of respondents	Percentage
Age	20 - 35	2	4%
	36 - 55	15	45%
	above 55	43	51%
	total	60	100%
Education	Literate	82	92%
	Illiterate	18	08%
	total	60	100%
Religion	Hindu	48	52%
	Christian	9	20%
	Muslim	3	28%
	Others	0	0%
	total	60	100%
Marital status	Single	5	8%

	Married	44	70%
	Widow	11	22%
	total	60	100%
Family	joint	25	42%
	Nuclear	35	58%
	total	60	100%
Household Occupation	Agriculture	5	8%
	labourer	11	22%
	other	44	70%
	total	60	100%
Annual income	less than 10 000	6	9%
	10 000 - 30 000	10	21%
	30 000 - 50 000	31	49%
	50 000 or above	13	21%
	total	60	100%

Source: Primary data

From the table 3.1, it is evident that majority of workers under MNREGP are aged above 55, as there are 43 respondents in this age group representing 51%. There are only 2 respondents in the age group between 20 – 35 and they cover only 4%. The other group is the age between 36 – 55 with 15 respondents that contributes 45%. Regarding the educational status of the respondents, 92% of the respondents are literate and the other 8% is illiterate, that is 82 are literate and educated and the other 18 respondents are illiterate. Religion of the respondents were also taken into account from which it can be seen that most of them are Hindus as there were 48 respondents of 52%, Christians with 20% and Muslims with 28%. While looking into their marital status 70% of the respondents are married, 22% are widows and 8% are unmarried and remains single. Most of the respondents belongs to nuclear family thus representing 58% and the remaining 25 are from joint families with 42%. The household occupation also plays an important role. Here agriculture and labourer represent 8 and 22 percentage respectively followed by other occupation with 70% which is more. And in the case of annual income of the household, the income group of 30 000 to 50 000 with 49% is more among the respondents. The study shows that majority of female members are depending on MGNREGP to draw the wages to cover up their major subsistence demand. Further, this program helps the women to enhance the sources of income and support to participate in decision making process in their village and home.

3.3 SOCIO-ECONOMIC EMPOWERMENT OF WOMEN UNDER MNREGP:

In order to assess the socio-economic empowerment potential of MGNREGA among women, four indicators under economic and three social parameters were considered. The indicators selected under economic group are control over economic resources such as control over earnings, control over savings, control over household daily expenditure and repayment of loans. Decision making capacity, self-confidence, and mobility are the indicators selected under social group.

(3.3.1) Social empowerment of women:

Social empowerment is understood as the process of developing a sense of autonomy and self-confidence, and acting individually and collectively to change social relationships and the institutions and discourses that exclude poor people and keep them in poverty. In the present study, by using these indicators social empowerment level of all the respondents has been measured. In the study conducted to find out whether the women workers under MNREGP are socially and economically empowered through the scheme, decision making capacity is taken as a social parameter to analyse whether they are empowered or not.

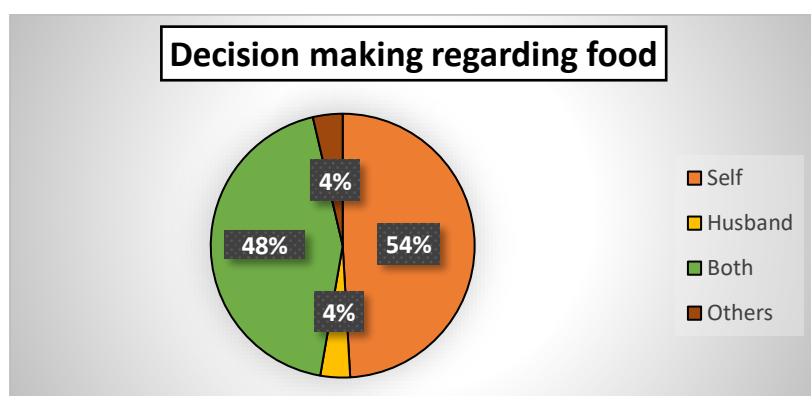
(a) Decision making within the family:

To participate in decision making at household level is a very important dimension of empowerment of women. Empowerment can be measured by measuring the level of respondent's participation in decision making. Therefore, in order to measure respondent's participation in decision making, five questions are prepared regarding decisions that were commonly made within a household. Social empowerment of women is when she is able to take decisions within the family. Indicators of social empowerment used in this study are decision making regarding food, clothing, children's education, health treatment and social gatherings.

Table 3.2: Decision making regarding food in the family

(A) Food	No. of respondents	Percentage
Self	31	54%
Husband	02	4%
Both	25	48%
Others	02	4%

Source: Primary data

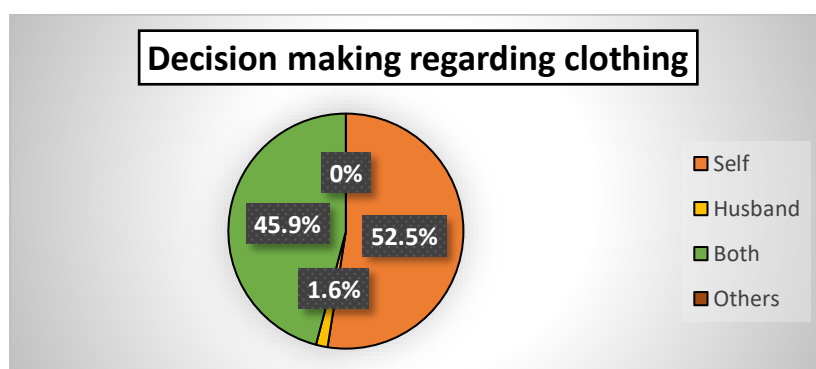


In the first case, the decision making is regarding the choice food in the family. As the table 3.2 shows that 31 respondents are able to take their own decisions regarding the choice of food in their families that is, they represents 54% of the total respondents as shown in the pie chart above. As an earning member they too are engaged in the decision making process in the family. Then comes the the decision making involving both the husband and wife in the family with 43% followed by 4% in which the decisions regarding food are taken by their husband only and then comes another 4% where the decision are taken by other membres in the family.

Table 3.3: Decision making regarding clothing in the family

(B) Clothing	No. of respondents	Percentage
Self	32	52.5%
Husband	01	1.6%
Both	27	45.9%
Others	0	0

Source: primary data

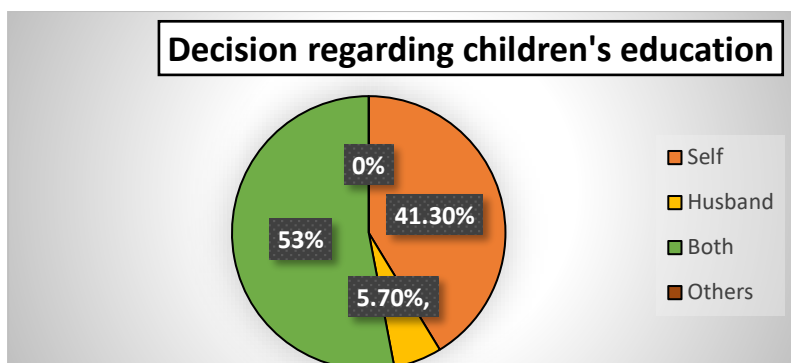


In the second phase as in table 3.3, the decision-making regarding clothing is taken into account. Here, 52.5% of women under the scheme are able to take decisions regarding the clothes they wear followed by 45.9% who respondent that both of them takes decision regarding the clothes they wear. 1.6% of the respondents clothing decisions are taken by their husband only. Thus, as represented in the pie charts and table above, a large proportion of women beneficiaries are able to take decisions regarding their clothing.

Table 3.4: Decision making regarding children's education in the family

(C) Children's education	No. of respondents	Percentage
Self	21	41.03%
Husband	07	5.07%
Both	32	53%
Others	0	0

Source: Primary data

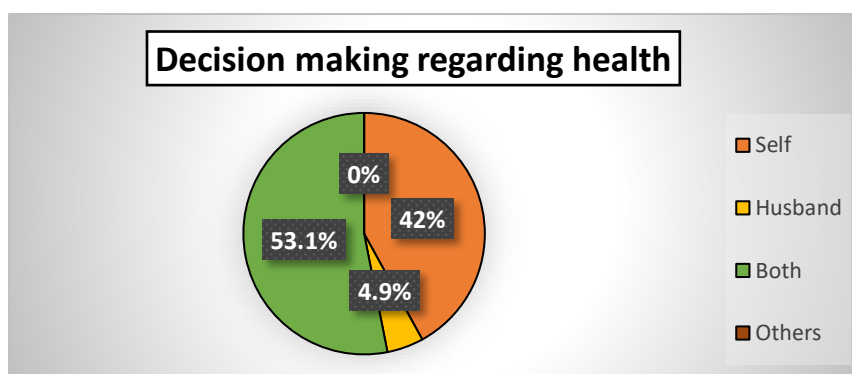


In the third case, as in table 3.4 the decision-making regarding children's education is given importance. Here, 35 respondents answered that the decision regarding the education of their children are taken by both the parents. That is, it represents 53% in the pie chart above followed by self decision making of 41.30%. And 5.70% responded that the decisions in the matters of education are taken by their husband only.

Table 3.5: Decision making regarding health in the family

(D) Health	No. of respondents	Percentage
Self	22	42%
Husband	07	4.9%
Both	31	53.1%
Others	0	0

Source: Primary data

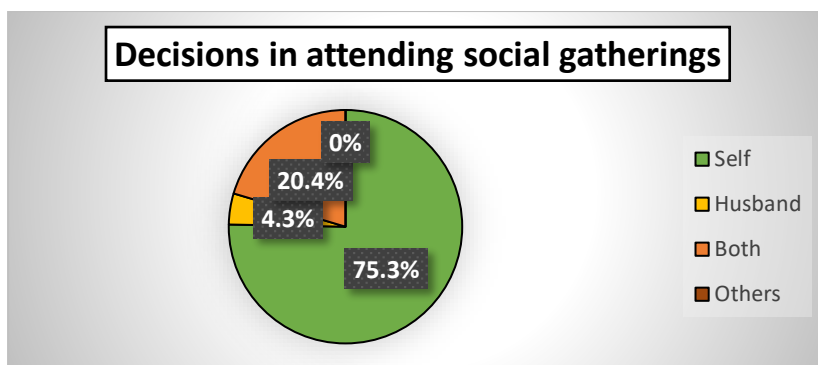


In the table 3.5, the decision-making regarding health in the families are taken by both the husband and wife together. Thus 51.3% answered that the decisions involves both members followed by 42% by whom alone the decisions are taken, while 4.9% answered that the decision making involves their husband only.

Table 3.6: Decision making in attending social gatherings

(E) Attending social gathering	No. of respondents	Percentage
Self	42	75.3%
Husband	05	4.3%
Both	13	20.4%
Others	0	0

Source: Primary data



In the table 3.6, the decision making in attending social gatherings are taken by themselves and thus it represents 75.3% of the total respondents followed by 20.4% where the decisions are taken by the both of them and 4.3% represents that the decisions are taken by their husbands only.

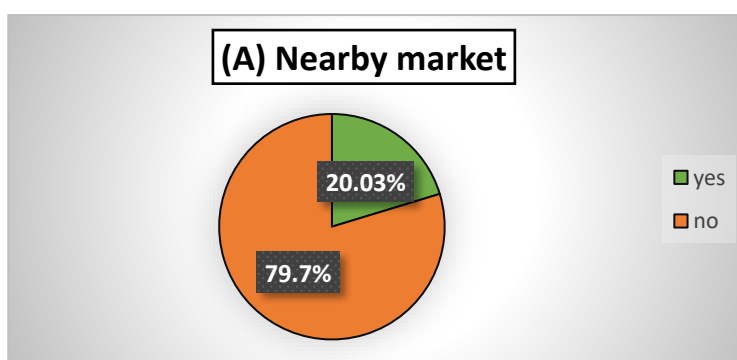
b. Mobility:

Mobility refers to visiting somewhere. When a woman is able to go anywhere without taking permission of anyone, she is considered as empowered. So, mobility has been taken as one of the indicators to measure the social empowerment of women. Here in this study mobility has been measured and it deals with the matter whether permission is needed for the women beneficiaries to go somewhere or not. The study was conducted in rural area to take the measure of mobility. The places are nearby market, hospital, relative's house, neighbour's house and another city or village.

Table 3.7: Mobility status of the respondents to different places

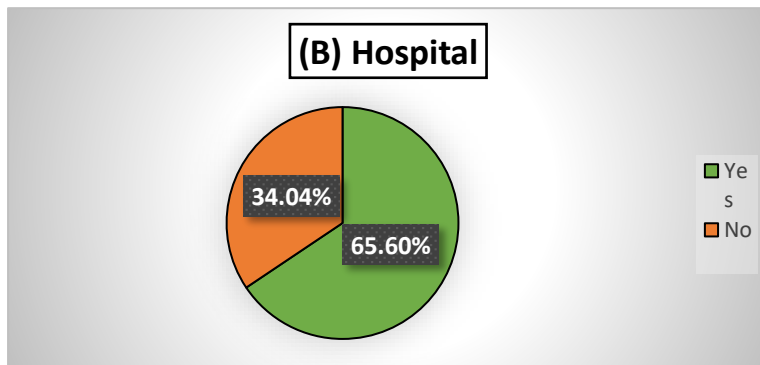
Places	Permission (no. of respondents)		Percentage	
	Yes	No	Yes	No
Nearby market	11	49	20.3%	79.7%
Hospital	32	28	65.6%	34.4%
Relative's house	26	34	32.7%	67.3%
Neighbour's house	10	50	19.8%	80.2%
Another city or village	50	10	80.02%	19.08%

Source: Primary data

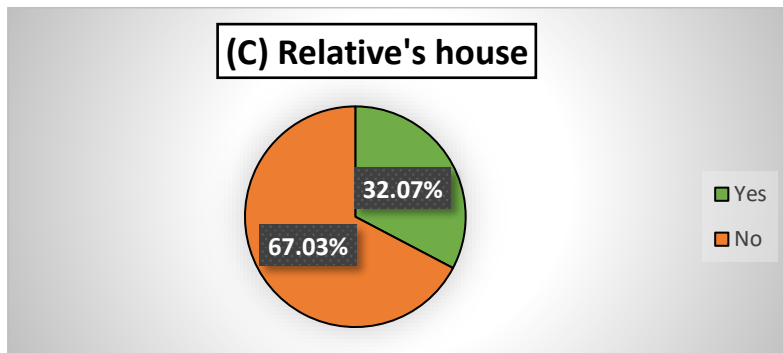


In the table 3.7 and pie charts represented above mobility is taken as a social parameter and the women beneficiary's freedom to travel different places. In the first case 79.7% of the

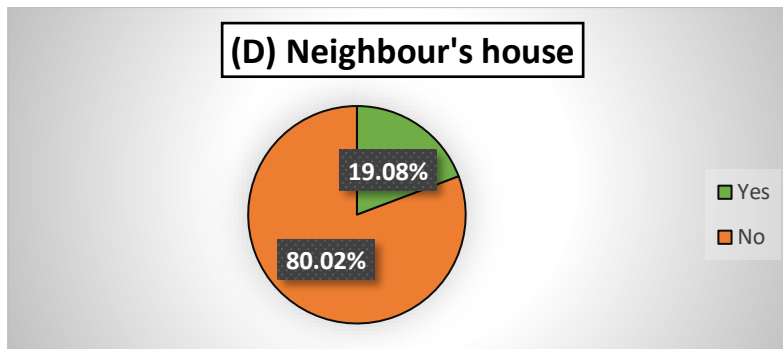
respondents do not need permission from anyone to go to nearby markets whereas the remaining 20.3% needs permission.



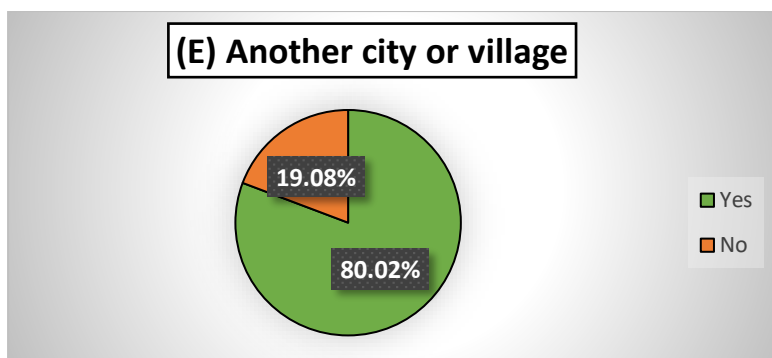
In the second case, as in table 3.7, the 65.6% of the respondents need permission to go to the hospital whereas 34.4% does not need permission.



In the third case, as in the table 3.7, the 67.3% does not need permission to go to relative's house while 32.7% of the respondents needs it.



In the fourth case, as in the table 3.7, the 80.2 % does not need the permission to go to neighbour's house at the same time 19.8% needs it.



In the last case, as in the table 3.7, the same percent that is, 80.2% needs permission to travel to another village while the remaining 19.8% needs.

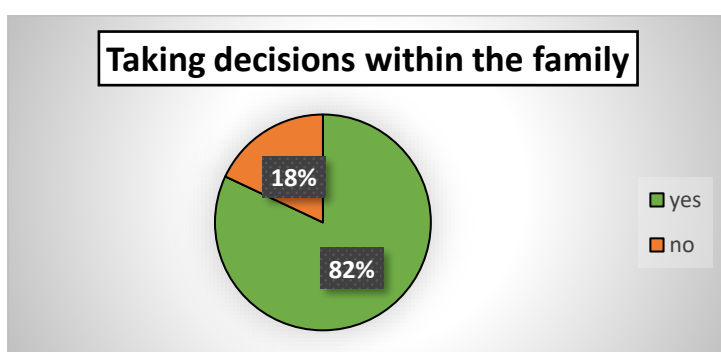
c. Self-confidence:

Self-confidence is an attitude about our skills and abilities. It means to accept and trust oneself and have a sense of control in our life. It is to generate a positive attitude. When all these join together she is considered as empowered. Therefore, the confidence level of the women workers is analysed through certain situations such as, in taking decisions within the family, to express ideas and opinions in the society, and to travel without fear.

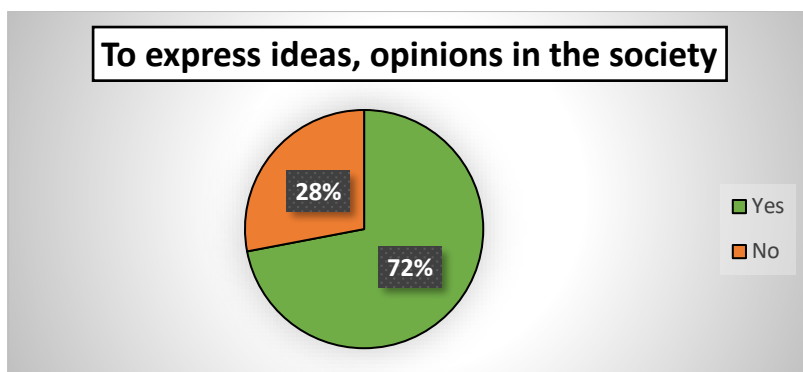
Table 3.8: Confidence level of the respondents

Confidence level of the respondents	No. of respondents		Percentage	
	Yes	No		
In taking decisions within the family	52	08	82%	18%
To express ideas, opinions in the society	43	17	72%	28%
To travel without fear	53	07	83%	17%

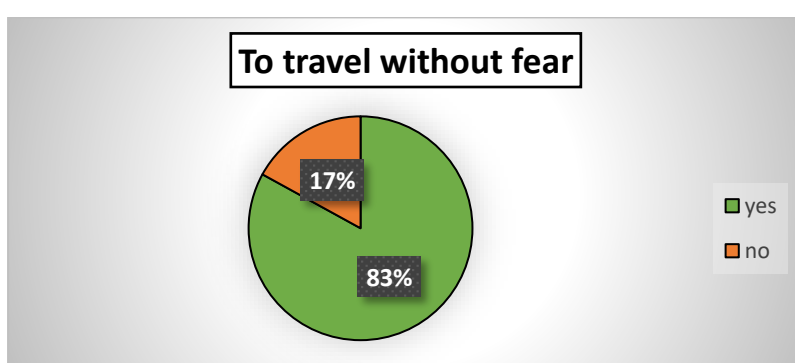
Source: Primary data



In the table 3.8, while analysing the social empowerment of the women beneficiaries under MNREGP by considering self confidence as a social parameter, 82% of the respondents stated that their confidence level has increased while 18% responded that there is no increase in their confidence level.



In the table 3.8, 72% of the respondents stated that there has been an increase in their confidence level while expressing their ideas and opinions in the society. And 28% argued that there is no increase in their confidence level.



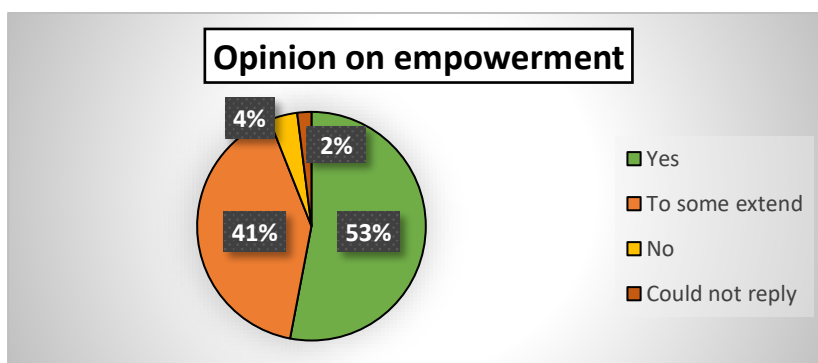
In the table 3.8, 83% responded that their confidence level has increased to travel without fear while 17% argued that there is no increase in their confidence.

(A) Respondent’s opinion on their empowerment:

Table 3.9: View of the respondents regarding their status of empowerment

Opinion on empowerment	No. of respondents	Percentage
(A) Yes	32	53%
(B) To some extent	25	41%
(C) No	02	4%
(D) Could not reply	01	2%
Total	60	100%

Source: Primary data



In the table 3.9, 53% of the respondents are of the opinion that they are empowered, followed by 41% who feels that they are empowered to an extend and 4% feels that they are not at all empowered and 2% of the respondents couldn't reply.

(3.3.2) Economic empowerment:

Economic empowerment is one of the ways to empower women. Women do not have control over their own earning, saving, daily household expenditure, assets etc. all these controls show their level of economic empowerment. In present study, economic empowerment of rural women working under MGNREGA has been measured by measuring their control over economic resources. Control over economic resources include their control over earning, control over saving, control over household expenditure and repayment of loan.

Control over economic resources:

One of the main dimensions of women empowerment is their control over economic resources. The women who have total control of her own on economic resources are taken as more empowered than others. In present study, various indicators used to measure their control over economic resources are their control over their own earning, control over their own saving, control over household daily expenditure, control and own assets, sale and purchase of assets and repayment of loan. If a woman has overall control over these dimensions, then she is called highly empowered.

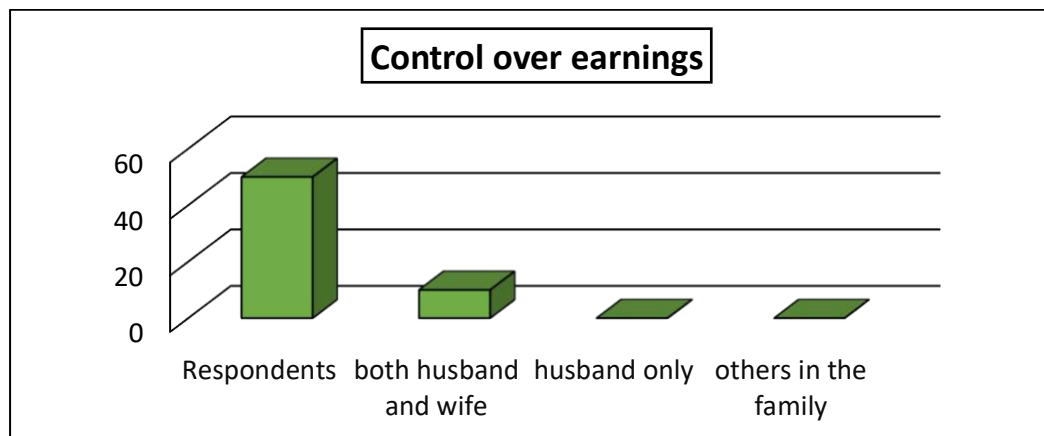
1. Control over earning:

In this study, women working under MGNREGA are the respondents thus their control over earning has been measured.

Table 3.10: Control over earnings in the family

Controlling authority	No. of respondents
(A) Respondent	50
(B) Both husband and wife	10
(C) Husband only	0
(D) Others in the family	0
Total	60

Source: Primary data



In the table 3.10, 50 respondents stated that the control over the earning is by them only while in the case of 10 respondents the control over earnings is done by both husband and wife and none of their earnings are controlled by their husbands alone or by others members in the family.

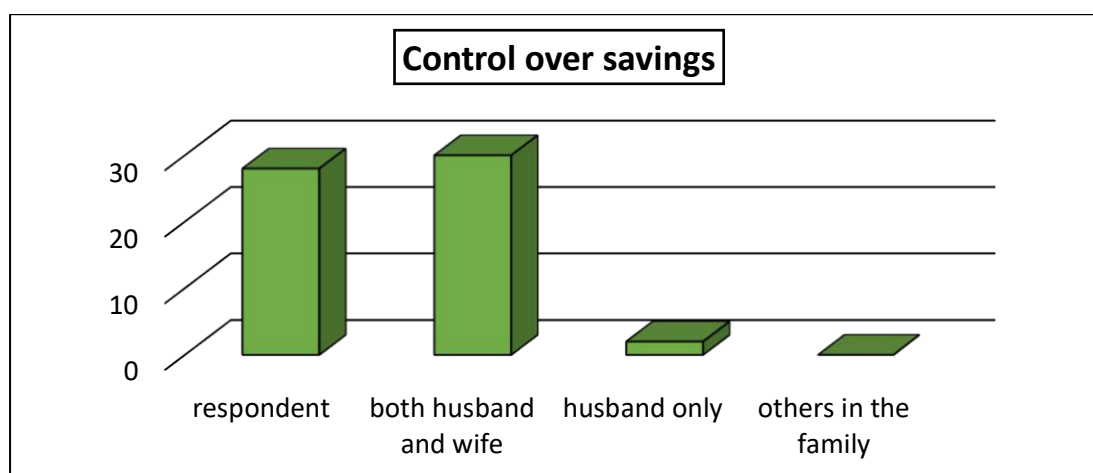
2. Control over saving:

Usually saving helps women to be secure about future. Thus, if a woman has full control over her saving i.e., she can use her saving for household expenditure, on children’s education, for health treatment of herself or her children or can purchase some assets. If a woman has money, she will use it to improve her economic status and ultimately it will lead to her empowerment.

Table 3.11: Control over savings in the family

Controlling authority	No. of respondents
(A) Respondent	28
(B) Both husband and wife	30
(C) Husband only	2
(D) Others in the family	0
Total	60

Source: Primary data



In the table 3.11, 30 respondents stated that the control over the savings is made by both husband and wife whereas 28 respondents stated that the control over the savings is done by themselves only. And as per 2 respondents the savings are controlled by their husband only.

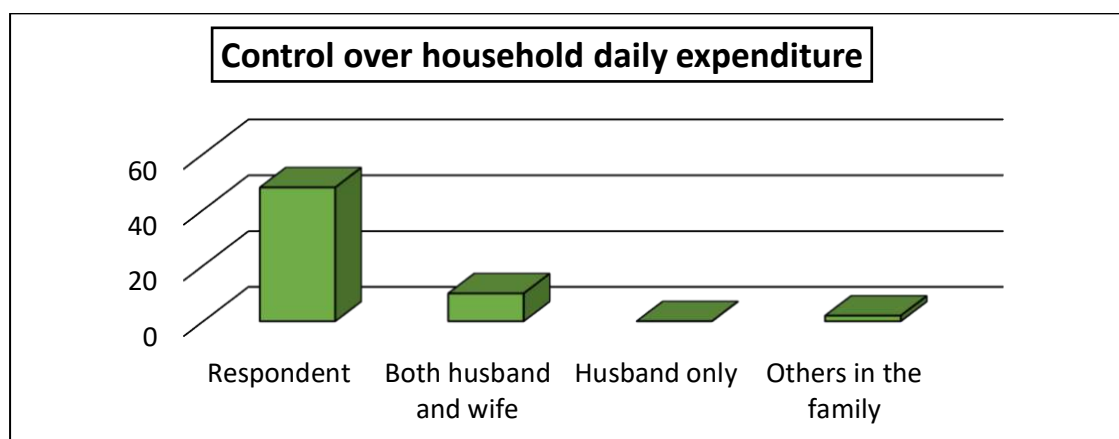
3. Control over Household daily expenditure:

If a woman has control over the household daily expenditure for cooking or other household needs than she is considered as economically empowered because she can cook according to the health requirements of her children or other family members. But in rural backward areas, it has usually been seen that all the decision regarding household is taken by elder members of the family. But here after the implementation of MGNREGA when women have started earning, there should be some different impacts. Thus, in this study, it has been revealed that after joining MGNREGA how many women have got control over household daily expenditure.

Table 3.12: Control over the daily household expenditure

Controlling authority	No. of respondents
(A) Respondent	48
(B) Both husband and wife	10
(C) Husband only	0
(D) Others on the family	02
Total	60

Source: Primary data



In the table 3.12, as per 48 respondents the control over household daily expenditure is done by them only followed by 10 respondents who responded that the control over household daily expenditure is made by both husband and wife and the remaining 2 responded that the controlling authority is other members in the family.

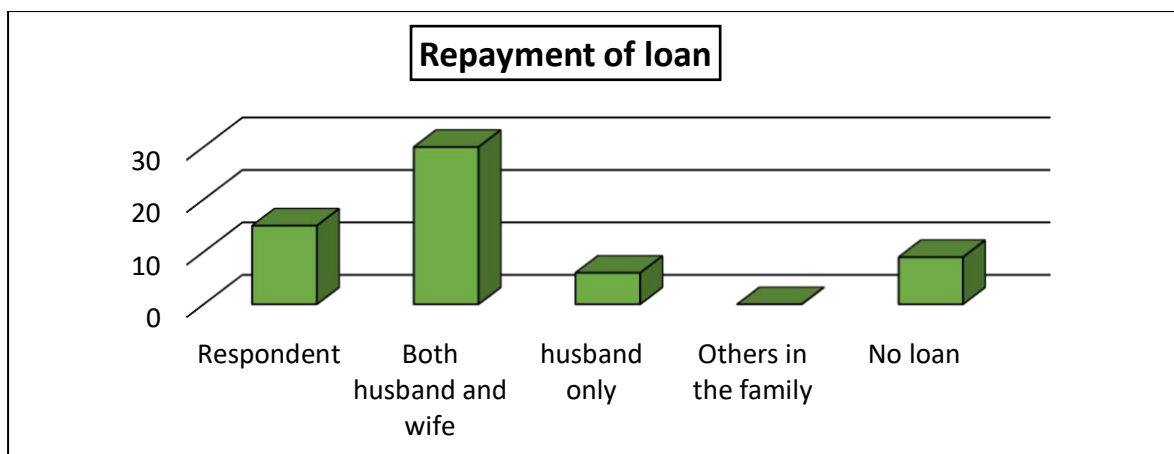
4. Repayment of loans:

After being independent some women also help in repaying the household loans. In this study it has been revealed that women are helping their household in repaying the loan to an extent. In this study, this thing has been revealed that whether the respondents whose families have taken loan are helping their family in repaying loan. In most of the studies done earlier, this control is in the hands of other members in the family or in the hands of husbands. This thing is studied in this study that who has more control over the repayment of loan.

Table 3.13: Repayment of loans

Controlling authority	No. of respondents
(A) Respondent	15
(B) Both husband and wife	30
(C) Husband only	06
(D) Others in the family	0
(E) No loan	09
Total	60

Source: Primary data



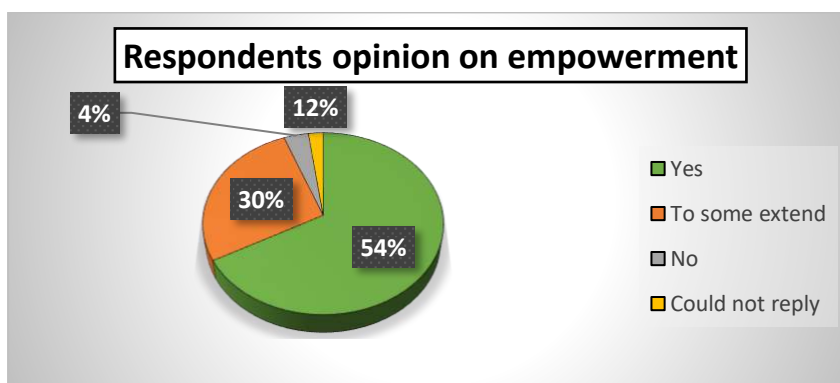
In the table 3.13, in the case of repayment of loans, 15 respondents pay it themselves whereas 30 respondents repay the loans along with their husband, 6 respondents stated that the loan amount is repaid by her husband only and there are 9 respondents who do not have loan.

(B) Respondent's opinion on their empowerment:

Table 3.14: Respondents view on their empowerment

Opinion on empowerment	No. of respondents	Percentage
(A) Yes	37	64%
(B) To some extent	15	30%
(C) No	2	4%
(D) Could not reply	6	2%
Total	60	100

Source: Primary data



In the table 3.14, 64% of the respondents are of the opinion that they are empowered and 30% of the respondents are empowered to an extent, 4% are not at all empowered, 2% of the respondents couldn't reply.

3.4 ANALYSIS OF PROBLEMS FACED BY WOMEN WORKERS WHILE WORKING AT WORKSITES

Worksite problems usually are a major obstacle in the way of workers to participate in working activities. According to MGNREGA guidelines, women working at MGNREGA worksites should be provided with some main facilities such as drinking water, creche facilities for their child, first aid facilities, shed for dressing.

According to guidelines these facilities should essentially be provided because without these women have to face so many problems and they will not be able to continue work.

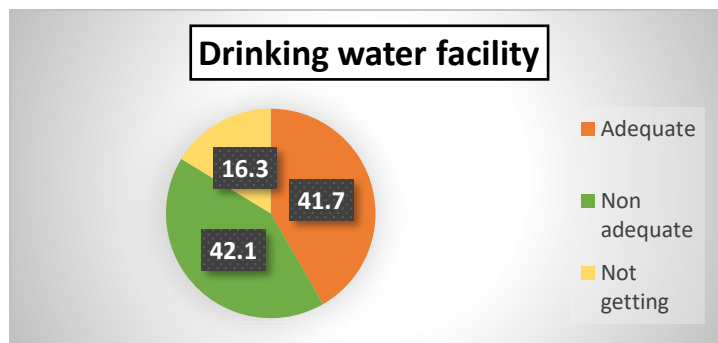
1. Drinking water:

Water is always an important and life-sustaining thing for humans and is required for the survival of most of other organisms. Thus, requirement of water for workers at worksites of MGNREGA is very essential as described by the guidelines of MGNREGA. In present study it has been surveyed that what percentage of respondents are getting facility of water or whether water being provided is adequate or non-adequate.

Table 3.15: Drinking water facility

Type of facility	Percentage
(A) Adequate	41.7%
(B) Non adequate	42.1%
(C) Not getting	16.3%
Total	100%

Source: Primary data



In the table 3.15, 41.7% of respondents are getting adequate drinking water facility. 42.1% of respondents are getting non-adequate drinking water facility and moreover 16.3% of respondents are not getting water for drinking. So, most of the respondents are not getting adequate water facility, which is being a major obstacle in the way of working at worksites.

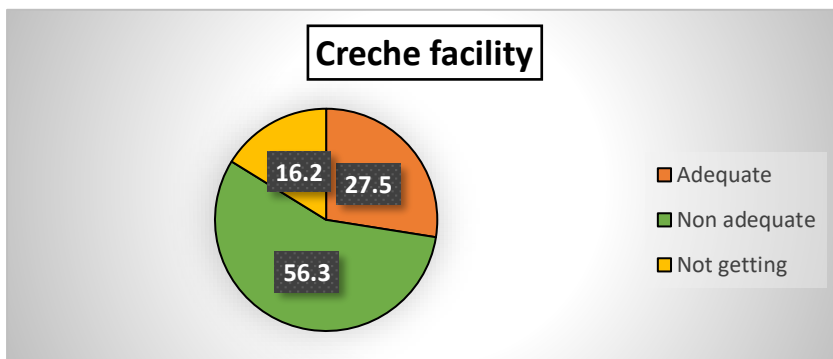
2. Creche facility:

Creche is actually a day care center where babies are cared when their parents go for job. According to MGNREGA, creche facility should be provided for babies of women so that their babies can be cared while they work at worksite. The present study revealed what percentage of respondents are getting creche facility for their respondents and whether adequate or non-adequate.

Table 3.16: Type of Creche facility

Facility	Percentage
(A) Adequate	27.5%
(B) Non adequate	56.3%
(C) Not getting	16.2%
Total	100

Source: Primary data



In the table 3.16, 27.5% of respondents are getting adequate creche facility, 56.3% of respondents are getting non- adequate creche facility and moreover 16.2% of respondents are not getting creche for their children.

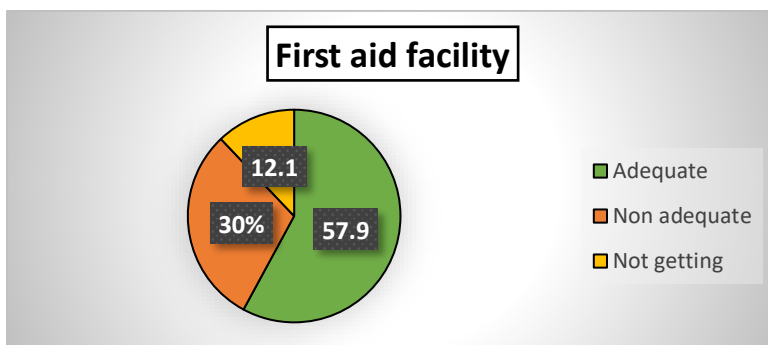
3. First aid:

First aid is the help given to any person suffering from a sudden illness or injury with care provided to protect life, prevent the condition from being worse, and help to recover soon. The following table reveals the data of how many respondents are getting adequate first aid facility, how many are getting non adequate worksite facility and how many of them are not getting worksite facility at all.

Table 3.17: Type of first aid facility

Facility	Percentage
(A) Adequate	57.9%
(B) Non adequate	30%
(C) Not getting	12.1%
Total	100%

Source: Primary data



In the table 3.17, 57.9% of respondents are getting adequate first aid facility. 30% of respondents are getting non- adequate first aid facility and moreover 12.1% of respondents are not getting first aid facilities.

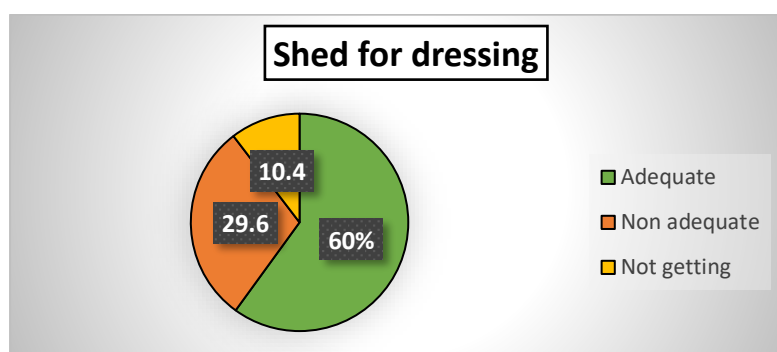
4. Shed for dressing:

Shed for dressing is also an important facility that should be provided at worksites according to guidelines of MGNREGA. The revealed the percentage of how many women workers are getting adequate, non-adequate or not getting the facility at all.

Table 3.18: Shed for dressing facility

Facility	Percentage
(A) Adequate	60%
(B) Non adequate	29.6%
(C) Not getting	10.4%
Total	100%

Source: Primary data



In the table 3.18, 60% of respondents are getting adequate shed for dressing facility. 29.6% of respondents are getting non-adequate shed for dressing facility and moreover 10.4% of respondents are not getting shed for dressing facilities.

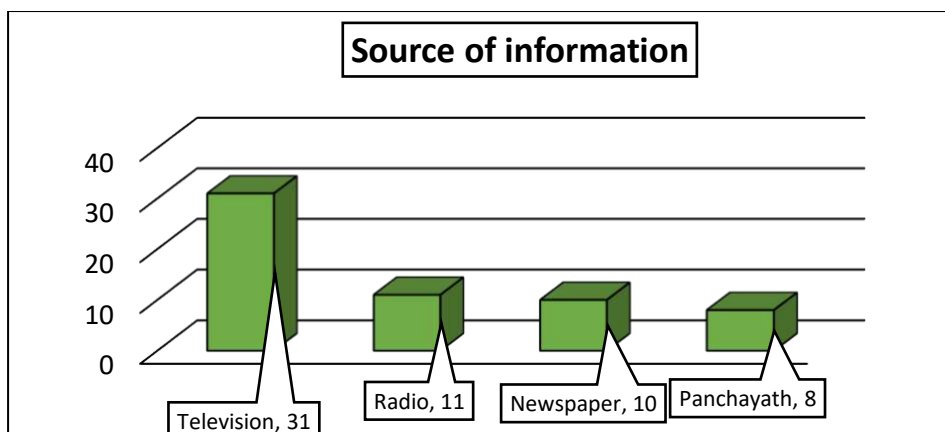
3.5 ASSESSMENT OF AWARENESS ON MNREGP:

Awareness has been assessed by using measures such as knowledge about the various provisions of MNREGP such as job card, how to apply for it, unemployment allowances, working hours, minimum wage per day and conducting of social audit. These variables are chosen because they are very clearly stated in the Act. The government sponsored campaigns also to highlight these aspects of the act so that the beneficiaries know their right.

Table 3.19: Respondent's source of information about MNREGP

Source of information	No. of respondents
(A) Television	31
(B) Radio	11
(C) Newspaper	10
(D) Panchayath	08
Total	60

Source: Primary data

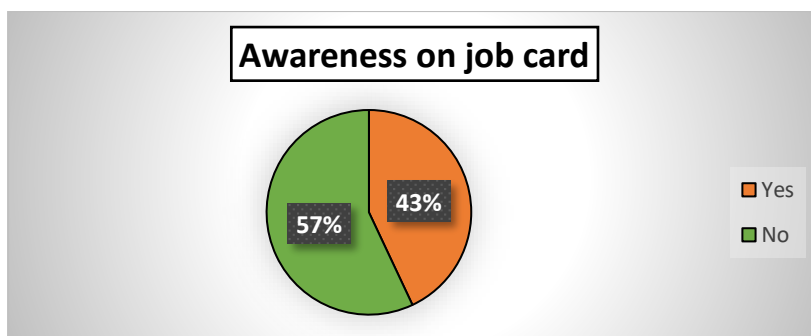


In the table 3.19, most of the respondents that is 31 respondents have accessed the information on MNREGP from television, 11 from radio, 10 from newspapers and 8 respondents from panchayath itself.

Table 3.20: Awareness on job card

Outcomes	Percentage of respondents
(A) Yes	43%
(B) No	57%
Total	100%

Source: Primary data

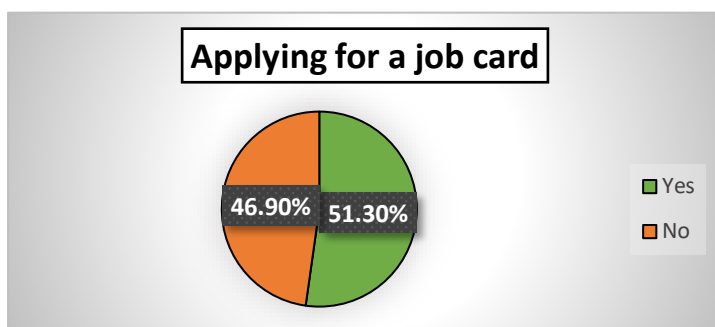


In the table 3.20, 43% of the respondents know what a job card is and 57% of the respondents do not know it.

Table 3.21: Applying for a job card

Outcomes	Percentage of respondents
(A) Yes	51.3%
(B) No	46.9%
	100%

Source: Primary data

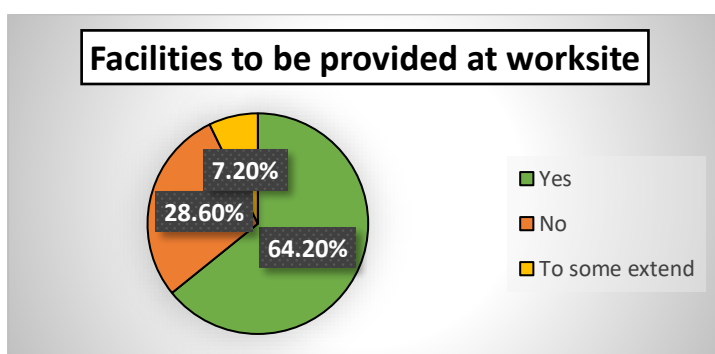


In the table 3.21, 51.3% of the respondents know how to apply for a job card whereas 46.9% of the respondents do not have any idea about it.

Table 3.22: Awareness about the provisions of related to women in MNREGA

(1) Facilities to be provided at worksite	Percentage
(A) Yes	64.2%
(B) No	28.6%
(C) To some extent	7.2%
Total	100%

Source: Primary data

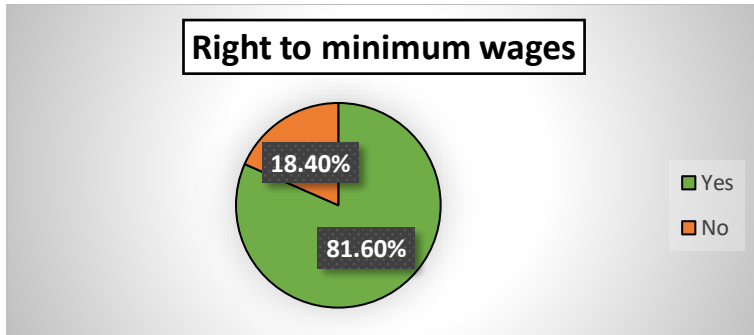


In the table 3.22, 64.2% of the respondents are aware about the facilities to be provided at worksites, 28.6% of the respondents do not know anything and 7.2% of the respondents are aware about the facilities to some extent.

Table 3.23: Awareness on the right to minimum wages

Outcomes	Percentage
(A) Yes	81.6%
(B) No	18.4%
Total	100%

Source: Primary data

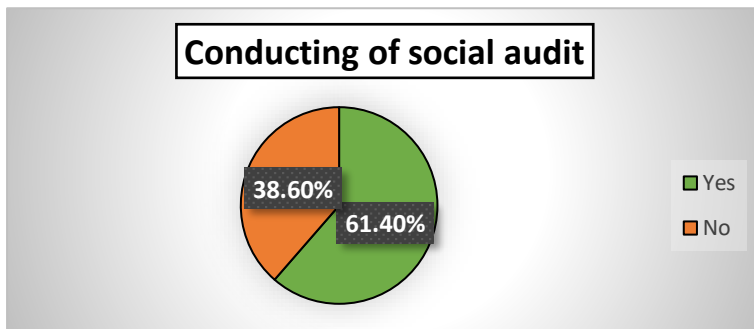


In the table 3.23, 81.6% of the respondents know their minimum wages to be paid whereas, and 18.4% of the respondents do not know about the provisions regarding the right to minimum wages.

Table 3.24: Awareness on the conducting of social audit

Outcomes	Percentage
(A) Yes	61.4%
(B) No	38.6%
Total	100%

Source: primary data

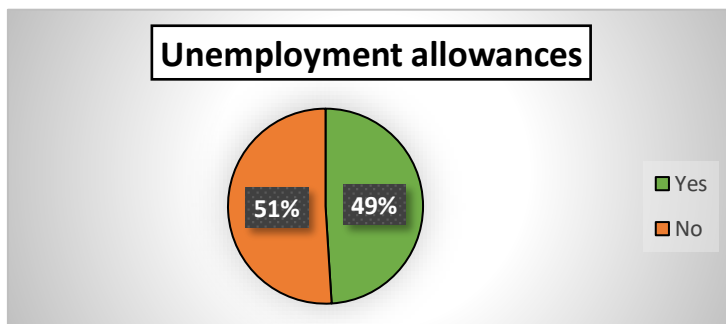


In the table 3.24, 61.4% of the respondents are aware about the conducting of social audits whereas 38.6% of the respondents are not aware about the conducting of social audit.

Table 3.25: Awareness on the unemployment allowances

Outcomes	Percentage
(A) Yes	49%
(B) No	51%

Source: Primary data

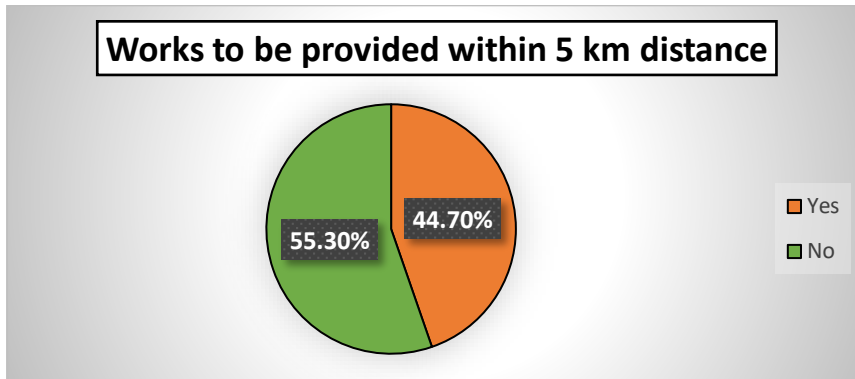


In the table 3.25, 49% of the respondents are aware about the unemployment allowances and 51% of the respondents are not at all aware about unemployment allowances.

Table 3.26: Aware whether the works to be provided within 5 km distance

Outcomes	Percentage
(A) Yes	44.7%
(B) No	55.3%
Total	100%

Source: Primary data

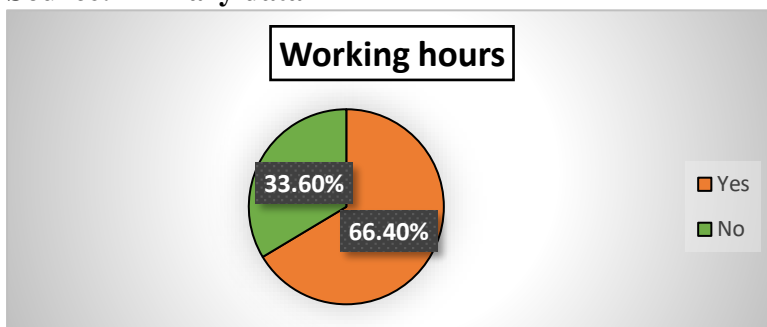


In the table 3.26, 45% of the respondents are aware that the work provided to them should be within 5 km distance and 55% of the respondents are not aware about this provision.

Table 3.27: Well defined working hours

Outcomes	Percentage
(A) Yes	66.4%
(B) No	33.6%
Total	100%

Source: Primary data

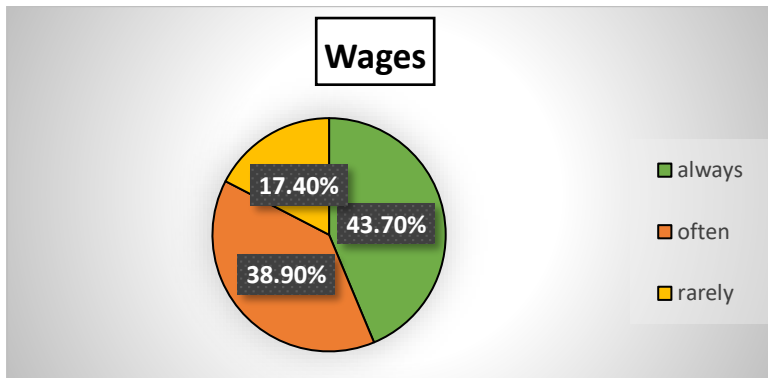


In the table 3.27, 66.4% of the respondents are aware about working hours whereas 33.6% of the respondents are not at all aware about the working hours.

Table 3.28: Receiving of wages on time

Outcomes	Percentage
(A) Always	43.7%
(B) Often	38.9%
(C) Rarely	17.4%
Total	100%

Source: Primary data

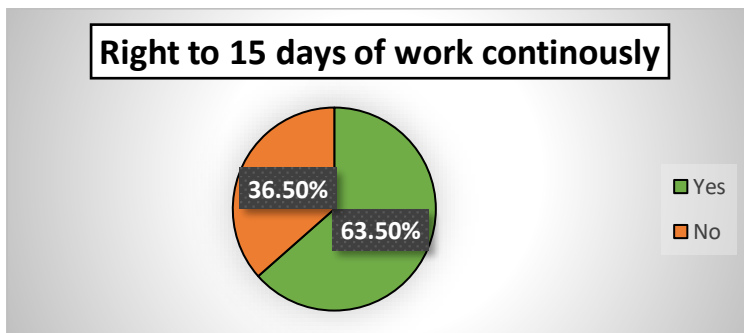


In the table 3.28, 43.7% of the respondents are always receiving their wages on time, whereas 38.9% receive it often and 17.4% are rarely receiving their wages on time.

Table 3.29: Aware whether the law entitles every beneficiary a minimum of 15 days of work continuously

Outcomes	Percentage
(A) Yes	63.5%
(B) No	36.5%
Total	100%

Source: Primary data



In the table 3.29, 63.5% of the respondents are aware that they are to be provided with a minimum of 15 days of work continuously whereas 36.5% of the respondents were not aware about these provisions.

CHAPTER NO: 04

SUMMARY, FINDINGS, SUGGESTIONS AND CONCLUSION

4.1 SUMMARY

This project entitled, “Empowerment of women through MNGREP: A case study of Kadinamkulam panchayath” analyse the socio-economic empowerment of women through MNREGP in the rural areas of Kadinamkulam panchayath. The purpose of this chapter is to summarize the chapters that provided insightful discussions on the topic.

The present study consists of four chapters. Chapter one is an introductory chapter that deals with the problem under evaluation, objective, hypothesis, methodology, scope of the study, limitations of the study and review of literature of the prior studies. Chapter two provides an overview of MNREGP scheme in India, Kerala and Trivandrum. Chapter three consist of the analysis of the data collected using primary data. Chapter four carries a summary of the analysis, findings, conclusion and suggestions.

4.2 FINDINGS

The research has successfully profiled the demographic characteristics of the respondents. The findings have thrown some rather interesting observations:

- The study reveals that 51% of the women workers under MNREG programme are of the age group above 55 years.
- 92% of the respondents are literate and thus they know to read and write.
- 70% of the respondents are married and 58% lives in nuclear family.
- The household occupation of 70% of the respondents are neither agriculture nor labourer.
- The annual income of 49% of the respondents is between 30 000 – 50 000.

Socio - economic empowerment:

- The respondents play a very important role in the decision making of the family. That is, 31% are involved in the decision-making regarding food, 32% -clothing, 21% - children’s education, 22% - health and 42% - social gatherings.
- The respondents are free to move to different places without permission. 79.7% of the respondents are free to move to nearby market, 34.4% - hospital, 67.3% - relatives house, 80.2% - neighbour’s house and 19.8% - another village or city.
- 82% of the respondents have gained self confidence in taking decisions, 72%- expressing ideas and opinions and 83% - travel without any fear.
- From the respondents, 53% feels that they are empowered socially.
- 50 respondents have control over their earnings.
- 28 respondents have control over the savings.
- The control over daily household expenditure is made by 48 respondents.
- 15 respondents play a major role in the repayment of loans.
- From the respondents, 64% is of the opinion that they are empowered economically.

Awareness about the provisions of the scheme:

- The awareness level of the respondents regarding the minimum wage, unemployment allowance, working hours, works within 5 km distance, awareness about the worksite facilities were found high.

Worksite facilities:

- The study reveals non-availability of child care facilities (crèche facilities) at the work site even though the Act includes this provision.
- MGNREGA funds have been allocated for the provision of safe drinking water, changing room, first aid, recreational facility for children, etc. From the survey it is found that except crèche facility all other facilities were generally present.

4.3 SUGGESSTIONS:

In order to make the programme more fruitful, following suggestions on the basis of study are given which are required to be implemented:

- There is delay in payment of wages in the case of some workers. Some efforts are needed by the government to solve this problem. There should be uniformity in the payment off wages.
- Some of the worksite facilities are very poor. So, the steps should be taken to ensure the providence of adequate worksite facilities. For this purpose, separate mechanism should be started.
- Providing 100 days of work should be made compulsory for women workers, as this will increase the process of women's empowerment.
- Improving the quantity of work of MGNREGS by implementing all entitlements of workers including payment of the legal minimum wages, work site facilities and dependable first aid facilities.
- In addition, it is important to add some minimum social security such as health insurance.
- In other words, MGNREGS work needs to move towards quality employment.
- More initiation and awareness should be given to the rural poor women about MGNREGA, that they should know the benefits of the scheme which will increase the women participation rate

4.4 CONCLUSION:

In view of the foregoing, it may be opined that Kerala has got excellent potential to become a role model for the entire nation for systematic and corruption-free implementation of MGNREGA. The field study has shown that there is quite high level of potential for MGNREGA for socio-economic empowerment of women. The study findings reveal that the economic empowerment of the beneficiaries of MGNREGA is more when compared to the social empowerment. Women also perceived that MGNREGA is giving them a sense of independence and security. Wages earned under MGNREGA has helped women in several ways. It helped them to pay the debt and helped them in taking care of children's education enabled them to meet the day-to-day household expenses and facilitated them to save money. Most of the women beneficiaries are educated and hence they are aware about the provisions of the scheme and while going through the study it can be found that the most important problem faced by the beneficiaries in the workplace is lack of cretch facilities should open the eyes of government.

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QUESTIONNAIRE

1. Name of the respondent:

2. Age:

- (a) 20 – 35
- (b) 35 – 55
- (c) above 55

3. Educational standard:

- (a) Literate
- (b) Illiterate

4. Religion:

- (a) Hindu
- (b) Muslim
- (c) Christian
- (d) Other

5. Marital status:

- (a) Single
- (b) Married
- (c) Widow

6. Family:

- (a) Nuclear
- (b) Joint

7. Household occupation:

- (a) Agriculture
- (b) Labourer
- (c) Others

8. Annual income:

- (a) Less than 10 000
- (b) 10 000 – 30 000
- (c) 30 000 – 50 000
- (d) Above 50 000

SOCO - ECONOMIC EMPOWERMENT:

9. Who has control over the following economic resources?

Statement	Respondent	Husband	Both husband and wife	Others
1. Control over earning				
2. Control over saving				
3. Daily household expenditure				
6. Repayment of loan				

10. State your opinion is you economically empowered?

- (a) Yes
- (b) To some extend
- (c) No
- (d) Could not reply

11. Who take decision regarding the following matters?

Statement	Respondent	Husband	Both husband and wife	Others
1. Food				
2. Clothing				
3. Children's education				
4. Health				
5. Attending social gatherings				

12. How much you are mobile with in your community, whether you need permission of husband/elders to go out to different places?

Place	Permission needed	
	Yes	No
1 Nearby market		
2 Hospital		
3 Neighbourhood		
4 Relatives home		
5 Other city or village		

13. Did you gain self-confidence through MNREGP scheme?

Situations	Confidence level	
	Yes	No

1. While taking decisions within the family		
2. To express ideas, opinions in the society		
3. To travel without fear		

14. Have you been socially empowered, state your opinion?

- (a) Yes
- (b) To some extend
- (c) No
- (d) Could not reply

15. Are the following worksite facilities available at worksite?

Facilities	Yes		No
	Adequate	Non adequate	
1. Drinking water			
2. First aid			
3. Crèche			
4. Shed for dressing			

16. Are you receiving wages at time?

- (a) Always
- (b) Often
- (C) Rarely

17. Are you aware of MNREGP scheme, if yes what is the source of information?

- (a) Tv/radio
- (b) Newspaper
- (c) Panchayath

18. Do you know what a job card is?

- (a) Yes
- (b) No

19. Do you know how to apply for a job card?

- (a) Yes
- (b) No

20. Are you aware of the provisions related to women in MNREGP?

- (A) Facilities to be provided at the worksite:

- (a) Yes
- (b) No
- (c) To some extent

(B) Right to minimum wages

- (a) Yes
- (b) No

(C) Conducting of social audit

- (a) Yes
- (b) No

(D) Unemployment allowances

- (a) Yes
- (b) No

21. Are your working hours well defined?

- (a) Yes
- (b) No

22. Do you know that the worksite provided to you should be within 5 km distance?

- (a) Yes
- (b) No

23. Are you aware that the law entitles every beneficiary a minimum of 15 days of work continuously?

- (a) Yes
- (b) No

24. Do you have any suggestions to improve the quality of the scheme (if any)?

**ROLE OF STATE BANK OF INDIA IN FINANCIAL INCLUSION OF
KUDUMBASHREE UNITS: A CASE STUDY IN TRIVANDRUM
DISTRICT**

First Degree Programme

In

Economics under CBCS system

ALL SAINTS' COLLEGE



Academic Year: 2020-21

CERTIFICATE

This is to certify that the dissertation titled “**Role of State Bank of India in Financial Inclusion of Kudumbashree units: A case study in Trivandrum District**” is a record of project work carried out by us at the Department of Economics, All Saints’ College, under the guidance of **SMT. Jiji Vijayan** and submitted at the University of Kerala in partial fulfillment of requirements for the award of the Degree of Bachelor of Arts, First Degree Programme in Economics under CBCS System



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CHAPTER NO: 1

INTRODUCTION

1.1 INTRODUCTION:

I remember a famous quote stated by Kofi Anan who was the Former Secretary-General of the United Nations, “**Micro finance recognizes that poor people are remarkable reservoirs of energy and knowledge**”. Microfinance is not a new concept. Small operations have existed since the 18th century. The first occurrence of micro lending is attributed to the Irish Loan Fund system, introduced by Jonathan Swift, which sought to improve conditions for impoverished Irish citizens. In its modern form, micro financing became popular on a large scale in the 1970s.

The first organization to receive attention was the Grameen Bank, which was started in 1976 by [Muhammad Yunus](#) in Bangladesh. In addition to providing loans to its clients, the Grameen Bank also suggests that its customers subscribe to its "16 Decisions," a basic list of ways that the poor can improve their lives.

The "16 Decisions" touch upon a wide variety of subjects ranging from a request to stop the practice of issuing dowries upon a couple's marriage, to keeping drinking water sanitary. In 2006, the Nobel Peace Prize was awarded to both Sri. Muhammad Yunus and the Grameen Bank for their efforts in developing the microfinance system.

There are other microfinance operations around the world. Some larger organizations work closely with the World Bank while other smaller groups operate in different nations. Some organizations enable lenders to choose exactly who they want to support, categorizing borrowers with criteria such as level of poverty, geographic region, and type of small business.

Others are very specifically targeted. There are organizations in Uganda, for example, that focus on providing women with the capital to undertake projects like growing eggplants and opening small cafés.

Some groups focus their efforts only on businesses whose goal is to improve the overall community through initiatives such as offering education, job training, and working toward a better environment.

To talk about the micro finance in Kudumbashree is very much important in the daily life of the women folk those who are in the members of the Kudumbashree family. The local needs of them are satisfying through the small loans from the neighborhood groups. Many of the women started micro enterprises by using these small loans. They also use this loan for their immediate need like hospital emergency, educational needs of the children etc. Often the loan from neighborhood groups could not address all the financial emergencies of the groups. In these circumstances they are compelled to take loan from other sources. But with the introduction of Community Investment Fund it is very easy for the groups to manage the financial emergencies. The Community Investment fund designed by National Rural Livelihood Mission (NRLM) had twin goals to attain namely self sustainability of Community Based Organization & extend financial support to NHG Members for livelihoods and various other social needs.

Roles in Micro Finance

- 1) NHG:** Management of the thrift and credit programme including internal lending and account keeping, grading, bank linkage
- 2) ADS:** Monitoring the thrift and credit programmes of NHGs, facilitation of bank linkage
- 3)CDS:** Monitoring of thrift and credit; facilitating bank linkages; payment of matching grant to bank-linked NHGs; updating management information system
- 4) District Mission:** District Missions approve and release matching grant to CDSs. It is also responsible for liaison with district level review committee of banks. District Missions conduct capacity building programmes too.

Liaison with State Level Bankers Committee (SLBC) is the responsibility of the State Mission. State Mission monitors the micro finance programme at the state level through the management information system. It designs programmes and schemes and does capacity building.

1.2 STATEMENT OF THE PROBLEM

When the financial requirements become unavoidable, people can't wait for safe lenders. This is the opportunity where the cut throat money lenders and finance companies tighten their clutches. Hence the financial exclusion of the poor from the formal banking sectors for lack of collateral and the unavailability of safe lending sources makes most of the poor borrowers the prey of the money lenders and aloof from formal banking practices. Lack of capital is a serious Limitation to the development of poor women in rural and urban areas who find zero access to credit. Credit can help women take up farm and allied activities such as milk cattle, poultry, animal husbandry or independent small enterprises, enabling them to economically empower and rise against any stressful situations .The study is aimed at realizing the role of State Bank of India in financial inclusion of Women working in Kudumbashree. It also examines and identifies the reasons of availing loans from SBI, level of awareness among respondents with regard to different financial inclusion schemes and Micro Financing ,benefits derived by respondents ,Matching grants by the NHGs and the satisfaction level respectively. The title of the study was framed as follows

“Role of SBI in Financial Inclusion of Kudumbashree Units: A case study in TVM District”

1.3 SCOPE OF THE STUDY:

The study on financial inclusion and financial literacy among people is a great importance in the present day situations. Active participation of each and everyone in the financial system of the state is pre requisite for the effective functioning of financial system. Financial system facilitates the needs of those who need money and those who have surplus money. Banking habit is the simplest way to enter into the financial system. Now also there are more than 30% of the Indian populations are unbanked. The study will help us to know the customer satisfaction with respect

to the interest, convenience, service quality and behavior etc. Also, we can have the ideas to increase the services to meet out the customer expectation in the near future.

OBJECTIVES:

Following are the objectives of the study:-

- To study the attitude of members of Kudumbashree units towards bank accounts
- To study the Matching grant received by NHGs
- To study the awareness level in connection with Different schemes provided by the Government Of India

1.5HYPOTHESIS:

H1: The importance of Micro Finance Institutions and Banks is high in Trivandrum District

H1: There is relationship between Schemes implemented by the Government of India and Benefits derived from them

RESEARCH METHODOLOGY:

Secondary data is used in this project work

TOOLS OF ANALYSIS:

Commonly and Widely used Statistical tools are used for data analysis. It include Bar chart

SAMPLE TECHNIQUE:

Convenience sampling technique is used for the study.

1.3 LIMITATIONS:

1. The main limitation was Time constraint due to which we were unable to study deeply

2. The members of Kudumbashree and State Bank of India hesitated to share the data of bank linkages and internal thrift etc
3. The study was limited only to Trivandrum district

1.4CHAPTER PLAN:

The study consists of 5 chapters. The first chapter of this project deals with the introduction which includes an overview of micro financing and its emerging significance. The chapter also deals with the statement of problem, scope of study and objectives of the study along with hypothesis. Further the limitations of the project were stated. 2nd Chapter consists Review of literature served to identify the known parameters of this study and enabled to have acquaintance with the topic in a general manner. The third chapter provides an overview about the various financial inclusion schemes in India; the chapter is also introspection in understanding the influence of State Bank of India around the globe, in India, in Kerala and ultimately the target area of this study-Trivandrum. The third chapter deals with data analysis and interpretation, and fourth chapter inculcates the findings, suggestions and conclusions derived from the study.

CHAPTER 2

REVIEW OF LITERATURE

A Literature Review is defined as **a comprehensive summary of previous research on a topic. The literature review surveys scholarly articles, books, and other sources relevant to a particular area of research.** The review should enumerate, describe, summarize, objectively evaluate and clarify this previous research.

Rajaram Das Gupta (2005): One of the reasons for the glow in the performance of both public and private sector banks in extending credit to weaker sections is their high level of NPAs. While credit under the Swarnjayanti Gram Swarozgar Yojana scheme across states has been extended in proportion to the poor in the population, this is not so in the case of self help group (SHG) credit that has been growing at the rate of 120 per cent per annum. However, growth in SHG credit has been uneven. The southern states are seen as SHG-developed states while Bihar and Madhya Pradesh are among those characterised as SHG-backward. But besides the SHG model in extending credit to weaker sections, other different models exist for extending microcredit to the poor and also to the weaker sections.

S Mahendra Dev (2006) stated financial inclusion is important for improving the living conditions of poor farmers, rural non-farm enterprises and other vulnerable groups. Apart from formal banking institutions, which should look at inclusion both as a business opportunity and social responsibility, the role of the self-help group movement and microfinance institutions is important to improve financial inclusion.

J Devika and Binitha V Thampi(2007) :Micro-finance and its (purported) capacity to empower women is by now a well-explored field all over the world. We now have several tools by which micro-finance programmes may be assessed. However, here we attempt to critically assess the claims of the Kerala government's poverty eradication programme, the Kudumbashree which

combines a micro-finance model with other elements through critical feminist lenses. Further, we attempt to place this programme within Kerala's own historical experience of empowering the poor. Given the fact that this major effort to popularize micro-finance in Kerala has the twin aims of poverty alleviation and women's empowerment, this seems justified. We try to place the 'micro-finance revolution' in Kerala within the larger historical trajectory of successive 'regimes of empowerment' in order to understand the different political stakes in each, and their implications for gender politics. While using some of the available tools that employ indicators of gender effectiveness to assess the impact of micro-finance in empowering women is certainly a basic exercise, the present approach allows us to draw lessons for effective gender politics through a comparison with earlier modes of empowering the deprived classes in Kerala.

MA Oommen(2008):Micro finance is an emerging reality in contemporary development discourse and has come to occupy a significant place in financial intermediation in India. Kudumbashree of Kerala, a community-based self-help organisation of poor women, although started as a micro-finance agency soon became an active subsystem of local governments and embarked upon several activities that address the question of poverty reduction. This paper attempts to narrate the story of Kerala's Kudumbashree as a women empowerment and anti-poverty programme, not only for its members but also for the wider community

Uma H.R, Rupa K.N (2013): The number of bank accounts, credit availed and repayment of credit showed positive increase with the membership of SHGs. The Global Financial Inclusion Data base (2012) found that the women are particularly disadvantaged, when comes to the access to financial services. Only 37per cent of women in developing countries have bank account, where as 46per cent of men do. The relative gender gap in formal account ownership is highest in South Asia. 41per cent of men and 25per cent of women have an account. SHGs are mainly women groups help them to enter formal financial system and thereby become socially and economically empowered.

Mr. Divyesh Kumar, Dr. H R Venkatesha (2014) stated that financial inclusion or inclusive financing is the delivery of financial services at affordable costs to sections of disadvantaged and

low-income segments of society, in contrast to financial exclusion where those services are not available or affordable. An estimated 2.5 billion working-age adults globally have no access to the types of formal financial services delivered by regulated financial institutions. Financial inclusion is an innovative concept which enables the alternative techniques to promote the banking habits and acts as enabler in reducing the poverty and the launch of Pradhan Mantri Jan Dhan Yojana (PMJDY) by Government of India is in that direction. The scheme is not only limited to opening of a bank account but has other benefits with it viz. zero balance bank account with RuPay debit card, in addition to accidental insurance cover of Rs 1,00,000 those who open accounts by January 26, 2015 over and above the Rs 1,00,000 accident, they will be given life insurance cover of Rs 30,000..

Nidheesh KB(2009): The study reveals that women empowerment is the best strategy for poverty eradication. Rural women, who were regarded as voiceless and powerless started identifying their inner strength, opportunities for growth and their role in reshaping their own destiny. The process of empowerment becomes the signal light to their children, their families and the society at large.

Dr VP Raghavan(2009): Poverty alleviation schemes based on micro- credit system have been implemented in many of the developing countries in recent years. The Government of Kerala State in India has introduced a novel scheme of poverty alleviation based on micro-credit and self help grouping. Paraphrased as Kudumbashree (Prosperity of the Family), the scheme aims at improving the living levels of the poor women in rural and urban areas. It seeks to bring the poor women folks together to form the grass root organizations to help enhance their economic security. The project aims at removing poverty among rural women households through setting up of micro-credit and productive enterprises. The activities such as micro-credit and micro-enterprises under the scheme were undertaken by the locally formed Community Development Societies consisting of poor women. The State Poverty Eradication Mission-Kudumbashree-launched by the Government of Kerala in India is a massive poverty eradication programme in contemporary history. It has proved without doubt that women empowerment is the best strategy for poverty eradication. Women, who were regarded as voiceless and powerless started identifying their inner strength, opportunities for growth and their role in reshaping their own destiny. The process of empowerment becomes the beacon light to their children, their families

and the society at large. It opens new vistas in development history. A new paradigm of participatory economics has been found emerging in “God’s Own Country”.

Dr BB Mansuri(2010):Poverty is omnipresent but the third world countries are the main sufferers. Even after more than 50 years of planning and employing various poverty alleviation programmes, official estimates show that 26.1 per cent of total population lives below poverty line in India. Since, independence government has taken several initiatives to tackle the scarce of poverty through Area Development approach. But all the initiatives failed to achieve the target due to faulty planning and improper implementation and lack of will. Formal banking sector also ignored the poor due to risk involved in lending to poor as they do not have collaterals and apprehension of non-bankability. Against this backdrop SHG bank linkage from NABARD is considered as best alternative to reach the poor. The provision of small and regular repayment schedule made possible very high recovery rate. After 1990s microfinance has taken it momentum and now it is the largest microfinance movement in the world.

A Amarender A. Reddy and Dharm Pal Malik (2011): The author is of the opinion that Microfinance has made tremendous strides in India over the years and it has become a household name in view of the multi-pronged benefits from microfinance services to the poor in our country. Self Help Groups (SHGs) have become the common vehicle of development process including microfinance. SHG–Bank Linkage Programme (SBLP) launched in 1992 envisaging synthesis of formal financial system and informal sector has become a movement in India. NSSO data reveal that 45.9 million farm households in the country (51.4%), out of a total of 89.3 million households do not have access to credit, either from institutional or non-institutional sources. Further, despite the vast network of bank branches, only 27 percent of total farm Households are indebted to formal sources (of which one-third also borrow from informal sources). Farm household’s not accessing credit from formal sources as a proportion to total farm households is especially high at 95.91, 81.26 and 77.59 percent in the North Eastern, Eastern and Central Regions respectively. As on 31 March 2009, there are more than 6.1 million saving-linked SHGs and more than 4.2 million credit-linked SHGs and thus, about 86 million poor households are covered under the programme. The SBLP targeted to reach 100 million of

households by 2015. The paper tries to examine the spread of SBLP among geographies and poor and suggest ways to overcome regional and class differences in reach.

Ram A Cnaan, MS Moodithaya and Femina Handy(2011) have stated Although many rural people in South India are financially included, the concept of financial inclusion is more complex than usually portrayed. Our findings show that social and personal deprivation contributes to financial exclusion and should be viewed as key barriers to financial inclusion. They also suggested that financial inclusion is not a monolithic phenomenon and should be studied in a multi-layered fashion, ranging from having a bank account to making full use of modern financial instruments.

Madusudhan Ghosh(2012): Reviews the progress of SHG-Bank linkage programme at the national and regional levels, and examines its impact on the socio-economic conditions of SHG member households. The programme has grown at a tremendous pace during last two decades and emerged as the most prominent means of delivering micro-finance services in India. Though the regional spread of the programme is highly skewed with highest concentration in the southern region, it has started picking up pace in other regions. The average annual net income, assets and savings of SHG member households increased significantly in the post-SHG situation. The average amount of loans and the regularity in repayment of loans increased, and the dependence on moneylenders decreased remarkably. The percentage of loans used for productive purposes and employment per household increased, the incidence of poverty among SHG members declined, and the social empowerment of women improved significantly. The study offers important policy suggestions.

C Paramasivan and V Ganeshkumar(2013):Financial inclusion is an innovative concept which makes alternative techniques to promote the banking habits of the rural people because, India is considered as largest rural people consist in the world. Financial inclusion is aimed at providing banking and financial services to all people in a fair, transparent and equitable manner at affordable cost. Households with low income often lack access to bank account and have to spend time and money for multiple visits to avail the banking services, be it opening a savings

bank account or availing a loan, these families find it more difficult to save and to plan financially for the future.

MG Dipika and MD Sigi (2014): The study examines the microfinance and microenterprise model of Kudumbashree, the state poverty eradication mission of Kerala, and its impact on poverty alleviation in the state of Kerala in India. Kudumbashree's method of identification of the poor is seen to be superior to the conventional head count ratio as it captures the multidimensional characteristics of poverty leading to lesser chances of exclusion of vulnerable families. The microenterprise-linked microfinance model of Kudumbashree has established itself as an effective model linking the state, community, and financial organizations, differentiating itself from other NABARD-led self-help group (SHG) programmes or the Grameena model of microfinance institutions in the country. The fundamental idea of local economic development on which the microenterprise business is built is, however, not free from limitations. Heavy reliance on local markets for procuring inputs and selling outputs makes the products less competitive, questioning the sustainability of a business-led model in the absence of state subsidy in the longer run.

Arjun Bhaskar (2015): Microfinance is a novel economic development tool aimed at alleviating poverty through financial inclusion, socioeconomic empowerment, and self-sufficiency. By virtue of a large and poor population, India is one of the largest microfinance markets in the world, and having recently confronted a fundamental moral question related to the mission of the field, presents an interesting area to study. Most press and research coverage focuses on microfinance in Andhra Pradesh due to a high microfinance penetration rate and recent events, but this paper aims to focus its study on the microfinance sector in the South Indian state of Kerala, distinct from the rest of India due to a unique cultural and regulatory environment relative to microfinance sectors in the rest of the world. The central conclusion is that microfinance is highly culture and context-specific, with Kerala's communal culture and welfare state being key drivers for the sector's success. In this specific situation, the non-profit orientation and bank linkage models enable institutions to focus more thoroughly on their mission statements, as evidenced by their demand-led convergence model of attacking poverty through several different community development initiatives. This case study also presents an interesting angle on government involvement in the microfinance sector, as subsidies have

fostered the sector's growth while simultaneously subjecting the sector to a high degree of political risk.

Jomy Jose(2015):The empowerment of women through different laws, legislations, activities and schemes is the most important concern of 21st century. This study explores the role of Kudumbashree and its impact on women empowerment in Kerala with special reference to Thiruvananthapuram Municipal Corporation area. Kudumbashree is a practical model for strengthening the Self Help Group (SHG) based poverty alleviation programme. Questionnaire and interview were used for collecting the data. The study found that, Kudumbashree leads to sustainable social, economic development of women and a direct impact on their living status, educational, nutritional and health needs of their children, positively.

Neethu Ann Georgie Dr Anthony Raj S(2016) :Financial Inclusions, aiming in providing the banking services to the deprived at an affordable cost, gained preference in India during 2005. A developing country, having majority in the lower and deprived group, considers this policy to be unavoidable and the present central government has succeeded in creating more impact for the same. The current analysis reveals that the southernmost state of our country, Kerala tops the index of Financial Inclusion and this creates a necessity to analyze the societal perception of Keralites with special reference to the women folk engaged with the Kudumbashree units towards this service and to analyze the influence of demographic factors on the perception towards financial inclusion schemes. Amidst the various factors influencing perception towards inclusive financing, demographic factors like age, education, income and marital status has been analyzed. The study reveals that selected demographic factors were influential in creating positive as well as negative attitude towards financial inclusions.

Martin Brown, Benjamin Guin and Karolin Kirschenmann(2016) had examined how the geographical proximity to a microfinance bank affects financial inclusion. First, Pro Credit is more likely to open a new branch in areas with a large share of low-income households. Second, in locations where Pro Credit opens a new branch the share of banked households increases more than in locations where it does not open a new branch. Third, this increase is particularly strong among low-income households, older households, and households which rely on transfer income.

Jerlin Jose and Dr Alice Mani(2018):Growth of a nation depends upon the existence of a healthy and easy accessible financial system. The countries all over the world are facing the issue of having a healthy, easy accessible and inclusive financial system. According to the latest Global Findex report of World Bank 2014, there are about 38 percentages of adults around the world are unbanked. Amongst all other financial services banking services are considered as the most vital and important for a common man. So we can say that countries banking penetration has a substantial impact on the success and growth of financial inclusion. In this study we are trying to examine the role and importance of banking penetration in the success and growth of financial inclusion in India and also specifically in the state of Kerala, as Kerala has ranked as one of the top leading Indian state in the progression of financial inclusion.

Sudarshan Maity and Tarak Nath Sabu(2020):The study finds that overall average efficiency towards financial inclusion increases significantly during post-phase, though all the public sector banks are not performing equally. There is a significant variation in efficiency level between them and even between the two periods. Further, there is a huge opportunity to enhance technical efficiency with the same quantity of input which will help to achieve the target of financial inclusion.

Arijit Banerjee (2020): SBI and its associates is the largest bank in the country. State Bank of India and its Associates (now merged in SBI) are playing a important role in the Indian economy. All over the world State Bank of India is a bank having Associates has branches. Accept deposit and lending is the main purpose of every bank and with the help of these transactions earns profits. State Bank of India and its Associates are public banks and performing the same functions. Lending is main source of earning of a bank and lending customers can be good and can be bad. Bad customers of a bank turn its assets into non-performing assets. So in the above scenario a research paper is constructed. In this paper the impact of Non-Performing Assets on the earnings of the State of India and its Associate is studied. Not only that, impact of NPA on the EPS and the dividend paid to its stockholders also analysed. Statistical tool like correlation is used to reveal the results. Data of 10 years i.e. March 2011- March 2020 is taken into consideration from the website of Reserve Bank of India.

Sudarshan Maity and Tarak Nath Sabu(2020):The study finds that overall average efficiency towards financial inclusion increases significantly during post-phase, though all the public sector

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CHAPTER 3:

OVERVIEW OF STATE BANK OF INDIA AND FINANCIAL INCLUSION

3.1 HISTORICAL OVERVIEW OF STATE BANK OF INDIA



Source: <https://www.onlinesbi.com/>

The origin of the State Bank of India goes back to the first decade of the nineteenth century with the establishment of the Bank of Calcutta in Calcutta on 2 June 1806. Three years later the bank was re-designed as the Bank of Bengal (2 January 1809). A unique institution, it was the first joint-stock bank of British India sponsored by the Government of Bengal. The Bank of Bombay

(15 April 1840) and the Bank of Madras (1 July 1843) followed the Bank of Bengal. These three banks remained at the apex of modern banking in India till their amalgamation as the Imperial Bank of India on 27 January 1921. Primarily Anglo-Indian creations, the three presidency banks came into existence either as a result of the compulsions of imperial finance or by the felt needs of local European commerce and were not imposed from outside in an arbitrary manner to modernise India's economy.

Their evolution was, however, shaped by ideas culled from similar developments in Europe and England, and was influenced by changes occurring in the structure of both the local trading environment and those in the relations of the Indian economy to the economy of Europe and the global economic framework.

3.2 ABOUT STATE BANK OF INDIA

State Bank of India (SBI) a 'Fortune 500 Company' is an Indian Multinational, Public Sector Banking and Financial services statutory body headquartered in Mumbai. The rich heritage and legacy of over 200 years, accredits SBI as the most trusted Bank by Indians through generations.

SBI, the largest Indian Bank with 1/4th market share, serves over 44 Crore customers through its vast network of over 22,000 branches, 58,500 ATMs, 66,000 BC outlets, with an undeterred focus on innovation, and customer centricity, which stems from the core values of the Bank - Service, Transparency, Ethics, Politeness and Sustainability.

The Bank has successfully diversified businesses through its 11 subsidiaries i.e. SBI General Insurance, SBI Life Insurance, SBI Mutual Fund, SBI Card, etc. It has spread its presence globally and operates across time zones through 233 offices in 32 foreign countries.

Growing with times, SBI continues to redefine banking in India, as it aims to offer responsible and sustainable Banking solutions.

Banking Subsidiaries

*State Bank of Bikaner and Jaipur (SBBJ)

*State Bank of Hyderabad (SBH)

*State Bank of Mysore (SBM)

*State Bank of Patiala (SBP)

* State Bank of Travancore (SBT) merged with State Bank of India on 2016 September 30th

Foreign Subsidiaries

- SBI International (Mauritius) Ltd.
- State Bank of India (California)
- State Bank of India (Canada)
- INMB Bank Ltd, Lagos
- BANK SBI Indonesia (SBII)

Achievements or Recognition:

Some of the achievements and recognitions received by State Bank of India are as follows: _

*State Bank of India **ranked 155th** in Forbes list of Global 2000 firms in 2014.

*Business Standard has awarded the Banker of the Year Award to MR. Om Prakash Bhatt in the year 2013-14.

*Innovation in Customer Data Management (DWP)

*Financial Inclusion (IT–RB), Electronic Payment (INB, MB &W, ATM, PSG) and CRM&BI (DWP)

*Best IT adoption

*AWARD for change management for managing high scale IT projects.

*Asia’s Best CSR Practices Award–2013– Singapore

*India’s Most Ethical Companies Award (**2013**)

*Asian Green Future Leadership Awards (**2013**)

*June ’08 Awards & Recognitions CNN IBN Network 18 has selected Shri. Om Prakash Bhatt as Indian of the Year – Business **2007**.

*Asian Centre for Corporate Governance & Sustainability and Indian Merchants Chamber has awarded the Transformational Leader Award 2007.

*State Bank of India ranked as NO.1 in the 4Ps B & M & ICMR Survey on India's Best Marketed Banks in August–(**2009**).

* Om Prakash Bhatt declared as one of the '25 Most Valuable Indians' By “The Week Magazine” in the year **2009**.

*State Bank of India has been adjudged as ‘**The Best Bank** ’By Business India in August–2009.

*It became the only Indian bank to get listed in the Fortune Global 500 List.

*SBI was at the 70th slot in the top 1000 bank survey by Banker Magazine.

*It was awarded Golden award for being among the two most trusted banks in India by Readers Digest.

*SBI is ranked 6th in the Economic Times Market Cap List.

*SBI ranked as no.1 in the 4Ps B & M & ICMR Survey on India's Best Marketed Banks (August–2009)

3.3 Evolution of the Kudumbashree Idea

Set in the context of the People's Plan Movement which was a state strategy for mass mobilization for bottom-up planning in the wake of the decentralization of powers, Kudumbashree has been an outcome of its specific context.

From the perspective of a government programme, Kudumbashree was the extension of the CDS experiments in Alappuzha and Malappuram. At the same time, the CDS initiatives themselves had drawn lessons and strategies from the NABARD led initiative of SHG Bank Linkage Programme.

As an idea, its base has been Neighbourhood groups (NHGs); the NHG idea had its own history within the State's civil society domain.

The NHG idea stayed in contrast with the SHG concept that had been promoted in many countries as well as in several States of India. The NHGs here were to be forums for planning and development action too. The concept of such NHGs too has peculiar roots in Kerala's development history. And the very concept of forming groups around neighbourhoods had been ingrained in traditional forms of community organization in the state.

In short, the Kudumbashree idea appears to have evolved through the community mobilization experiments in Alappuzha and Malappuram, also drawing in from the various civil society initiatives in community mobilization for different purposes. The Kerala CDS model, as recognized widely, evolved from the Alappuzha and Malappuram experiments. However, these initiatives themselves were informed by the experiences of certain traditional community organizations and practices.

As pointed out by Rajeev Sadanandan, who was the district collector at Malappuram during the experiment there, women in NHGs fixed 2% interest rate on the credit availed from the groups based on their experience in traditional organizations.

Eventually it was the decentralization of powers to PRIs and the People's Plan Campaign set the stage for formation of Kudumbashree units.

3.4 FINANCIAL INCLUSION

The Reserve Bank of India setup a commission (Khan Commission) in 2004 to look into Financial Inclusion and the recommendations of the commission were incorporated into the Mid-term review of the policy (2005-06). In the report RBI exhorted the banks with a view of achieving greater Financial Inclusion to make available a basic "no-frills" banking account. In India, Financial Inclusion first featured in 2005, when it was introduced, that, too, from a pilot project in UT of Pondicherry, by Dr. K. C. Chakraborty, the chairman of Indian Bank. Mangalam Village became the first village in India where all households were provided banking facilities. In addition to this KYC (Know your Customer) norms were relaxed for people intending to open accounts with annual deposits of less than Rs. 50, 000. General Credit Cards (GCC) were issued to the poor and the disadvantaged with a view to help them access easy credit. In January 2006, the Reserve Bank permitted commercial banks to make use of the services of non-governmental organizations (NGOs/SHGs), micro-finance institutions and other civil society organizations as intermediaries for providing financial and banking services. These intermediaries could be used as business facilitators (BF) or business correspondents (BC) by commercial banks. The bank asked the commercial banks in different regions to start a 100% Financial Inclusion campaign on a pilot basis. As a result of the campaign states or U.T.s like Pondicherry, Himachal Pradesh and Kerala have announced 100% financial inclusion in all their districts. Reserve Bank of India's vision for 2020 is to open nearly 600 million new customers' accounts and service them through a variety of channels by leveraging on IT. However, illiteracy and the low income savings and lack of bank branches in rural areas continue to be a road block to financial inclusion in many states. Apart from this there are certain in Current model which is followed. There is inadequate legal and financial structure. India being a mostly agrarian economy hardly has schemes which lend for agriculture. Along with Microfinance we need to focus on Micro insurance too.

3.5 Financial inclusion: Concept and definition

It is a method of offering banking and financial services to individuals. It aims to include everybody in society by giving them basic financial services regardless of their income or savings. It focuses on providing financial solutions to the economically underprivileged. The term is broadly used to describe the provision of savings and loan services to the poor in an inexpensive and easy-to-use form. It aims to ensure that the poor and marginalized make the best use of their money and attain financial education. With advances in financial technology and digital transactions, more and more startups are now making financial inclusion simpler to achieve.

3.6 Objectives of financial inclusion

The objectives of financial inclusion are to provide the following:

- A basic no-frills banking account for making and receiving payments
- Saving products (including investment and pension)
- Simple credit products and overdrafts linked with no-frills accounts
- Remittance, or money transfer facilities
- Micro insurance (life) and non-micro insurance (life and non-life)
- Micro pension

3.6.1 Why is financial inclusion important?

Financial inclusion strengthens the availability of economic resources and builds the concept of savings among the poor. Financial inclusion is a major step towards inclusive growth. It helps in the overall economic development of the underprivileged population. In India, effective financial inclusion is needed for the uplift of the poor and disadvantaged people by providing them with the modified financial products and services.

3.7 Financial inclusion in India: Important Schemes

PMJDY: Around 192.1 million accounts have been opened under the Pradhan Mantri Jan Dhan Yojana (PMJDY). These zero-balance bank accounts have been accompanied by 165.1 million debit cards, a life insurance cover of Rs 30,000 and an accidental insurance cover of Rs 1 Lakh. "**Pradhan Mantri Jan-Dhan Yojana (PMJDY)**" under the National Mission for Financial Inclusion was launched initially for a period of 4 years (in two phases) on 28th August 2014. It envisages universal access to banking facilities with at least one basic banking account for every household, financial literacy, access to credit, insurance and pension.

PMJDY has provided a platform for the three social security schemes viz.

*Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY)

*Pradhan Mantri Suraksha Bima Yojana (PMSBY)

***Pradhan Mantri Mudra Yojana (PMMY):-** Pradhan Mantri MUDRA Yojana (PMMY) is a scheme launched by the Hon'ble Prime Minister on April 8, 2015 for providing loans up to 10 lakh to the non-corporate, non-farm small/micro enterprises. These loans are classified as MUDRA loans under PMMY. These loans are given by Commercial Banks, RRBs, Small Finance Banks, MFIs and NBFCs.

The Government has decided to extend the comprehensive PMJDY program beyond 28.8.2018 with the change in focus on opening accounts from "every household" to "every adult", with following modifications:_ :

- (i) Existing Over Draft (OD) limit of Rs. 5,000 revised to Rs. 10,000.
- (ii) No conditions attached for active PMJDY accounts availing OD upto Rs. 2,000.
- (iii) Age limit for availing OD facility revised from 18-60 years to 18-65 years.
- (iv) The accidental insurance cover for new RuPay card holders raised from existing Rs.1 lakh to Rs. 2 lakh to new PMJDY accounts opened after August 28th 2018.

3.7.1 Benefits under PMJDY

One basic savings bank account is opened for unbanked person.

- a. There is no requirement to maintain any minimum balance in PMJDY accounts.
- b. Interest is earned on the deposit in PMJDY accounts.
- c. RuPay Debit card is provided to PMJDY account holder.
- d. Accident Insurance Cover of Rs.1 lakh (enhanced to Rs. 2 lakh to new PMJDY accounts opened after 28.8.2018) is available with RuPay card issued to the PMJDY account holders.

- e. An overdraft (OD) facility up to Rs. 10,000 to eligible account holders is available.
- f. PMJDY accounts are eligible for Direct Benefit Transfer (DBT), Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY), Atal Pension Yojana (APY), Micro Units Development & Refinance Agency Bank (MUDRA) scheme

3.8 Financial Inclusion in Kerala

In Kerala PMJDY is commonly used by the people

3.9 State Bank of India in Kerala

There are 1518 **State Bank** Of India branches available in 14 districts of **Kerala state**.

3.10 E-Shakti or Digitisation of SHGs

E-Shakti is an initiative of Micro Credit and Innovations Department of NABARD in line with our Hon Prime Minister Sri Narendra Modi statement, '**We move with the dream of electronic digital India**'. Digital India is Rs 1.13-lakh Crore initiative of Government of India to integrate the government departments and the people of India and to ensure effective governance. It is to "transform India into digital empowered society and knowledge economy".

Keeping in view the Government of India's mission for creating a digital India, NABARD has launched a project for digitization of all Self Help Group (SHG) in the country.

3.11 Aims and Objectives of E-Shakti programme

The broader aim of the programme is to support the flagship programme of the Government of India i.e. Prime Minister Jan Dhan Yojna (PMJDY) by way of:

- a) Integrating SHG members with the national Financial Inclusion agenda;
- b) Improving the quality of interface between SHG members and Banks for efficient and hassle free delivery of banking services;
- c) Facilitate convergence of delivery system with SHGs using Aadhaar linked identity

3.12 Emergency Credit Line Guarantee Scheme (ECLGS):

As part of the Aatma Nirbhar Bharat Abhiyaan and as a specific response to the COVID pandemic, Emergency Credit Line Guarantee Scheme was launched on 23.05.2020 to support eligible Micro, Small and Medium Enterprises (MSMEs) and business enterprises in meeting their operational liabilities and restarting their business in the context of the disruption caused by the COVID-19 pandemic.

ECLGS 1.0

Under ECLGS 1.0, fully guaranteed and collateral free Guaranteed Emergency Credit Line (GECL) from Scheduled Commercial Banks, Financial Institutions, NBFCs is provided to eligible MSME units, business enterprises and individual loans for business purposes to the extent of 20 per cent of their entire outstanding credit as on 29.2.2020. The amount of GECL funding under ECLGS 1.0 to the eligible MSME borrowers is up to 20 per cent of their outstanding credit up to Rs. 50 crore as on 29.2.2020, subject to the account being less than or equal to 60 days past due as on that date. The loans provided under ECLGS 1.0 will have a 4-year tenor, with a 12-month moratorium on repayment of principal. Interest rates under the Scheme are capped at 9.25% for banks & FIs and at 14% for NBFCs.

ECLGS 2.0

The Scheme has been extended through ECLGS 2.0 for the 26 sectors identified by the Kamath Committee and the health care sector. Entities with outstanding credit between Rs. 50 crore to Rs. 500 crore as on 29.2.2020 are eligible subject to the account being less than or equal to 30 days past due as on 29.2.2020 are eligible under ECLGS 2.0. The eligible entities/borrower accounts shall be eligible for additional funding up to 20 per cent (which could be fund based or non-fund based or both) of their entire outstanding credit (fund based only) as a collateral free Guaranteed Emergency Credit Line (GECL), which would be fully guaranteed by NCGTC. The loans provided under ECLGS 2.0 will have a 5-year tenor, with a 12-month moratorium on repayment of principal.

State-wise status of implementation of ECLGS: Top 10 states are

- a) **In terms of number of guarantees issued** – West Bengal, Orissa, Maharashtra, Uttar Pradesh, Bihar, Tamil Nadu, Assam, Karnataka, Kerala, Madhya Pradesh.
- b) **In terms of amount of guarantees issued** – Maharashtra, Tamil Nadu, Gujarat, Uttar Pradesh, Karnataka, Delhi, West Bengal, Rajasthan, Haryana & Telangana.

CHAPTER 4

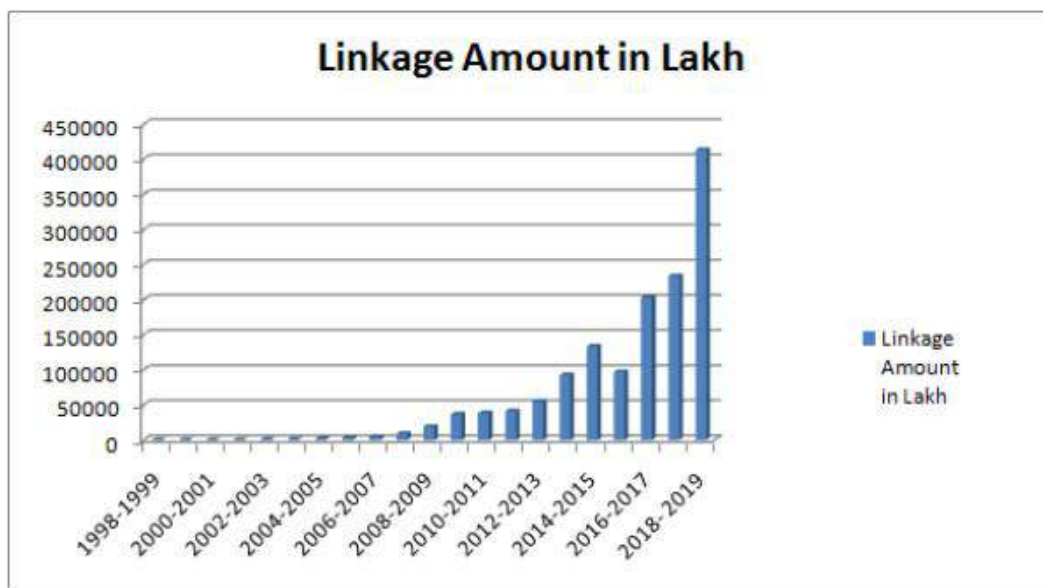
DATA ANALYSIS

The present chapter deals with the analysis of data collected from secondary sources.

They are graphically represented below:

The Bank linkage program has made inclusive growth possible by providing easy access to bank loans without any physical collateral. The efficiency and effectiveness of the NHGs are verified on the basis of some objectively verifiable and easily identifiable parameters. NABARD has developed a 15-point index for rating NHGs on the basis of which they will be allowed to link with various banks under the Linkage Banking Scheme. The total amount which has been mobilized under linkage banking is Rs. 9,34,400 lakhs (**current live linkage**) and **1,86,682** NHGs have availed of the loans. The linkage loans may be raised directly by the NHG or as bulk loan through the CDS

4.1 Linkage Amount wise graph



Source: <https://www.kudumbashree.org/>

4.2

Bank group	Rural	Semi urban	Urban	Metropolitan	Total
SBI and its associates	7903	6510	4216	3536	22,165
Nationalized banks	20,666	15,981	12,296	11,111	60,054
Other public sector banks	338	470	455	361	1624
Private sector banks	4082	6155	4320	4429	18,986
Foreign banks	8	12	57	245	322
Regional rural BANKS	14,281	3628	1029	205	19,143
Grand total	47,278	32,756	22,373	19,887	122,294

Source: Reserve Bank of India

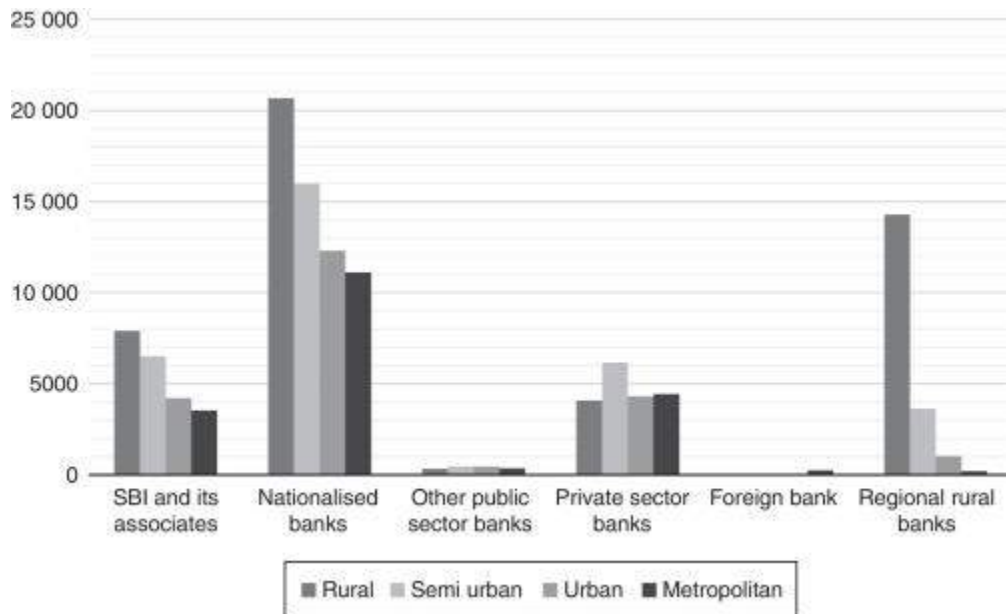
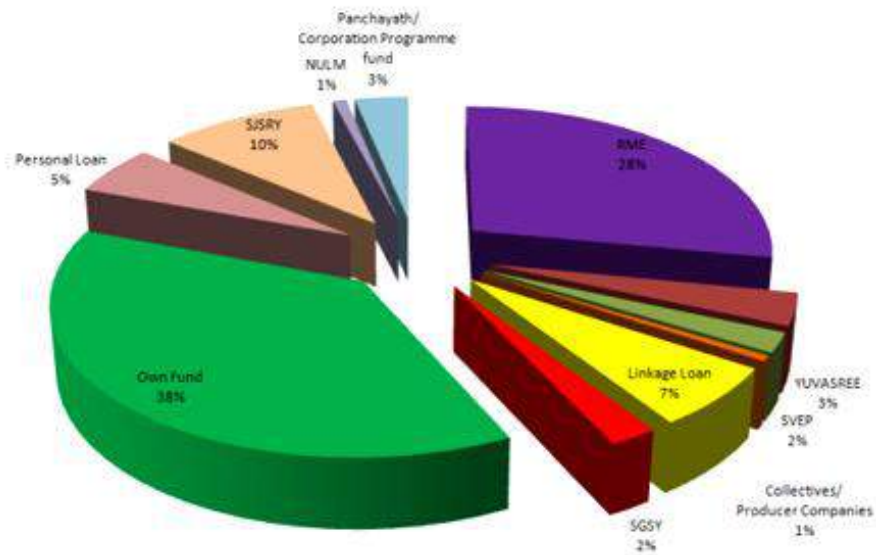


Fig shows the Bank group as well as population wise growth trend of number of bank branches over the India as on 31st December 2014. It is clear from the graph that SBI and its associates, public sector and regional rural banks are operates more in rural areas compared to others. The overall growth in rural and semi urban areas is comparatively more compared to urban and metropolitan. The private sector banks dominate in semi-urban areas with 6155 bank branches whereas foreign banks dominate in metropolitan area. The total number of functioning bank branches are 122, 294 across the country.

ME started under Various Schemes



4.3

Source: Kudumbashree Mission

In the pie chart shown below, shows Micro enterprises started under various schemes. 7% has been used for linkage loan, 38% has been used for Own fund, 5% personal loan, 7% linkage loan, 28% for RSME, 10% for SJSRY, 3% for YUVASREE, 2% for SGSY AND SVEP and only 1% for Collectives or producer companies.

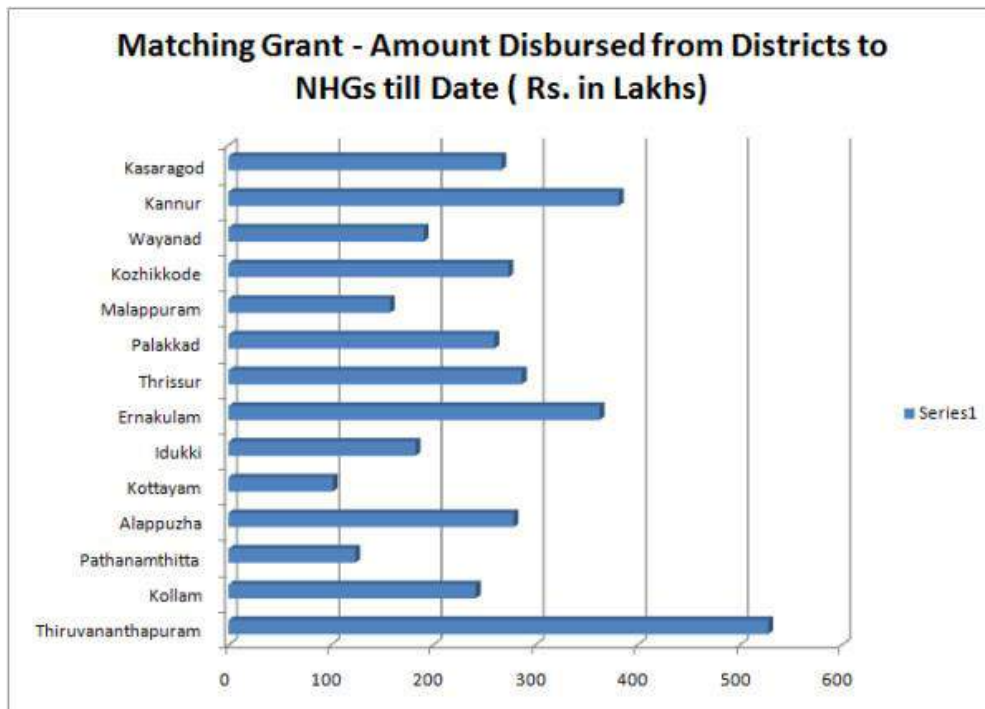
4.4

Micro Finance	
Thrift	5,091.45
Internal Lending	20,449.66 Cr
Live Linked (NHGs)	2,34,803
Cumulative Linkage Loans	20,335.47 Cr
Total No. of KASS Members	355

Source: Kudumbashree Mission

From the table below we can say that Cumulative linkage loans were Rs 20,335.47 Crores and Internal lending was Rs 20,449.66 crores. It shows an improvement in the Micro Financing

4.5



Source: Kudumbashree Mission

From the bar graph given above, we can say that Trivandrum district has got the highest NHG till date (Rs 5,00,000) followed by Kollam District with Rs.2,110,000

CHAPTER 5:

SUMMARY, FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 SUMMARY

The project entitled, 'Role of State Bank of India in Financial Inclusion of Kudumbashree Units: A case study in Trivandrum District' analyses the role played by Bank. The purpose behind this chapter is to summarize the chapters that provided useful discussions on the topic.

The present study consists of five chapters. Chapter 1 is an introduction chapter that deals with the statement of the problem followed by objectives, hypothesis, methodology, scope of the study, tools used to analyse and limitations of the study.

Chapter 2 deals with the review of literature based on the studies done over the past years. Chapter 3 provides an overview of the State Bank of India, Financial Inclusion and Kudumbashree units in Kerala. Chapter 4 consists of data analysis collected using secondary methods. Chapter 5 tells us about summary of our analysis, findings, Conclusion and some valuable Suggestions to improve in future.

5.2 FINDINGS OF THE STUDY

Findings drawn from the study are as follows:-

- * The attitude towards microfinance revealed that 98 percent (98%) had favorable attitude towards microfinance.
- * 99% of the people were very much aware about PMJDY scheme by Government of India
- * Trivandrum district stands highest on receiving NHGS receiving matching grant (Rs.12534)
Followed by Kollam district (Rs.6897)
- * 33548 NHGs have SBI Accounts out of this 4,179 availed bank loan (13%)

5.3 SUGGESTIONS

The following suggestions have emerged from the study to strengthen microfinance initiatives for economic empowerment of women:

1. Bank employees should be able to maintain a good relationship with the Kudumbashree members.
2. In most of the group based enterprises, group solidarity was found to be a major problem. In order to circumvent this issue, proper group based training and awareness programme must be organized.
3. The bank linkage of the SHG groups was literally low and hence this has bearing on the quantum of loan availability. So, the promoters of the SHG should take serious attention in maximum SHG-bank linkage so that adequate loan for economic activities will be available.
4. The Chairman of the Community Development Society (CDS) and coordinators of SHGs should see that the office bearers of SHGs are rotational so that every member of the group is involved in leadership activities, accounting, etc. At present, most of the office bearers continue as long as they wish or till other members voluntarily willing to take up the responsibility.
6. There is some problem for respondents like lack of proper guidance, proper and timely guidance must be provided to them according to their needs. Officials related to the following factors: Financial products and Service, Service providers, Banking procedures. Kudumbashree should conduct awareness programmes will definitely gives improvement in future for all those who need to avail loan for the education of their children.
7. Give awareness about different financial inclusion schemes implemented by the Government of India or State governments respectively.
8. The bank should take necessary steps to provide awareness about the operating systems of ATM.

.5.4 CONCLUSION

To conclude, Financial Inclusion is critical to the process of development of the economy. It plays a crucial role in the alleviation of poverty and in the all round progress of the nation. Organization of women into Kudumbashree is an effective way to achieve financial inclusion. It is evident from the present study that the Kudumbashree project in Trivandrum has been instrumental in the economic, political, social/cultural, personal and familial empowerment of members. In spite of the different constraints and challenges, the Kudumbashree project has the potential to transform the entire economy of the State. The Bank can also play a commendable role in the step by step growth of those who are deprived of access to financial services. State Bank of India will be a Role Model to other Public sector banks and organizations.

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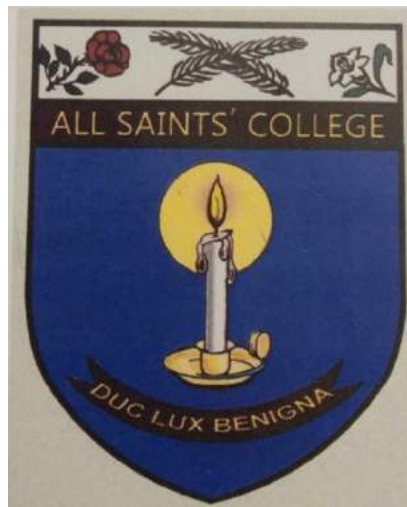
ROOFTOP FARMING IN KERALA : A CASE STUDY IN TRIVANDRUM

First Degree Programme

In

Economics under CBCS system

ALL SAINTS' COLLEGE



YEAR: 2020-2021

ROOFTOP FARMING IN KERALA : A CASE STUDY IN TRIVANDRUM

Project submitted to the University of Kerala

In partial fulfillment of the Degree of Bachelor of Arts

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2020-2021

CERTIFICATE

This is to certify that the dissertation titled “**Rooftop farming in Kerala : A Case study in Trivandrum**” is a record of studies carried out Ardha.v.s,Praveena.s.prabhu , Rakhi.j.s , Roshni Roy,Abhirami .m.g at the Department of Economics, All Saints’ College, under my guidance and submitted to the University of Kerala in partial fulfillment of the Degree of Bachelor of Arts, First Degree Programme in Economics under CBCS System.



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CHAPTER I

INTRODUCTION

1. INTRODUCTION

“There is no gardening without humility. Nature is constantly sending even its oldest scholars to the bottom of the class for some egregious blunder”: - ALFRED AUSTIN

Terrace farming is an alternative agricultural system which originated early in the 20th century in reaction to rapidly changing farming practises. Rooftop farming is known as rooftop gardening or terrace cultivation. It is a type of farming on the roof of the building for high density cities. The green rooftop farming as a counter balance to this have made in such density populated area. It comes as no surprise, there for that roof area are needed for the production of fruits, vegetables and herbs. Organic farming can be defined as: an integrated farming system that strives for sustainability, the enhancement of soil fertility and biological diversity, with rare exceptions, prohibiting synthetic pesticides, antibiotic synthetic fertilizers, genetically modified organisms and growth hormones. Organic farming is a production system which avoids or largely excludes the use of synthetically compounded fertilizers, pesticides, growth regulators generally modified organism and livestock food activities. A vegetable garden on the rooftop offers may environmental benefits. Supply routes and emissions are minimized, as the garden is closed to the goods are fresh when delivers and there for, tastier. And plants fitter pollution from the air thereby contributing to an improved climate in towns and cities. A roof garden is a garden on the roof of building. Besides the decorative benefit, roof plantings may provide food, temperature control, hydrological benefits, and in large scale it may even have ecological benefits.

The practice of cultivating food on the rooftop of buildings is sometimes referred to as rooftop farming .Rooftop farming usually done using green roof, hydroponics air systems or container garden. A roof top garden can delay run off. Roof top gardens can delay peak flow and retain the run-off for later use by the plants. In an accessible rooftop garden, space becomes available for localized small -scale urban agriculture, a source of local food production. An urban garden can supplement the diets of the community it feeds with fresh produce and provide a tangible tie to food production.

Available gardening areas in cities are often seriously lacking, which is likely the key impetus for many roof gardens. The garden may be on the roof of an autonomous building which takes care of its own water and waste. For those who live in small apartments with little space, square foot

gardening or can be a solution. These use much less space than traditional gardening. These also encourage environmentally responsible practices, eliminating tilling, reducing or eliminating pesticides, and weeding, and encourage the recycling of wastes through composting.

Terrace gardens and farming in urbanized areas are as old as Babylon. But today Urban Greening and Urban Farming has acquired a new significance due to the current trend of rapid urbanization around the world. In India, the share of urban population was just 30 percentage in 2010. A report by UNDP estimates that this will rise to 40 percentage in 2030 and over 50 percentage by 2045. The urban population in India is set to increase from the current 3.5 billion to more than 6 billion by 2050. Areas under cultivation increase by just a miniscule 2 percentage annually in comparison to the Urban growth. The combined issues of population explosion, rapid urbanization and climate changes are posing a great threat to food supply. The Farmer population has decreased and various factors contribute to the poor yield of existing Farmlands. The youth are taking to non agricultural sectors. Thus the urbanizing communities are confronted with urban growth, changing life –styles and food security problems. The urban population living and employed in cities has to source their food supply from the market. As much as 70 percentage of their income has to be spending on buying food. Thus they are vulnerable to the fluctuations in the market prices. To support this vulnerable population is a great challenge for urban Governance. In many parts, it is seen that the urban poor are utilizing vacant plots in the city to grow vegetables to enhance their income also. India being an agricultural country, urban farming has been a traditional activity at household level which has its origin household kitchen waste management.

Rooftop farming is fairly a ecological concept in Kerala but there is a progressive increase in the number of green roofs and rooftop farms. Eco-conscious and organic-friendly urbanites are acknowledging the importance of sustainable living as it is the need of the hour to sustain in the change in ecological conditions.

A Rooftop farming is cultivated in urban region in environmentally sustainable manner. It will also increase the floral area in the urban area for reduction of carbon-di-oxide load by photosynthesis, where heavy pressure of automobile and transportation create a big problem for public health. Since, vegetable plants do not produce strong root and shoot system, it can be grown in small container having little soil without creating any damage in the roof. Therefore, rooftop vegetable should be promoted in all possible areas through organic farming to produce good quality and healthy vegetables to meet the public demand.

Advantages

There are several advantages of roof-top vegetable in production technique:

- **Utilization of free space of the roof**

There are large numbers of well tent constructed house in urban area. Roof-top of these houses get sufficient sun light throughout the year, but these space and solar energy become unutilized in absence of any crop production. Therefore, roof-top technique of vegetable production may provide a better opportunity to grow several type vegetables for efficient and sustainable utilization of free space and solar energy of roof.

- **Production of healthy vegetables**

The application of pesticide may cause accumulation of toxic chemicals in the food, which is highly dangerous for human consumption. This technique promotes the organic farming enable production by avoiding the application of pesticide, and provides pesticide free vegetable to grower which is the demand among public at present scenario. Increase vegetable production of fresh vegetables Utilization of free roof-top can increase the vegetable production area.

- **Harvesting of rain water in efficient manner**

It is well laydown that maximum rain water utilization in agriculture sector is highly profitable, because it makes availability of sufficient amount of water for good growth of crop without any cost. Rain water on the roof-top become unutilized in absence of vegetable plants. This technique can help to vegetable grower to utilize the rain water in an effective way, especially ' during the rainy season

- **Empowerment of women / family members**

In India, maximum women are restricted in house hold activity. There are large quanta of human resources as women, who cannot offer their participation in any productive activities in spite of being strong and having desire of employment due to the traditional within the periphery of 6house. This technique gives the chance to women to engage themselves in the production of vegetable without any hindrance of house-hold activities, which not only increase self employment among women, but also make them able to produce the healthy vegetable for the family.

- **Increase the saving of the family**

Grower reduces his dependency on high priced market vegetables. Grower can also increase his saving by selling his/her surplus organic and healthy vegetables in the local area. This technique reduces the application of high priced inorganic fertilizer, pesticide and insecticide. This reduction of the application of inorganic fertilizer and chemical also helps to growers to increase of their saving. Utilization o f kitchen waste Huge amount of kitchen wastes are generated through all urban populations, which degrades environment in absence of proper treatment and management.

- **Reduction of environmental pollution**

Recycle, reduce and reuse are the best idea to minimize the solid waste. The management of plastic waste is a global debate at the present time. But, large and used plastic bag can be utilized as grow-bag in this technique, which helps in minimizing the dumping of plastic in open environment. In addition to plastic waste, household-generated organic solid wastes are also reduced by adopting this technique.

1.2 STATEMENT OF PROBLEM

The agricultural system in Kerala is unique and distinct from other states in terms of land utilisation and cropping pattern. In 2021 kerala has 860/km² population density and TVM has 3910/ sqm. In Malthusian theory, he pointed that population growth increases in geometrically and food supply grows arithmetically.

The continuous use of chemical pesticides and fertilizer cause several health issues. Hence everyone should do roof farming for best organic food item. It will reduce the health issues and scarcity of food items. The present study analyse the roof top farming in Kerala in general and Trivandrum Corporation in Particular.

1.3 SCOPE OF THE STUDY

In the recent years of studies, shows the growth of rooftop farming . There is a tremendous increase in the cultivation of crops in rooftop of the houses, especially in city areas. While cultivating crops in rooftop will increase the production of crops and nutritious of vegetables. Rooftop farming can provide solution to increased food demand and also can promote a sustainable and liveable city. Local fresh and safe food can be ensured through roof gardens in Trivandrum city. The aim of the study is to explore the present practice and challenges of rooftop farming . This study aims at exploring the existing practice and associated challenges of rooftop farming. What makes this study unique is the identification of benefits from urban sustainability perspective and calculation of the monetary value of economic and environmental benefits of rooftop farming in Trivandrum city. The geographical scope of this study is limited area of Trivandrum district, from which primary data is collected. The study will help us to know the customer rooftop farming can support environment by improving air quality, reducing carbon in the atmosphere and can benefit society by reducing storm water management cost. One of the

aim of this survey was to encourage the maximum people to practice rooftop farming and want to provide at least 50% of roof space for rooftop farming. Finally some recommendations have been suggested to improve rooftop farming practice and encourage more people to practice rooftop farming in future.

1.4 OBJECTIVES

1. To examine the economic aspects of rooftop farming ..
2. To examine the gvt efforts in promoting rooftop farming .
3. To examine whether rooftop farming is related to income of the households

1.5 HYPOTHESIS

Terrace farming to grow organic crops is economical.

1.6 METHODOLOGY

The research study relies on both primary and secondary data. Secondary data is collected from magazines, journals, newspapers, internet, etc. Simple random sampling is used to gain an unbiased representative opinion on perception towards rooftop farming. Primary data is collected by 50 house holds practising terrace farming from different parts of the city. For this purpose, a detailed and well questionnaire is designed. The data collected will then be tabulated and analysed with statistical tools.

A. Research Design :- The study is both descriptive and analytical in nature.

B. Data source :- The study includes both primary and secondary data .The secondary data has been collected from various govt publication and economic review and planning boards. The primary data collection is done by conducting a survey among the households of kazakuttom corporation, in order to gather relevant information. Data is collected from 50 households by survey using schedule designed for the purpose.

C. Sampling plan:- Sampling plan method used in the study was simple random sampling. It is also known as probable sampling, because each and every item in the population was in equal chance of inclusion in the sample.

D. Data analysis and interpretation :-The data collected were recorded, tabulated analysed and analyzed with the help of appropriate tool. The study has employed simple statistical tool like percentage.

1.7 LIMITATION

The study is subjected to certain limitations. The sample respondents may not represent the entire population. The answers may include biased individual responses to particular aspects. It was difficult to collect the responses of the farmers and most of the respondents were unwilling to provide accurate information. The behaviour of the farmers is dynamic in nature and it is tough to make strong conclusions from the study. The confined geography of targeted area and limited sample size could also cause variation from the rooftop farming.

1.8 CHAPTER SCHEME

The first chapter of this project deals with the introduction which includes an overview of rooftop farming and its emerging significance. The chapter also deals with the statement of problem, scope of study and objectives of the study along with hypothesis. Further the limitations of the project were stated. Review of literature served to identify the known parameters of this study and enabled to have acquaintance with the topic in a general manner. The second chapter provides an outline of production of crops in rooftop farming in India; the chapter is also introspection in understanding the influence of rooftop farming around the globe, in India, in Kerala and ultimately the target area of this study-Trivandrum. The third chapter deals with data analysis and interpretation, and fourth chapter inculcates the findings, suggestions and conclusions derived from the study.

1.9 REVIEW THE LITERATURE

The literature review on ROOFTOP FARMING reflects the findings of various researchers and academicians. Roughly reputed national and international journals, magazines and annual reports are presented by the authors below for easy understanding. In this study I have reviewed only few important ones to understand the concept and to link them. These are:

- Sakthi Ganapathi (2011) argued that agricultural development in the country has mainly been focusing on maximizing yields, especially during the past 5-6 decades. Though the yields increased substantially, farmers and the environment had to pay a heavy price for this development. With low prices being offered for farm produces and the rising costs of chemical inputs having made agriculture unprofitable, farmers sought new ways to increase their farm incomes in order to survive.
- According to Alagesan (2007) reducing input cost is the immediate need of the hour for farmers. Agriculture scientists would like the farmers to realize that reduction of chemical based fertilizers and pesticides can benefit both the man and earth over the long run, and in particular for farmers, as a major portion of whose money is spent on buying these chemicals. The focus, they believe must shift to educating farmers on the value of waste matter being generated in both their fields and homes and the technology to convert these waste into wealth. An innovative model can be designed for improving farm productivity in a sustainable manner through integrating farm resources by recycling farm and home wastes.
- Abraham (2007) has come up with the advantage with multicropping and some other allied activities such as dairy, poultry, and vermicompost units is that even if there is an unexpected loss from one of the crops, the income from the others will help the farmer to make up for it. He cited a case of a farmer who was growing about 500 areca nut palms in his 8-acre land and when a majority of the trees started to die due to yellow leaf infestations, he

approached the Krishi Vigyan Kendra of the Indian Institute of Spices, (IISR) Kozhikode, for help. “Realizing the benefits of organic farming, I found a young farmers’ SHG (Self Help Group) for organic farming and as a first step towards organic farming he was trained in vermicomposting and coir pith composting”.

- Somala Devi (2008) opined that self-reliance is imperative for any farm related activity. Whether the farm is big or small, it really does not matter as long as it is self-reliant. “What I mean by self-reliance is that a farmer should not depend on any external sources for seeds, manures or other items. Everything must be available in the farm itself,” she said.
- Arunachalam (2008) says fertile soil and adequate water resources, though important, cannot alone ensure a good yield. Inputs such as fertilizers and manures are essential. “Today chemical fertilizers cost a lot, and a sudden shortage in their availability makes a small farmer desperate for an alternative”.

Organic practices avoid investment on costly chemicals. There is a growing body of evidence to suggest that in the past 4-5 decades there has been an excessive dumping of chemical toxins on the soil. As a result, the soil has become barren and ground water toxic, in many places. Contrast this with organic inputs that are safe, nontoxic, and cost much less. For example, if using chemical pesticides and fertilizers for growing a crop in a hector works out to about Rs. 6,000- Rs. 7,000 the cost of growing the same crop using organic inputs may come to only about Rs.500- Rs. 1000, according to Rajareega (2008).

- Balakrishnan, G (2009) has a tree farm with a variety of trees primarily timber and fodder rather than fruit trees. The trees include teak, eucalyptus, guava, maramalli, gooseberry, etc. He is very particular about using organic matter and collects whatever organic matter is available in the village and makes it into compost.

- Nagaraj N (2009) is a well-known jasmine flower grower. He grows banana, turmeric, and vegetables organically. Panchakavya, herbal pesticide and vermi-compost are all prepared on the farm. Surplus is sold.
- Poongodi, S and selvam, R (2009) have started vermi farm with the aim of producing vermi-compost. They also wanted to create awareness and train farmers in vermi composting. The farm is 2.6 acres and has more than 400 trees of 80 different species. Around $\frac{1}{4}$ portion of the farm is being developed as a model farm for training programmes.
- Murthy K. Srinivasa and Nigam G.L. (2001), Organic farming and pest management. They state that organic farming systems, management, balanced use of fertilizers, use of bio-pesticides and botanicals form part of integrated pest management strategies to control that losses owing to pests and diseases (10 to 30 per cent) hold the key to successful farming.
- Gaur A.C. (2001), Organic manure a basic input in organic farming. The paper explains the importance of organic manure in organic farming. Many of the growing successfully crops like coconut, spices, banana, grapes etc. with the liberal use of organic manures.
- Pal S.S., Singh Ravindra, Biswas, Chinmay and jaya M.C. (July 2005), Prospects and problems of growing crops in upper genetic plains region. This study focused that green revolution technology has undoubtedly increased production and labour efficiency. But it showed remarkable side effects on field and farm-level diversity as well as on environment.
- Thapa V. and Tripathy P. (2006), Organic farming in India problem and prospects. This book explains the concept, merit demerit, input and methods of organic farming as compost, organic manures, bio fertilizer effective micro-organism technology crop residue and weed management, pest management.
- Pawar Vishal (2011), Problems and Prospects of organic farming in Dhule district. This is M. Phil Dissertation consist 5 chapters and focused

concept, merit, demerits, problems, challenges and the trend of organic farming in Dhule district.

- Pawar Vishal and Patil V.Y. (2006), Organic farming a New Trend in agriculture. This paper presented in 27 IIG Meet Jammu. In this paper they studies the trend of organic farming in shindkheda tahsil management, balanced use of fertilizers, use of bio-pesticides and botanicals form part of integrated pest management strategies to control that losses owing to pests and diseases (10 to 30 per cent) hole to successful farming.
- Nagarajan (1992) presented the case of a progressive farmer of Hosahalli in Shimoga Taluk of Karnataka who raised sugarcane varieties on his farm without loss in yields or soil fertility by using the trash as manure without burning it, which is the common practice followed by farmer. Burning of cane fields leads to irreparable environmental damage and helps to increase the atmospheric temperature of the areas which is not desirable. The leaf trash mulched into the soil without burning, on complete decomposition supplies about 100 kg of Nitrogen and 100 kg of K₂O per hectare. In this novel method, the farmer has been getting an average yield of 135 to 140tonnes per hectare for the past 25 years when compared to national yield of cane per hectare (40 tonnes). It is very high.
- Rahudkar and Phate (1992) narrate the experiences of organic farming in Maharashtra. Individual farmers growing sugarcane and grapes, after using vermi compost, saw the soil fertility increased, irrigation decreased by 45 percent and sugarcane quality improved. The authors say that net profits from both the sugarcane and grape crops are high organic farms.
- Regi Thames (1993), from his case study found that transition from conventional to ecological agriculture yielded more. In the first year, the result was poor, yields were still less. The second year onwards, yields and soil began to improve. By the third-year yields started showing significant improvement. Coconut yielded 240 percent increase along with the

increased yield of 480 percent from inter crop. In rubber, the yield came down by the 20 percent, but when compared with the profit, it was remaining the same. He also concluded in his research that the alternative ecological practices were found to be superior to conventional agriculture.

- Anil Agarwal (1993), Stated that in Tamil Nadu some Municipal Corporations have began to sell organic manure to farmers which will not only solve the problem of waste disposal, but also supplement their budgets. He cited the case of Thanjavur Municipal Corporation which sold 14.790 tonnes of organic manure for Rs. 1.69 lacks in 1992-93. The manure consisted largely of wastes from slaughter houses and vegetables markets, besides domestic wastes.
- Balasubramanian (1994), Opined that the agricultural practices followed in organic farming are governed by the principles of ecology. It is not an alternative system of farming but part of the philosophy of life to know the true spirit and form of nature. Biologically active soil is the foundation of organic farming. Healthy plants grown in healthy soil are naturally more resistant to pests and diseases.
- Kannan (1995), Impressed that he has raised Basmati variety of paddy of 120 days duration during raby season (January to April) on three hectares and harvested an average of more than five tones per hectare. The crop was grown entirely on the basis of organic manure and biofertilizers and for plant protection eco-friendly botanical pesticides were used. Liberal quantities of farm yard manure, green leaf manure and neem cake formed the bulk the basic application. The total cost of cultivation per hectare was about Rs.9303.50 and a net profit of about Rs 40,000.00 could easily he realized per hectare of basmati.
- Margasagayam(1995),conducted comparative study of modern farming and natural farming in Pudukkottai district in Tamil Nadu and reported that there was less assurance of pest incidence in natural farming because of the

absence of fertilizer and pesticide application. Six natural farm of claimed to have achieved yields on a par with modern farming and others were confident that they would attain the break-even point within another few years.

- Harender Raj (1996), found that Metropolitan cities like Bombay, Delhi, Calcutta and Madras, Organic Farmed vegetables and fruits are available in the market and the farmers are getting much higher prices for their produce.
- Kaushik (1997), analysis the issues and policy implications in the adoption of sustainable agriculture. The concept of trades off has a forceful role to play in organic farming both at the individual and national decision-making levels. Public vis-a-vis private benefits, current vis-a-vis future incomes, current consumption and future growths, etc. are very pertinent issues to be determined. The author also lists a host of other issues.
- Anon (1998), emphasis on marketing the organic products on the basis of reputation and credibility. A farmer from UP who allotted a portion of his land exclusively for organic farming found that the yields of sugarcane, rice, wheat and vegetables were lower than those under chemical farming. An Englishman, settled in Tamil Nadu, who runs an organic farm in 70 acres planted with coffee, citrus, other fruits, rice, pepper and vegetables says that he does not earn a profit and does not have confidence in organic farming.
- Kumar and Jain, (2003), predicted that, there is a good demand for organic products in the domestic market, which is not matched by supplies. The linkages between the two do not exist which in turn discourage production. The wholesalers/traders play a major role in them distribution of organic producers as they originate from the small farms. Large farmers have access to supermarkets and own stalls for distribution. Mumbai,

Delhi, Kolkata, Chennai, Bangalore and Hyderabad are major domestic markets for organic products.

- Rao (2003), has suggested that before the beginning of the cultivation of organic crops, its marketability over the conventional produce has to be assured. Inability to obtain a premium price, at least during the period required to achieve the productivity levels of the conventional crop will be a setback. It was found that the farmers of organic wheat the Rajasthan got lower prices than those of the conventional wheat. The cost of marketing of both types of products was also same and the buyers of wheat were not prepared to pay higher prices to the organic variety.
- Chouichom and Yamao (2010) Organic farming is becoming popular as part of sustainable agriculture systems. The interviews enabled to compare their attitudes towards organic farming based on four aspects, namely: organic farming knowledge, environment, marketing and costs and benefits. Comparisons were made not only of socio-economic indicators, but also their opinions. Chi-square and t-test were employed to quantify correlations in this study.
- Arunachalam V.S. (2009) a small farmer from a rural background decided to farm and chooses to do it the ecological way. The special features of his farm are: Integrating goat rearing with crops; preparing panchakavya with goat products; mixing cattle urine with irrigation water; Vermiculture in between banana trees; Mulching in sugarcane; Single seedling plantation in rice; and Green manure preparation by sowing 20 kinds of crop seeds.
- Nallusamy R, and Shanti (2009) are tapioca farmers who have only recently converted their twenty-five-acre farmland to organic. The benefits were immediately visible. Ten acres of the 25 acres farmland are under tapioca plantation, turmeric is grown on five acres, coconut plantation occupies another six acres and the remaining four acres have a mixture of paddy, onions and vegetables. They prepare herbal pesticide, panchagavya

and vermi-compost and claim that with this combination of organic nutrients and pest management strategies no insects dangerous to the crops visit their field. Even rats do not dare to visit the farm, they confidently assert.

- Reeta Ganapathy (2009) has a five-acre plot of farmland and has become organic farmer since the past ten years. Earlier she used chemical fertilizers and with it one naturally had to also use pesticides and so on. Finding the fertilizer cost very high she switched to organic farming. She also realized that chemicals are needed each year to give the same results and this is what makes chemical farming so costly. Now with the cattle she own he is able to prepare panchakavya, for vermi-composting and make her own she is able to prepare panchakavya, do vermi-composting and make her own herbal pesticides

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CONCLUSION :::

Above studies has provided a panorama of rooftop agriculture. Examples are given where rooftop farming is practiced for community building and health, commercial production, ecology and landscape enhancement or knowledge production and sharing . Case studies, from a variety of contexts and cities, describe rooftop home gardens, community rooftop gardens, therapeutic rooftop gardens, research oriented and educational rooftop gardens, amongst others.

1.10RESEARCH GAP

Here, a detailed review of relevant literature in Rooftop farming is done. It reveals that a lot of studies on rooftop farming in kerala and Trivandrum have conducted economics aspects. Recent studies in rooftop farming is not available. The present studies analyse rooftop farming in Trivandrum.

CHAPTER II

HISTORY OF ROOFTOP FARMING

2.0 INTRODUCTION

From the beginning of recorded history, people have been building gardens on their roofs. From the famous Hanging Gardens of Babylon to the Rockefeller Centre in New York, the roof garden has been a part of civilised society. Rooftop gardens have been used as extensions of living rooms, displays of wealth and social status, gathering grounds for the elite, and places to escape the summer heat. They have also been used as insulation, a means of flood control, a place to grow food, and as camouflage. Green roofs have been an essential feature of vernacular architecture and in many instances has been vital to human survival. “ Modern “ civilisation is slowly rediscovering the astonishing benefits of vegetated roofs.

2.1 ORGANIC FARMING

Organic agriculture is one among the broad spectrum of production methods that are supportive of the environment. Agriculture remains the key sector for the economic development for most developing countries. It is critically important for ensuring food security, alleviating poverty and conserving the vital natural resources that the world’s present and future generations will be entirely dependent upon for their survival and well-being. The world populations will inevitably double by the middle of the twenty-first century, that we are soon to enter, that is in the space of just two generations. Over 90% of the developing nations, especially in Asia and to an ever greater extent will be in the urban areas which follow up the green revolution strategy (Rothschild 1998). Green revolution technologies such as greater use of synthetic agro chemicals like fertilizers and pesticides, adoption of nutrient responsive, high yielding varieties of crops, greater exploitation of irrigation potentials etc. has boosted the production output in most of

cases. Without proper choice and continues use of these high energy inputs is leading to decline in production and productivity of various crops as well as deterioration of soil health and environments. A rooftop garden is a garden on the roof of a building. Besides the decorative benefits, roof plantings may provide food, temperature control, hydrological benefits, architectural enhancement, habitats or corridors for wildlife, recreational opportunities, and in large scale it may even have ecological benefits. The practice of cultivating food on the rooftop of buildings is sometimes referred to as rooftop farming. Rooftop farming is usually done using green roof, hydroponics, or container gardens.

Organic farming gives importance to environmental protection and helps to sustain ecological issues such as soil conservation. Farmers who undertake organic farming practice crop rotation to enrich the soil with natural minerals resources. Organic farmers have to follow the norms set by the local organic farming association and they are not allowed to cultivate genetically modified crops. The minerals for the crop known as crop nutrients are given using insoluble nutrient sources through soil microorganisms that increase nitrogen levels in the soil. The important characteristics of organic farming is maximal but sustainable use of local resources, minimal use of purchased inputs, only as complementary to local resources, ensuring the basis biological functions of soil water nutrients human continuum, maintaining a diversity of plant and animal species as a basis for ecological balance and economic stability, creating an attractive overall landscape which given satisfaction to the local people, increasing crop and animal intensity , integrated crop/livestock system etc to minimize risk.

Agriculture is an important sector of the Indian economy, according for 14 percent of the nations GDP, about 11 percent of its exports, more than 60 percent of the population still relies on agriculture as its principal sources of income and it is also a source of raw materials for a large number of industries. With about 2.5% of global and resources, 4% of water resources and 17% of global population living in India, achieving food security by increasing agricultural production has to be at the core of India's agricultural development strategy. Situations assumes greater significant with the increasing population and growing economic prosperity. The role of agriculture on the economy of India may be considered in the light of the contribution it makes in three important aspects i.e., national income, employment and foreign exchange. India has a wide diversity of crops, among them food grains occupy a major portion of the land area. In the recent past, though the productivity of these crops has increased, the magnitude has been very small. In order to increase our national Income, the sustainable production of crops is imperative. The government has launched a number of programmes for increasing production of agriculture commodities. Many new initiatives have been taken to widen the food basket keeping in view the demand and nutritional requirements of the population. Accelerating the growth of agriculture production is therefore necessary not only to achieve an overall GDP Target of 8% during the 12th five year plan and meet the rising demand for food, but also to increase incomes of those dependent on agriculture to ensure

inclusiveness. The development of the agricultural sector has been therefore having just ended in itself; it has a direct and beneficial effect on overall economic development of the nation.

2.1.1 HISTORY OF ORGANIC FARMING

Many scientists at different levels have elaborated the concept of organic farming. The concept of organic farming was started 1000 years back when ancient farmers started cultivation near the river belt depending on natural resources only. There is brief mention of several organic inputs in Indian ancient literature like Rig-Veda, Ramayana, and Mahabharata etc. In fact, organic agriculture has its roots in traditional farming practice that evolved in countless villages and farming communities over the millennium. Organic farming is an oldest practice dating back to 'Neolithic age', practiced by ancient civilization like Mesopotamia, Hwang Ho basin etc. The conversion for traditional farming towards organic is by no means exhaustive, it does not illustrate that the trends are multi-factorial. Based on the literature, we conclude that there are four broad themes underlie in organic farming.

Profit/economic/financial issues, environmental concerns, Health and safety concerns and ideological/philosophical motives. The relative importance of these four themes does not appear to be consistent across the various studies, suggesting variation across countries, commodities, etc. Moreover, the relative importance of these studies appears to be changing over time. Organic farming practice is known since ages. The ancient Indian manuscripts also describe the importance of dead and decaying matter in nourishment of life and soil fertility, respectively.

Importance of organic manure and recycling post harvest residues has also been dealt in various sections of these literatures. Organic farming has been recognized worldwide for personal health, safe environment, food security and fight against global warming. Ideological, philosophical and religious beliefs have also triggered the use of organic farming with a commercial outlook taking care of environment and quality product.

An effort made by Fukuoka of Japan to develop natural farming principles by the experiments on farm over a number of years, needs a special mention here, similarly, such methods have been by a number of farmers in different parts of the country to develop alternative farming methods of their own on their farm. Experiments and success of such farmers are unique and such farmers are only a few. Their efforts are being named differently as "Organic Farming", natural farming, ecofarming, ecological agriculture, sustainable agriculture, permanent agriculture, permanent and bio-dynamic agriculture.

Organic farming was the original type of agriculture and has been practiced for thousands of years. For example, forest gardening a fully organic food production system which dates from prehistoric times, is thought to be the world's oldest and most resilient agro-

ecosystem. After the industrial revolution had introduced in organic methods, some of which were not well developed and had serious side effects. An organic movement began in the 1940s as a reaction to agricultures growing reliance on synthetic fertilizers and herbicidal weed control. The history of this modern revival of organic farming dates back to the first half of the 20 century at a time when there was a growing reliance on these new synthetic, inorganic methods. Organic Agriculture movement starting on 5th November 1972 in France with the establishment of the international federation of organic agriculture movement (IFOAM) with a total of 5 members, now there are more than 650 associations, institutes, schools co-operative and other legal entities in over 100 countries worldwide. IFOAM has defined organic agriculture as follows.

“Organic Agriculture includes all agricultural system that promote environmentally, socially and economically sound production of food and fibres. Recycling nutrients and strengthening natural processes help to maintain soil fertility and ensure sustained production-pests and diseases are controlled with naturally occurring means and substances according to both traditional as well as modern scientific knowledge. Organic agriculture excludes synthetic fertilizers and pesticides, and genetically modified organism”

2.1.2 METHODS OF ORGANIC FARMING

The farming practice which involves the use of eco-friendly methods to grow crops and the exclusion of synthetic products, such as chemical fertilizers, insecticides and pesticides are described as organic farming. It is practiced on 32.2 million hectares of land over the world. The international federation of organic agriculture movements carries out the task related to setting standards and regulations of organic farming activities worldwide. A holistic approach towards growing crops, organic farming methods helps apply simple and eco friendly technique in farming. Use of compost fertilizers, crop rotation and biological pest control, are some of the features of organic farming methods. The farming method that make use of various traditional agricultural practises like minimum tillage, composting, crop rotation, biological pest control etc and exclude the application of synthetic fertilizers, insecticides, growth regulators and genetic modification of crop species, are included in organic farming methods. Organic farming methods take an integrated approach in growing crops rather than exploiting the available natural resources. The use of organic farming method is aimed at enhancing the productivity of crops without the use of any kind of synthetic materials and adopting a sustainable approach towards farming.

Organic agriculture system is based on four strongly inter related principles under autonomous ecosystem management: mixed farming, crop rotation, and organic cycle

optimization. The common understanding of agricultural production in all type of organic agriculture is managing the production capacity of an agro-eco system. The process of extreme specialisation propagated by the green revolution led to the destruction of mixed and diversified farming and ecological buffer system. The function of this autonomous ecosystem management is to meet the need for food fibres on the local ecological carrying capacity. Production of organic agriculture accounts for 3-5% in Germany 10% in Australia and 1-2%in USA out of total marketed food and there is a steady growth. Awareness regarding organic movement is growing in Asia, too. The common practices are detailed below:-

- Soil fertility is maintained through cultivation of legumes, green manuring, green leaf manuring, crop rotation, inters and mixed cropping.
- Incorporation of organic materials of crop residues, application of farmyard manure and compost.
- Applications of bio- fertilisers, Azola, BGA, etc.
- Conservation of soil, water, flora and fauna including natural vegetation and world life.
- Organic farming emphasised an observance of ILO conventions of labour welfare and other rules relating to labour welfare and women`s and children`s rights.

2.2 ROOFTOP FARMING IN WORLD

People have been n planting rooftops since the beginning of recorded history. The earliest record go back to the ancient ziggurats of Mesopotamia , built between 4000 and 600 BC. The Hanging Gardens of Babylon are probably the most famous ancient paintings, with landscape terraces boasting trailing plants reaching a planted roof rope that was 75 feet above the ground. This living mountain in the desert was an engineering marvel. One of the first designed landscape was rooftop garden commissioned by Pope pius II in pienza, Italy, in 1463. In the U.S , rooftop gardens became popular in New York city in the 1890s . In fact , that`s where Madison Square Gardens gets its name. Fast forward to the late 20th century, Although rooftop gardens were planted and enjoyed mainly as a novelty for the wealthy, in the mid 1970s a new system was developed in Germany. “ The popularisation of green roofs began in the early 1970s in Germany when the first green roof system were developed and marketed on a large scale, “ says Paul Kephart, president of RANA creek, Monterey, California. The company has designed and

installed a wide range of residential and commercial rooftop gardens. “ Unlike former ‘ green roofs ‘ , this first approach offered reliable technology that provided sophisticated irrigation and protection against root ingress for rooftop gardens. Charlie Miller is considered a green roof guru . His company, Roofmeadow, based in Philadelphia, has landscape architects, civil engineers, horticulturalist and construction specialists who have been working to produce award winning, sustainable green roofs since 1997.

2.2.1 World Experience an Overview

In New York city, urban farmers practicing rooftop farming might be eligible for the NYC Green Roof Property Tax abatement programme, which offers a one year tax abatement of \$ 4.50/ square foot of green 31 roof, with a maximum abatement of \$ 10,000 or building tax liability, whichever is less. Brooklyn Grange, a commercial rooftop farm with average in Brooklyn and Queens, offers consulting, design and installation service for people interested in rooftop farming. Eagle Street Rooftop Farm, In Brooklyn is a 6,000 square foot green roof organic farm that offers free public programming and workshop. Green roof urban farming for buildings in high-density urban cities Many urban cities in the world are trying to enhance sustainability by improving urban greenery and promoting urban farming. By installing green roofs with urban farming, it is possible to achieve environmental, social and economic sustainability for the buildings in urban cities because it can contribute to the mitigation of environmental problems, enhancement of community functions and development of urban food systems. This paper presents the findings of a research to investigate green roof urban farming for high-density urban cities like Hong Kong. The benefits and potential of rooftop urban farming are examined; some experiences in the world are described. The characteristics and constraints of high-density urban cities are studied and the situation in Hong Kong is evaluated critically. It is hoped that the research information will be useful to promoting sustainable buildings and environment in urban cities

2.2.2 Experience in the world

In order to illustrate how rooftop farming could be set up and applied in urban cities, some interesting examples from different countries are presented. The rooftop farming ranges from simple containers to beds of soil covering the roof surface. Community development and commercial enterprises can also be established for large scale food production.

USA-- The potential for food production in urban cities in USA is great, and many model projects have demonstrated successfully that urban agriculture is both necessary and viable (Bay Localize, 2007; Brown and Carter, 2003; Davis, 2007; Nowak, 2004). A growing consumer demand for fresh, local, and often organic food has created new markets for urban food production.

Japan -- The traditional culture in Japan emphasizes on domestic food production and consumption. Therefore, methods to cultivate local urban farming are of utmost importance. To transform the city into an urban forest that supports biodiversity, the environment and human community, micro green spaces were created in the urban cities in Japan.

2.3 ROOFTOP FARMING IN INDIA

Terrace gardens and farming in urbanized areas are sold as Babylon. But today Urban Greening and Urban Farming has acquired a new significance due to the current trend of rapid urbanization around the world. In India, the share of urban population was just 30% in 2010, A report by UNDP estimates that this will rise to 40% in 2030 and over 50% by 2045. The urban population in India is set to increase from the current 3.5 billion to more than 6 billion by 2050*Areas under cultivation increase by just a miniscule 2% annually in comparison to the Urban growth. The combined issues of population explosion, rapid urbanization and climate change are posing a great threat to food supply. The Farmer population has decreased and various factors contribute to the poor yield of existing Farmlands. The youth are taking to non-agricultural vocations and employment in non agricultural sectors. Thus the Urbanizing communities are confronted with urban growth, changing life-styles and food security problems .The urban population living and employed in cities has to source their food supply from the market. As much as 70% of their income has to be spent on buying food. Thus they are

vulnerable to the fluctuations in the market prices. To support this vulnerable population is a great challenge for urban Governance. In many parts, it is seen that the urban poor are utilizing vacant plots in the city to grow vegetables to enhance their income also.

2.4 ROOFTOP FARMING IN KERALA

Abstract Organic farming involves holistic production systems that avoid the use of synthetic fertilizers, pesticides and genetically modified organisms, thereby minimizing their deleterious effect on environment. Agriculture area under organic farming ranges from 0.03% in India to 11.3% in Austria. Organic farming is beneficial for natural resources and the environment. Organic farming is a system that favours maximum use of organic materials and microbial fertilizers to improve soil health and to increase yield. Organic farming has a long history but show a recent and rapid rise. This article explains the development stages, techniques and status of organic farming worldwide. The sections are: the development and essential characteristics of organic farming; the basic concepts behind organic farming; historical background; developmental era of organic farming; methods of organic farming; relevance of organic farming in the Indian context; comparative account between organic farming and conventional farming; importance of organic farming in environmentally friendly approaches; working with natural cycles; relevance of organic crop production in food security; yield potential and trends of organic farming; rural economic linkage its scope and limitations; and legislation procedures adopted by various countries.

2.5 ECONOMIC GROWTH AND AGRICULTURE

The liberalization of the economy has certainly re-invigorated the national economic growth. In 1990-91, the share of services, industry and agriculture to the GDP was 44.5%, 19.4%, and 26.5% respectively, while in 2008-09 these shares shifted respectively to 59.1% and 16.1%. The liberalized economic growth excluded a large section of population that depended on agriculture and to that extent enlarged the economic discrimination. This inequity is deepening the crisis of Indian agriculture.

2.5.1 Government to Promote Organic farming

The government is promoting organic farming by providing incentives to cultivators of organic food products under the national Horticulture mission (NHM). Through various schemes like National Horticulture Mission (NHM) Horticulture Mission for north east and Himalayan states (HMNEH), Rashtriya Krishi Vikas yojana (RKVY) National project on management of soil health and fertility (NPMSHF), National project on organic farming (NPOF), Net work project on organic farming under Indian council of agricultural research (ICAR) and various schemes of agricultural and processed food products export Development authority 30 (APEDA). There is no provision of minimum support price (MSP) in respect of organic farm product.

2.5.2 Government to promote Organic Farming

Roof garden are must often found in urban environments, plants have the ability to reduce the overall heat absorption of the building which then reduces energy consumption. "The primary cause of heat build-up in cities is insulation, the absorption of solar radiation roads and buildings in the city and the shortage of this heat in the building materials and its subsequent re-radiation. Plant surfaces however, as a result of transpiration, do not rise more than 4-5 degree Celsius above the ambient and are sometimes cooler." This then translates into a cooling of the environment between 3.6 and 11.3 degree Celsius. Depending on the area earth (in hotter areas, the environmental temperature) will cool more, the study was performed by the university of Cardiff.

2.6 URBAN AGRICULTURE

Urban agriculture or urban farming is the practice of cultivating, processing and distributing food in or around a village, town or city. Urban agriculture can also involve animal husbandry, aquaculture, agro forestry, urban keeping, and horticulture. These activities occur in urban areas as well, and peri-urban agriculture may have different characteristics.

2.6.1 Benefits of urban agriculture

Urban Farming known as urban agriculture is a way for urban dwellers to grow their own food, or at least have access to local food. The practice of urban agriculture is growing in popularity in urban areas across North America. With the many benefits of urban farming and all that local food production has to offer, it's important that we continue to spread awareness about how individuals and communities can establish a foundation of improved health, social interaction, and economic prosperity.

Here are five benefits of urban farming;

1. Increases food security

Food security is having access to and being able to afford nutritious, safe food and enough of it. This is a major concern for many families all over the world. Fortunately, urban farming contributes to greater food security.

2. Create a sense of belonging

Urban Farming is one way to bring urban dwellers together to establish a sense of community among people otherwise independent and, in some cases, isolated.

3. Produces healthy food you can respect

You get fresher, healthier food, herbs, vegetables and fruits and are more likely to eat what's in season, when you eat what's produced

4. Provides a learning opportunity

Urban farms give city dwellers a chance to produce their own food, and learn in process. They learn about various gardening techniques, the best nutrient solutions, required sunlight, and controlling temperature, among other things.

5. Makes efficient use of land

We can efficiently use the land we do have to feed the people. Consider rooftop or vertical gardens; they take up minimum space but produce tons of fresh, healthy food.

2.6.2 Major benefits of green roof urban farming are:-

A, Environmental Sustainability:

- Reduce food transportation
- Reduce wastes by generating less packaging
- Recycle organic wastes by composting
- Increase biodiversity
- Improve air quality
- Mitigate urban heat island
- Improve urban storm water management
- Sound insulation and noise absorption

B, Social Sustainability

- Active community participation
 - Community green space
- Social inclusion: provide fresh food to the poor
- Education

- Local employment
- Amenity space for exercise and recreation
- Aesthetic value

C, Economic Sustainability:

- Increase local food security
- Sell organic vegetable and food
- Access to open space/views increases property value
- Reduce building cooling load and energy costs
- Increase roof life span
- local food production and safe
- Improve roof durability
- Increase availability of bio fuels

CHAPTER III

ECONOMICS OF ROOFTOP FARMING: AN ANALYSIS

3.1 INTRODUCTION

Thiruvananthapuram city is the fastest growing cities of south India. Thiruvananthapuram Municipal Corporation is the largest city corporation in Kerala state in India by area and population. It is the Municipal corporation that administrates the capital city of Kerala. It includes the legislative Thiruvananthapuram, vattiyoorkavu, Nemom, kazhakkootam and 5 wards of kovalam constituency. Mayor Arya Rajendran is the presently the youngest mayor in the country. The city corporation is spread over 214.86 km² with 100 wards and a population of 9,57,730 inhabitants. The body governs an area of 214.82 square kilometres centered on Trivandrum with about 100 wards and population of 957,730. City is known historically as KERALMAM and tagged as “GODS OWN COUNTRY”. After the constitution of Trivandrum as a corporation in 1920, there were Indians demands to upgrade the densely populated Trivandrum city into a city corporation. As a result, on 30 October 1940, Trivandrum Municipality was upgraded by the Kerala Government to a Municipal Corporation. The city population of Trivandrum increased substantially from 29,46,650 in 1991 to 957,730 in 2011.

In November 2009, the sreekaryam, vattiyoorkavu, kudapanamkunnu, vizinjam, and kazakuttom panchayat were merged with Trivandrum city corporation. As a result the area run by the municipal corporation increased from 2912 km. Later in May 2015, total area of the city became 2192 sqkm with total area of 2214.282 sq km. Trivandrum city is governed by Municipal Corporation which comes under Trivandrum Metropolitan Region.

3.2 TRIVANDRUM CORPORATION



3.3 BRIEF PROFILE OF TRIVANDRUM

Name	Trivandrum cooperation
Starting date	30 Oct 1940
Address	Taluk office road, Fort,eastfort, pazavangadi,Tvm Kerala 695023
Area	214.82 sqkm
Population	9,57,730
Sex ratio	92.66%
Population density	4,500/km
No of wards	100
Literacy	86.4%
Mayor	Arya Rajendran
Email	Tvpmcorp@gmail.com
Language	Malayalam
Parliament constituency	Trivandrum
State	Kerala
Country	India

3.4 ROOFTOP FARMING - A CASE STUDY IN TVM CORPORATION

Kazakuttom was one of the corporation of Trivandrum district in kerala. We choose this cooperation for our project “ Rooftop farming: A case study in Trivandrum. It was one cooperation which is recently noted that several house holds of this area where doing rooftop farming. They cultivated crops in their terrace for their needs and to earn a income. Many of the house holds in this area choose rooftop farming as income for their basic needs. We take each house holds the member who is practicing rooftop farming is taken as sample for our present survey.

3.5 GENDER DISTRIBUTION OF THE SAMPLE

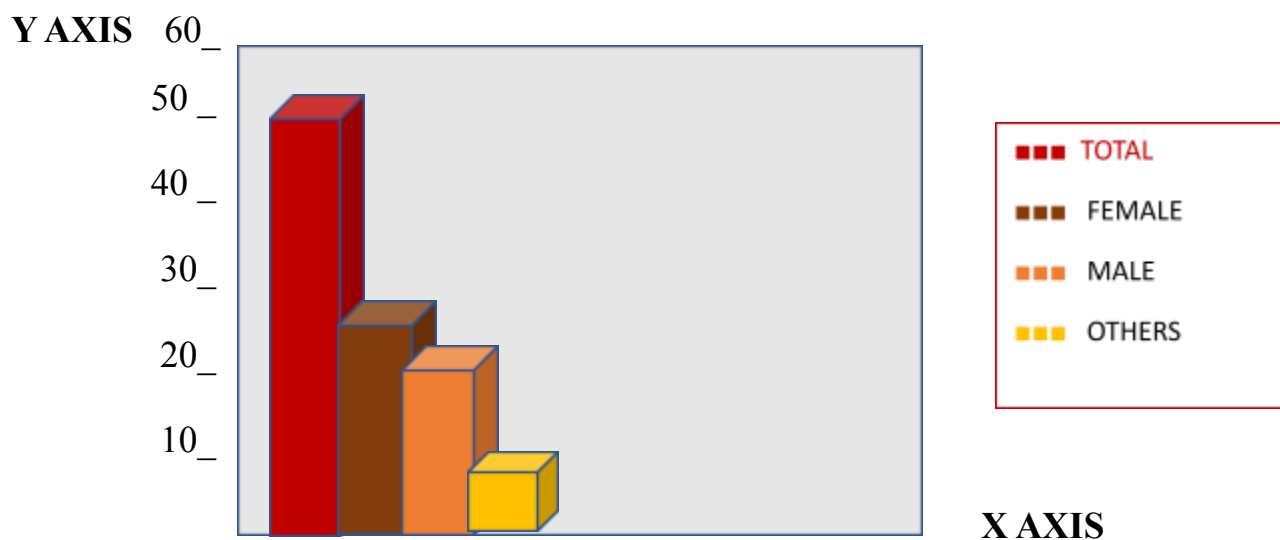
In this case study, we could see male and female and others in the below table no.35

.Table 3.5

.NO of RESPONDENTS	SEX	NUMBER
1	Male	23
2	Female	25
3	Others	2
	Total	50

(SOURCE: : PRIMARY DATA

Figure 3.5



In the above table and figure shows that the total number of 50 farmers done by roof top farming in their own houses.23 male persons and 25 female persons and other category of 2 persons also producing organic products

3.6 OCCUPATION OF THE HOUSE HOLDS

A person’s occupation does have a bearing on his or her personality and so also the way of looking at the problem before him or her. Each house holds the member who is practicing rooftop farming is taken as sample for the present study.

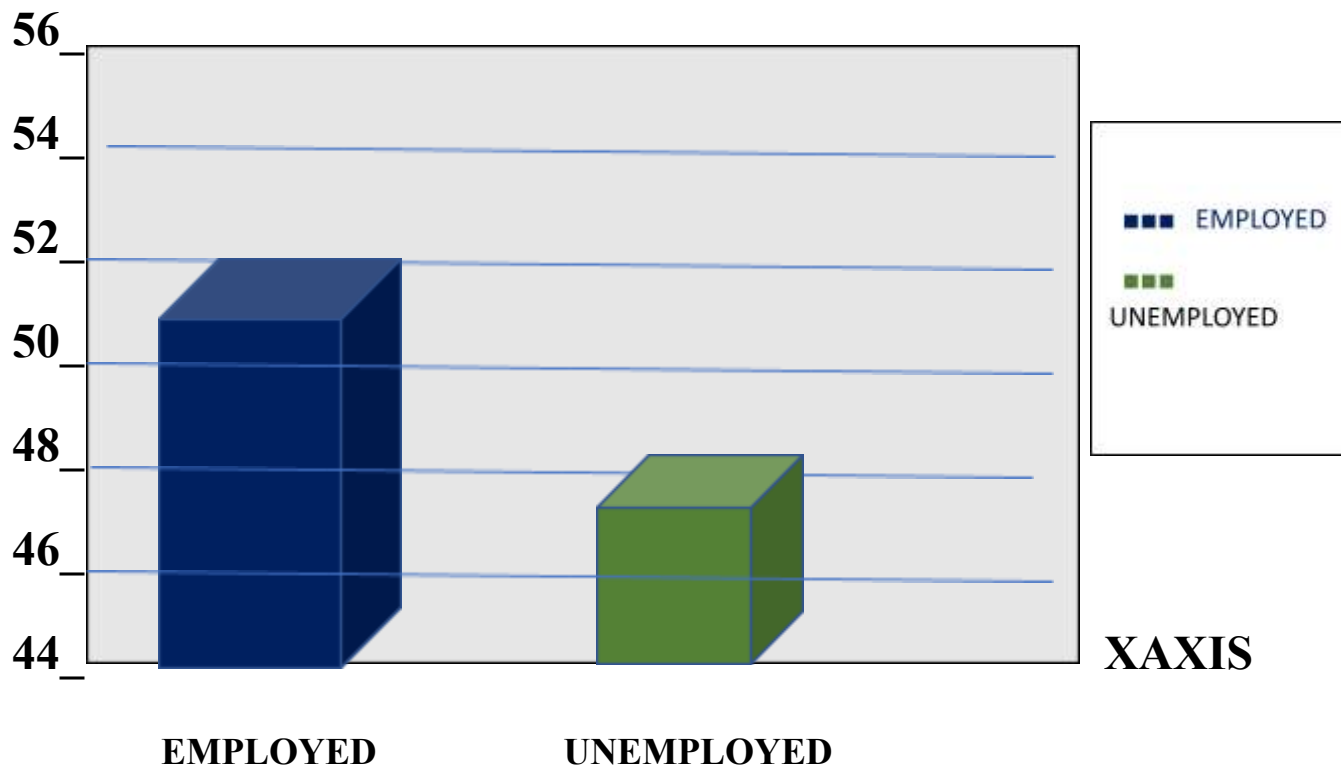
Table 3.6

Occupation status	Percentage
Employed	48
Unemployed	52

Source: primary data

Figure 3.6

Y AXIS



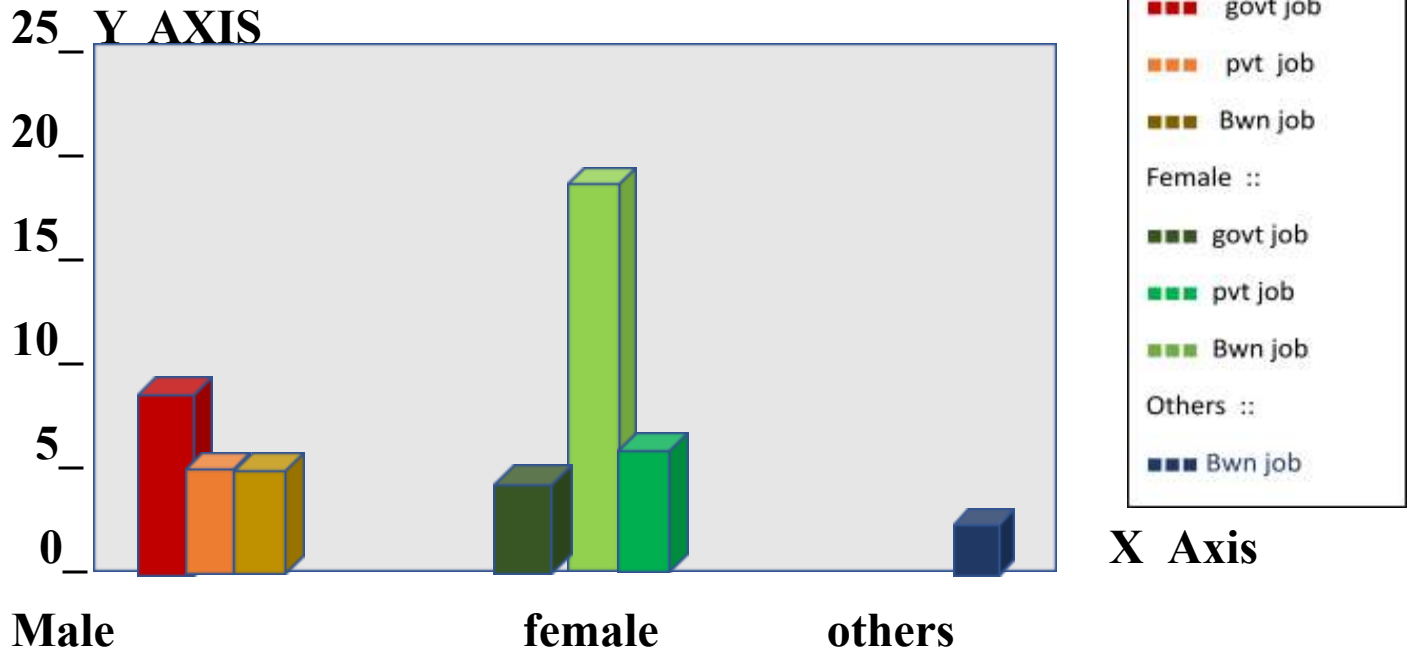
3.7 GENDER WISE :: OCCUPATION DETAIL OF HOUSEHOLDS

Table 3.7

Gender	Govt jobs	Pvt job	Between job
Male	10	4	5
Female	4	6	19
Others	—	—	2

Source : primary data

Figure 3.7



3.8 EDUCATIONAL QUALIFICATION

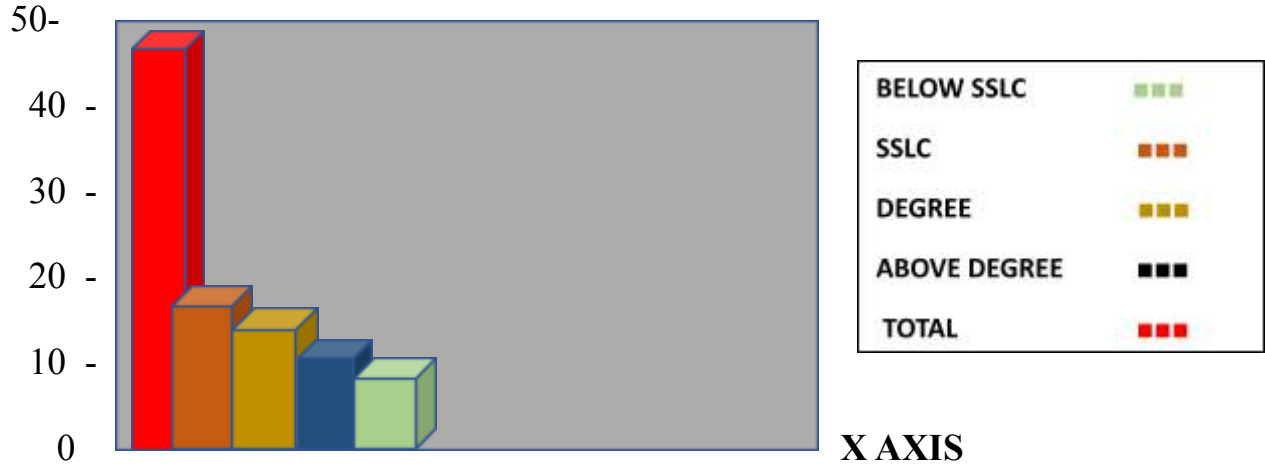
Table 3.8

SL.NO	EDUCATIONAL QUALIFICATION	NUMBER
1	Below SSLC	6
2	SSLC	19
3	Degree	16
4	Above Degree	9
	TOTAL	50

Source : primary data

FIGURE 3.8

Y AXIS

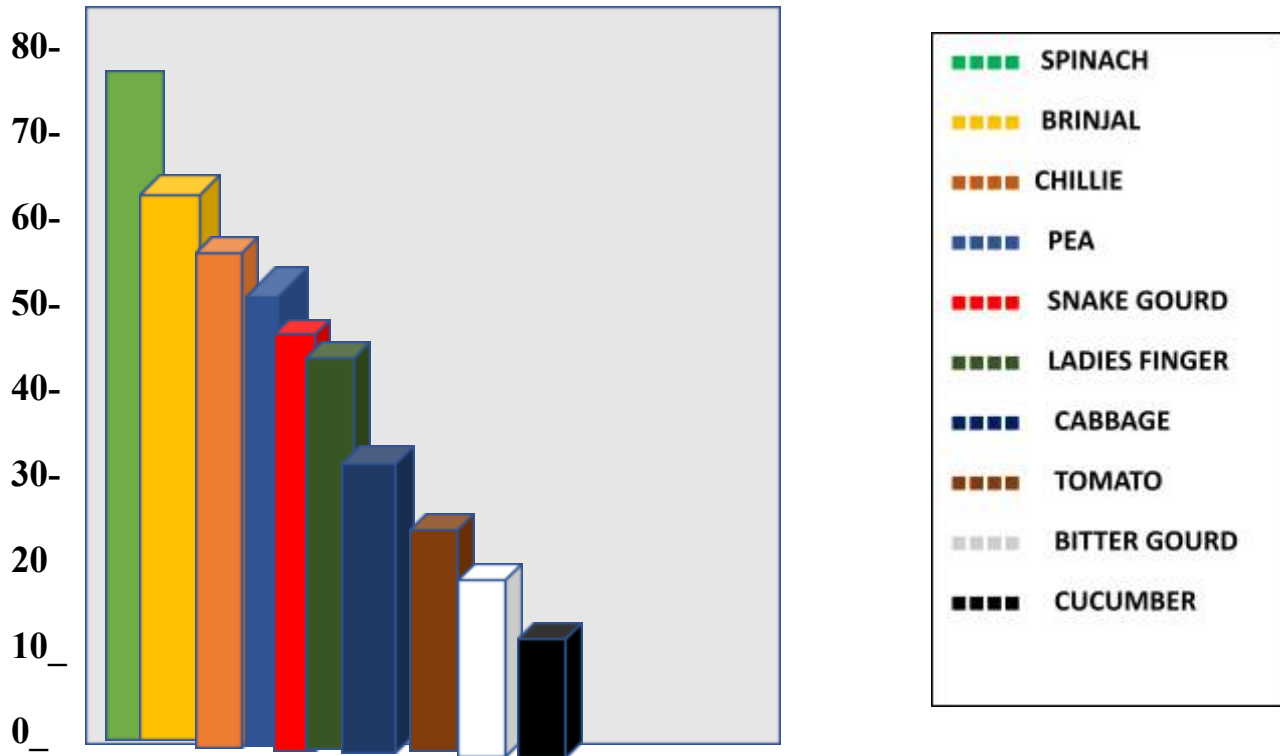


In the above table shows that the qualification out of 50, there are 6% of people are below in SSLC. 19% of the people are in SSLC, and 16% in Degree and 9% are above to the degree.

3.9 CROPS CULTIVATED

SL.NO	NAME OF VEGETABLES
1	Spinach
2	Chillie
3	Ladies finger
4	Tomato
5	Cucumber
6	Brinjal
7	Snake gourd
8	Pea
9	Bitter gourd

FIGURE 3.9

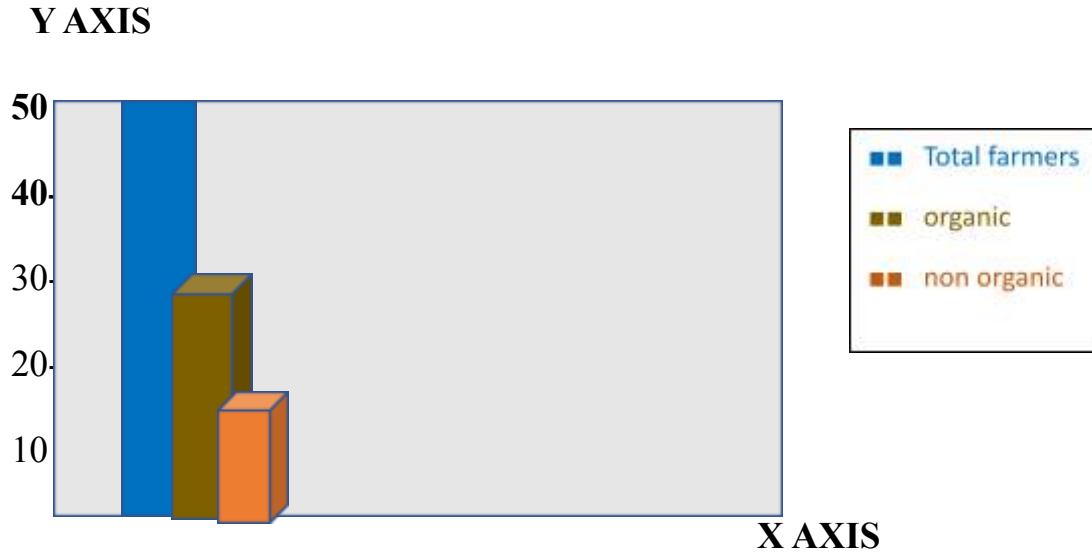


The above table and graph shows that out of total 50 respondents most of them at 82% of cultivate spinach. 64% of the respondents cultivate brinjal.60% of them cultivate chilly,53% cultivate pea,50% cultivate snakegourd,42% cultivate ladies Finger, 37% cultivate cabbage, 33% cultivate tomato, 27% cultivate bittergaurd, and Very less number of farmers 18% were cultivated cucumber on their roof top.

3.10 PREFERENCE OF PESTICIDES

Type of pesticides	No. of farmers
Organic	33
Non Organic	17
Total	50

Figure 3.10



An analysis of this chart shows that out of total respondents only 18 people were45 Use non organic and 32 people were use organic farmings. In this Chart shows more of the people prefer organic farming than non organic farming.

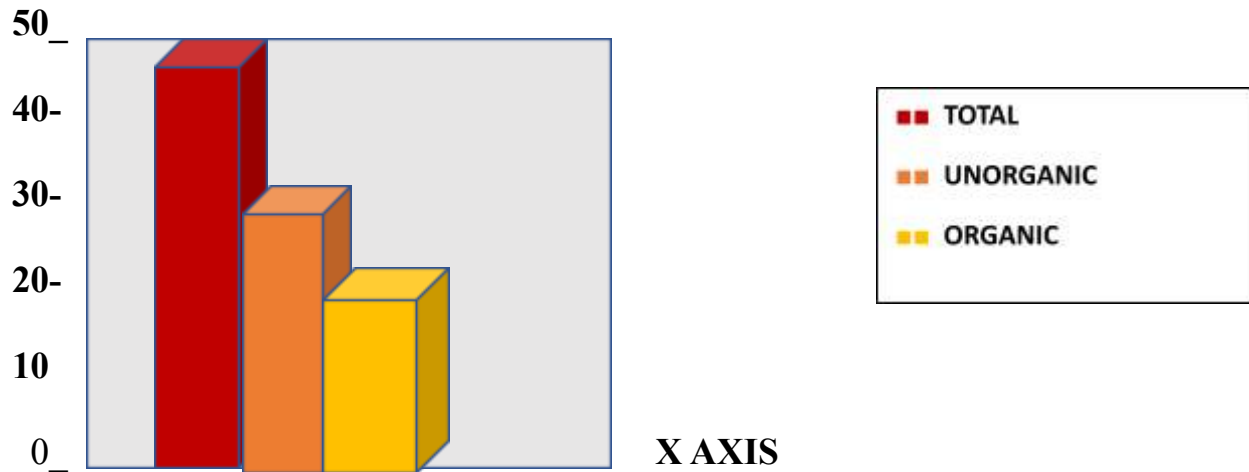
3.11 USING BIOGAS TO GREENHOUSE

SL.NO	BIOGAS	RESPONDS
1	Yes	20
2	No	30
	Total	50

(SOURCE: :- PRIMARY DATA)

Figure 3.11

Y AXIS



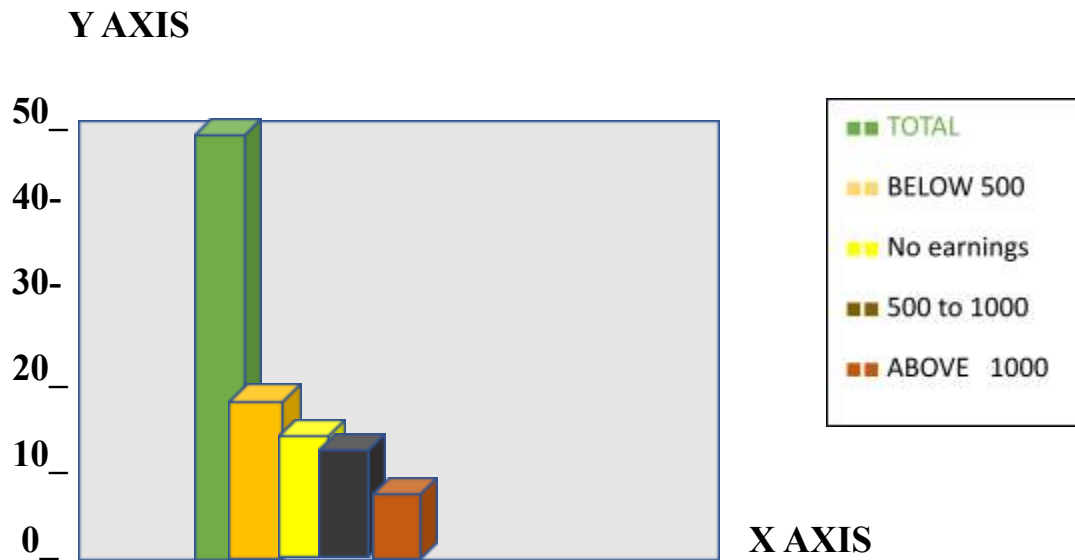
The above table and figure shows that out of total respondents were only 20 people use Biogas plants and balance of 30 did not use biogas plants.

3.12 MONEY EARNED FROM ROOFTOP FARMING

SL.NO	MONEY	PEOPLE
1	Below 500	20
2	500 to 1000	12
3	Above 1000	5
4	No earnings	13
5	TOTAL	50

(SOURCE ::: PRIMARY DATA)

Figure 3.12



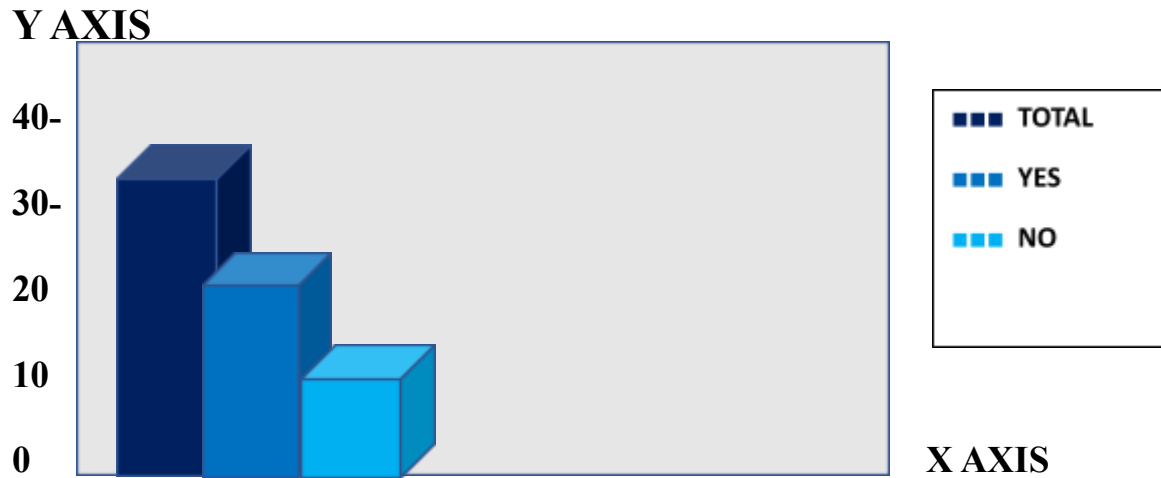
In the above figure shows that out of 50 farmers, total 20 peoples earn below 500 of rupees and 13 people earn above of 1000 rupees. And the middle of 12 people earns between 500 to 1000 rupees and the diagram shows as a result of 5 % have no earnings to this farming.

3.13 ROOFTOP FARMING : INCOME OF THE FARMERS

SL.NO	RESPONDS	PEOPLE
1	YES	20
2	NO	30
	TOTAL	50

(SOURCE-PRIMARY DATA)

Figure 3.13



In the above chart shows that out of 50 households, there are 20 people will earn or to increase their Income and 30 people cannot get any benefit or cannot to increase their income

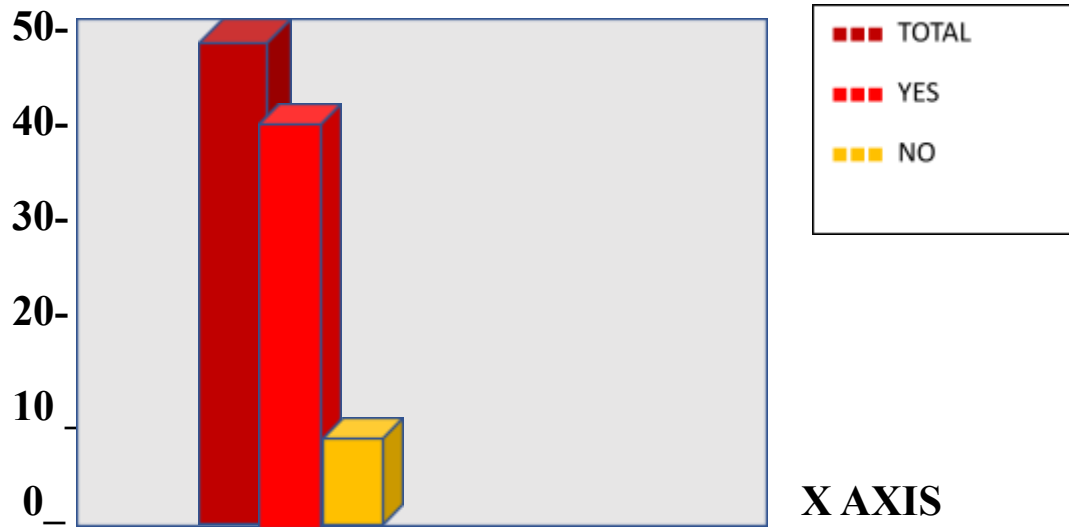
3.14 HELP FROM THE PART OF GOVERNMENT

SL.NO	RESPONDS	PEOPLE
1	Yes	9
2	No	41
	TOTAL	50

(SOURCE :: PRIMARY DATA)

Figure 3.14

Y AXIS



This figure shows that the helps provided by the government. Out of 50 farmers, more of them like 41 % cannot get any kind of subsidies and helps to government. But in other side 90% of people get some kind of help from the part of government.

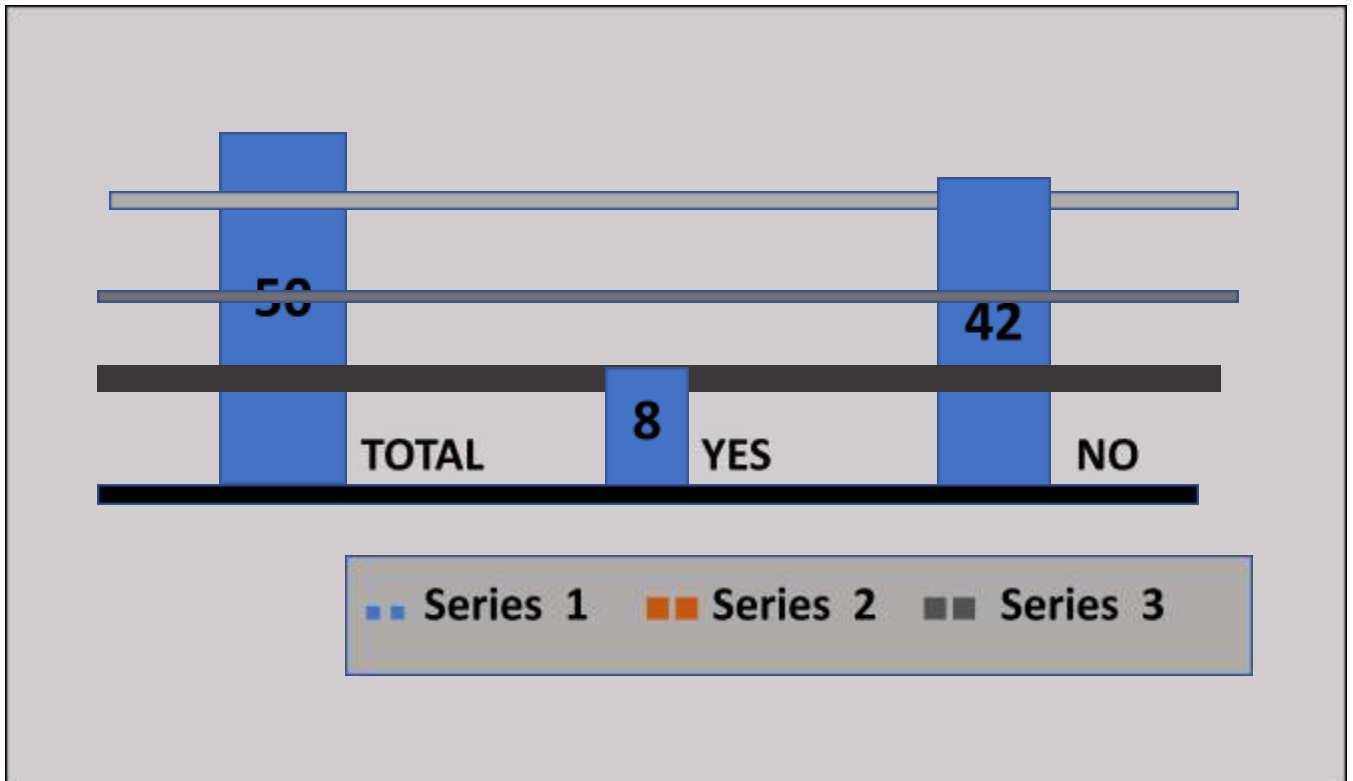
3.15 FINANCIAL ASSISTANCE FROM GOVERNMENT

SL.NO	RESPONDS	PEOPLE
1	YES	8
2	NO	42
	TOTAL	50

(SOURCE: : PRIMARY DATA)

Figure 3.15

Y AXIS



X AXIS

This shows that the out of 50 household cannot get any financial assistance by the government and other 8 persons get financial assistance. In this chapter we conclude that out of 50 household arranged with variety of tables and figures and we also analysed the total data. Each figures show different kinds of knowledge of the farmers.

CHAPTER IV

SUMMARY ,FINDINGS AND SUGGESTION

Agriculture is the life line of humanity. Any change in agriculture will result in corresponding changes in the life of People and of nature and vice versa. There has been a rapid change in the way we farm in the past few decades. It is characterised mainly by the dominance of machinery and chemical technology in agriculture replacing the traditional wisdom which has altered our society considerably.

Over the years agriculture has undergone several changes. Thus drifting away from nature. The changes in agriculture have taken a quantum jump during green revolution. Such changes have resulted in environmental pollution, degradation of the soil health, loss of biodiversity and others.

The following were the findings of this study:-

4.1 FINDINGS

- ❖ 66%of the organic farmers did not get any subsidies from govt.
- ❖ 66% of the organic farmers were used organic farming for personal purpose.
- ❖ 80% of the people plant spinach,60% chilli,30% Tomato, like the vegetables.
- ❖ 18% few peoples get financial assistance from government.
- ❖ In this study we find out that people were not participate at any agriculture Fest.
- ❖ 34%of the people not more aware about organic farming methods.
 - ❖ There is Less awareness about the benefits of rooftop farming
 - ❖ 26 % of people think that rooftop garden is More expensive .
- ❖ ❖ None of the House Hold surveyed practices rain water harvesting methods.

4.2 SUGGESTIONS

Actually they have long lived on the planet and deserved the right to live. Having vegan diets can reduce global warming. With organic agriculture, the water can be well preserved. During our interviews, we find that most vegan restaurants run their business for the benefits of health and the planet. In addition, visiting organic farms makes us aware of the advantages and process of organic agriculture.

- ❖ We suggest that to give more awareness about rooftop farming to households especially for the women

- ❖ To promote sustainable food production, the government should limit the consumption of meat products.

- ❖ We should purchase local agriculture product particularly fruits, vegetables and crops etc.

- ❖ Research on Agriculture should take climate, and the nutrition plants have in to consideration.

- ❖ More subsidy and research funding should be provided for organic and Eco- friendly agricultural.

- ❖ Agriculture in the study should be encouraged and promoted it is suggested that meat consumption should be limited and people should have meat free diets at least once in a week

- ❖ Govt should permit special subsidies for rooftop farmers and provide fertilizer's to them .

- ❖ Govt should conduct some research and studies on rooftop farming to improving number of farmers.

- ❖ Encourage youth and students in rooftop farming through awareness .

4.3 CONCLUSION

The goal of terrace farming is to create a sustainable agricultural system. Organic agriculture relies largely on the locally available resources and is dependent upon the maintaining ecological balance and developing biological process to their optimum. The protection of soil and of the environment is the fundamental of the organic farming. But it should be supported by the new suitable technologies, which are not only the cost effective but also easily adoptable to the farmers of the district. Another important aspect while practicing the organic farming is that of contamination of the product due to the lack of knowledge and appropriate technology of packaging and preservation.

Rooftop farming both protected and open air, could supply local and fresh produce to urban cities, where unheated production can be performed. Soil production would be the most eco efficient cultivation option. The potential substitution of imported food could boost the environmental benefits of rooftop farming there by reducing the foot print of cities.

Rooftop agriculture can complement other forms of urban agriculture because of its unique use of built up space .Although the potential of rooftop agriculture to contribute to urban sustainability (including climate change adaptation)is recognised, its scale of implementation is still limited, both in terms of production areas and intensity of individual rooftop gardens as well as in terms of total rooftop production and area at city level. There is need to address legal and regulatory issues, technical and infrastructural requirements and adapt cultivation practices to specific growing conditions and safety and sustainability requirements.

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QUESTIONNAIRE

1. Details :

1.1 Name of the house head :

1.2 Address :

1.3 Age :

1.4 Sex ::

Male Female Transgender

1.5 Income :

1.6 Educational Qualification :

1.7 Marital status :

a) Single b) Married c) Divorced d) Widowed

If married, number of children:

2. The assessment of economic aspects of on organic farming.

2.1 What type of crops do you plant?

2.2 How many years have you doing this job?

0 to 1 year 2-5 Years 5-10 Years More than 10 Years

2.3 If your family members involved in farming operations?

Yes No

2.4 How would you rate your knowledge of organic farming?

Poor Fair Average Good Excellent

2.5 Do you purchase organic seedlings?

Yes No

2.6 Do you grow non organic plants in your greenhouse?

Yes No

2.7 What strategies do you use to control pest damage to crops?

2.8 Which type of pesticides do you use?

Organic Non organic

2.9 Do you construct any of rain water harvesting methods?

Yes No

2.10 What composting method do you use?

Biogas Vegetable waste others

2.11 Do you use biogas for your greenhouse?

Yes No

2.12 Do you save money from this?

Yes No

2.13 How much money do you earn from this farming?

Below 50 More than 50 More than 100

2.14 Do you use your products for your kitchen purpose? Yes No

2.15 If yes you notice any health benefits by using your own products?

Yes No

2.16 Usually how much money to spend for health needs/ medicines in one month? >1000 1000-5000 <500

2.17 After using the organic products how much money do you spend for health needs/medicines in one month?

>1000 1000-5000 <5000

2.18 If the organic farming increases your income?

Yes No

2.19 Are you aware about the subsidies provided by government for farming?

Yes No

2.20 Do you get any help from the government?

Yes No

2.21 Have you ever sold your products to government agencies?

Yes No

2.22 Are you aware about various government schemes for agriculture credit? Yes No

2.23 Do you get any financial assistance to improve your farming? If yes, are you satisfied by the government to improve your production

Yes No



