# DISPARITIES OF EDUCATION AND EMPLOYMENT AMONG WOMEN IN MALABAR 

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## CERTIFICATE

This is to certify that the dissertation titled "Disparities of Education and Employment among Women in Malabar" is the record of the original work done by Ms. Jasna. P under my guidance and supervision. The results of the research presented in this thesis have not previously formed the basis for the award of any degree, diploma, or certificate of this institute or any other institute or university

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## LIST OF ABBREVIATIONS

| APL | : | Above Poverty Line |
| :---: | :---: | :---: |
| BPL | : | Below Poverty Line |
| EPWRF | . | Economic and Political Weakly Research Foundation |
| GDP | : | Gross Domestic Product |
| GNP | : | Gross National Product |
| GPI | : | Gender Parity Index |
| ILO | : | International Labour Organization |
| KMO | : | Kaiser-Meyer-Olkin |
| MGNREGA | : | Mahatma Gandhi National Rural Employment Guarantee Act |
| MOSPI | : | Ministry Of Statistics and Programme Implementation |
| MRP | : | Marginal Revenue Product |
| NSSO | : | National Sample Survey Organization |
| PCA | : | Principle Component Analysis |
| PLFS | : | Periodic Labour Force Survey |
| PS | : | Usual Status |
| PSC | : | Public Service Commission |
| SS | : | Subsidiary Status |
| UGC | : | Union Grants Commission |
| UN | : | United Nations |
| UNESCO | : | United Nations Educational Scientific Cultural Organization |
| USA | : | United State of America |

## CHAPTER I

INTRODUCTION

## CONTENTS

1.1. Background of the study
1.2.Importance of the study
1.3.Scope of the study
1.4.Statement of the Problem and research question
1.5.Objectives of the study
1.6.Methodology
1.7.Limitation of the study
1.8.Design of the study

### 1.1 Background of the Study

The central role of women in society has ensured the stability, progress, and longterm development of a nation. Today women contribute to all the sectors of the economy, globally women comprise half a percent of agricultural labour and in some countries, they contribute more than half of the agricultural production. Women are the primary caretakers of children and elders of every country. In most families, all the domestic work is under the responsibility of women and they can do the domestic work more flexibly than the man. Many times woman sacrifices her pleasure and career to build a good family and she helps her partner to think more about the economic improvement of the family. Most of the time she acts as the family manager and she handles the family budget and always tries to make a surplus budget without compromising the pleasure of the family. Thus at a single time, women act in multiple roles in their family such as mother, wife, manager, etc.

Women's education has a sign of economic growth and development of a country; it improves the standard of living and overall income of the nation. An educated female got better opportunities in the labour market which makes them financially independent and it helps them to take decisions independently and women empowerment. Education and employment help them to fight against all the abuse in society and all types of discrimination against them. It improves their productivity in the labour market and at the same times their productivity in the home, it improves family health and life expectancy, child survival, and investment in children's human capital (Hill and King, 1995). Educated mothers always had given better attention to child care, like better education, health, etc. In recent times every country has given more preference to girls' education and working participation and it improved their role in society. But most of the developing economies show a U shaped relationship between female education and labour force participation, when the income level increases, most of the countries show a declining female labour force participation, and then at a certain level of income rises employment level also rises (Goldin, 1994).

The reports of the International Labour Organization (ILO, 2019) showed that female labour force participation is highest in the poorest and richest countries. That means a 'U' shaped relationship between GDP growth and female labour force participation. But every country shows increasing female workforce participation over the previous decades. The world Development Report (2012) estimated that the world's female labour force participation increased from 1980-to 2008 and male labour force participation decreased. It showed that narrowing the gender gap between male and female labour force participation all over the world. But in recent years every country shown an interesting fact that the labour force participation among old women is higher than the younger women because women are given more preference for higher education and they enter the labour market after completing their education (Humpert and Pefeifer, 2013).

The twentieth century witnessed a high increase in the number of females participating in labour markets across early industrialized countries. The historical data showed that there is a positive trend in these countries in the case of women working participation rates, and this is a striking feature of economic and social changes in these countries during the twentieth century. It results in a long-run increase in women working participation and especially there was an increase in the labour force participation among married women (Heckman and Killingworth, 1986). And another interesting fact noted by the different studies is that in the $20^{\text {th }}$ century there was a reduction in the working hours of a female because the expansion of education and skill development improved their productivity in labour markets.

Female labour supply is a key driver of economic growth and development, women's contributions to labour supply increased family's income, consumption, and investments. It reduced the overall poverty of the country and improved the standard of living. Women working participation in developing economies result from the improvement of educational attainment and social well-being and it leads to a modern economy. Many developing countries showed a linear relationship between education and labour force participation and at the same time, some poor
countries showed a nonlinear relationship (Verick, 2018). The education attainment of young women and girls helped them to get better opportunities in the labour market but in some countries, uneducated women are worked more than educated women.

But another important fact is that all the countries showed gender discrimination in the case of working participation and the number of male workers is more than the number of female workers. Discrimination has also existed in the case of payments, there exists a wage gap between male and female labourers almost all countries paid more wages to male labourers than female labourers. And in some cases women worked more hours than men both in case of paid and unpaid work is taken into account. Gender equality is the heart of ILO's Decent Work agenda, the aim of which is "to promote opportunities for women and men to obtain decent and productive work, in the condition of freedom, equity, security and human dignity" (ILO, 1999). All the laws provide equal treatment for male and female labourers, but in all countries existed social barriers and discrimination based on gender. In the case of development and modernization, this gender gap narrowing but not completely removed.

The female labour force participation in the Indian economy is a falling trend over the past few years. But an interesting paradoxical phenomenon is that the other indicators such as female education, the standard of living, income, and literacy are an increasing trend. The latest World Bank survey reported that the labour force participation of women in India is only 21 percent, which means that 79 percent of Indian women were unemployed. The female working participation in most of the neighboring countries like China, Indonesia, and Bangladesh was three times more than the Indian average. One of the main reasons behind this is that Indian women are given more preference to domestic unpaid activities which means household activities, and it is not calculated as an economic activity or not a part of GDP. The economic and social conditions that prevailed in India insisted women acted as fulltime homemakers, and that all the household duties are handled by women. Indian
culture and history were male-dominated, the head of the family is a male member and the female members were dependent on them.

The paradox of declining female workforce participation in an era of economic growth (Desai and Joshi, 2019) in recent years in India the education of women improved and modern facilities like electricity, cooking gas, piped water, etc. reduce their time in domestic activities and increase their chance of economic activities. But in reality, economic participation gradually declined (NSSO data). The main reason behind this is that in our country there are no opportunities for educated women because of our backwardness in the industrial sector and the territory sector has not created sufficient vacancies. And in recent years many women withdraw from the labour market for better education and career. As a result labour force participation gradually declined in recent years.

The educated women also prefer highly educated and well-qualified partners and they withdraw from the labour market because their husband's income is very high. This also results in a paradoxical result in education and female employment (Abraham, 2013). The study of Vellon (2019) explained that in India women spend more than six hours per day on unpaid domestic activities and at the same time men only spend thirty minutes on unpaid domestic labour. This limits women's opportunities for education and ability to obtain better employment. The human capital theory by Becker also clears that investment in education and career creates better opportunities in the labour market. As a result, the employer favours male labourers over female workers. Women are unable to support themselves as well as the economy.

The demographic studies also reported that in India sixty percent of women married before the age of twenty and pregnancy and maternity insisted on them withdraw from the labour market. The absence of proper childcare facilities makes it challenging for women to join the labour force when social norms mandate that it's their primary responsibility to look after children. The theory of marriage by Becker also states that the married couples taking the decision together that who is taking in the domestic work and economic participation. Mostly the women took the
responsibility for children and household activities. And these limit their choice of employment.

The World Economic Forum (2020) reported that the gender gap in the Indian labour market is very high compared to other global economies. In India, only 25 percent of women are economically active compared to 82 percent of men and the country stood 145 out of 153 countries. They also reported that women's labour force participation has fallen from 35 percent in the 1990s to 25 percent in 2020. India is the only major economy that shows a negative trend compared to its neighboring economies. An Indian woman makes about 20 percent of what an Indian man is making. But in the case American women, they make up 65 percent of American men, and China women make up 60 percent of Chinese men. That means women and girls in India spend most of their lifetime on unpaid domestic activities and this burden of unpaid work negatively impacts women's economic participation. The World Bank reported that India's GDP growth would climb above 9 percent if women had an equitable share of jobs and India could boost 1.5 percent economic growth annually if its 50 percent of women could join the workforce.

All the economic data (NSSO, Census, and ILO) show a declining trend of female labour force participation, especially among the educated ones. Nowadays there is an increasing unemployment rate among educated women and men. There are no opportunities for such a group and there are no vacancies for them. The various rounds of employment and unemployment survey of NSSO show that the women with no primary education work more than those with higher secondary education. Especially in rural areas but in urban areas little more chance for educated women. In the case of India social and religious factors also influenced the female labour force participation rates. The periodic survey of NSSO reported that women among Muslims were the lowest working participation compared to the Hindu communities and the forward caste women from Hindu communities also showed lower workforce participation rates. So the social and religious factors also determine the women's labour force participation rates.

The statistics of male and female participation rates in India also show a gender gap between male and female labourers. The participation rates of female labourers are only half of the male labourers. Because most workplaces favors male workers over female employees. And there is occupational discrimination between male and female workers (Becker). And there is also a difference between the urban and rural participations rates in India. The percentage of working participation level of rural women is more than the level of urban women. Because in rural areas many women engaged in agriculture and allied activities but in urban areas, there is a lack of opportunities for women, and the choice for them is limited many of them worked in the garments and textiles sector with low wage rates (ILO, 2019). But another interesting fact is that both male and female workforce participation rates in urban and rural India show a declining trend.

There exist also wage discrimination based on gender and India stood at rank 112 in Gender Gap Index 2020. There are several reasons behind this and the sex ratio in the labour market is one of the main reasons. According to the Monster Salary Index in 2019, around 46 percent of Indian women believed that they will quit their job after maternity or pregnancy. And there is also a common trend among employers that they prefer male candidates to female candidates because they believed that women have more commitments in families than in the workplace. And the survey also reported that more than 60 percent of Indian women face discrimination in the labour market and 86 percent of women are given preference safety for choosing a job. All these factors reduce the number of female working participation rates and consequently also lead to the wage gap between the male and female labourers. And another noted fact is that all the discrimination and abasements are only reported in organized sectors but in the unorganized sector, the real fact is more than our calculation and women face much discrimination like sexual abasement, wage differences, overtime work, etc.

In a country like India, the structural and social factors lead to gender discrimination. The girl children are kept away from school and they are denied opportunities for better education and better employment. The report of ILO
published in 2020 shows that women paid approximately 20 percent less than men. And the report also states that the wage difference is very high in low-income and underdeveloped countries. India is also facing a huge gap between the categories of organized and unorganized sectors, rural and urban areas, and regular and casual workers. A study by Kingdon (1998) explains that the parents give more preference to the education of male children than female children. He argued that better education and experiences remove all the discrimination in the labour market. But in the Indian scenario families are given more preference to male children and the early marriage systems, the educational backwardness of women, pregnancy, maternity, family responsibility, etc. are the main reasons behind all the discrimination faced by females in the labour market. Agrawal (2013) also states that all the gender discrimination in Indian society can be removed only by educating women. He explained his views based on human capital theory and he conclude that investment in human capital means better education and experience providing good opportunities for women and it also improves their standard of living and other indicators like infant mortality, maternal mortality, sex ratio, fertility, etc. better education is the only solution for removing all the discriminations in Indian society against women.

The structural barriers in the Indian labour market also result in the lowest female working participation rates. ILO identifies mainly there are three types of structural barriers that prevailed in the Indian labour markets such as lowest agricultural production, lack of options for educated women, and long-term stagnation of female working participation (Steven Kapsos et al. 2014. Because Indian women in rural regions depend primarily on agricultural production and related labour. But in India, for more than half of a century agricultural productivity is very low and there are no opportunities there. In rural areas, there are no opportunities for women to complete their education and this leads long term stagnation in female working participation rates. Another important reason is the lack of skilled and technical education among women and the industrial backwardness. When we analyse our GDP we can see that our industrial production is very low and it only generates fewer employment opportunities. Women's participation in the industrial sector is very less in India
because our education system does not provide technical or skilled education. The reports on Higher education show that the number of female students enrolled in technical or vocational education is very less compared to the number of male students. More than 75 percent of girls' students choose arts and science colleges. The lack of job-oriented or skilled education limits the employment opportunities of female students.

The neo-classical theory states that increasing women's education would raise the working participation rates. That means education improves productivity and efficiency and it also results in the creation of more employment opportunities but in the case of India the highest unemployed prevailed among women with high education. The past studies explained about this that in India the structural and cultural barriers result in the lowest female working participation rates. The cultural barriers mean there is a lack of mobility for women entering the job market and the structural barrier means there are no opportunities for educated women. The neoclassical theory also predicts that employment is determined by income and substitution effects. The substitution effect means educated women command higher wages or otherwise they prefer leisure or household work. The income effect means educated women always prefer to marry educated men and the family income is the most dominant factor in determining women's employment participation. In many cases, women with higher class families prefer leisure to employment. In the Indian case, the income effect is stronger than the substitution effect (Esha Chattergee et al. 2018)

In the case of most developed countries increasing women's education is positively related to women working participation rates. When education increases employment levels also increased. But this situation is quite different in low and middle-income countries. King (1990) reported that education declined female labour force participation in low-income countries, but it improved paid employment. Reddy (1979) reported that there is a ' $J$ ' shaped relationship between women's education and working participation rates and the labour force participation improved only with highly educated women than the other groups. Abraham (2013)
stated that the increased family income also results in women withdrawing from the labour market. As a result of development and migration, the household's income increased in India, and as a result, women withdraw from the labour market and were given more preference for domestic work. The cultural system prevailed in India giving more preference to housewives than the working women. In India, women from higher castes face restrictions to move in the labour market (Kingdon and Unni, 2001). The women from lower castes always prefer agricultural and other jobs and upper-caste women stay away from such a type of jobs they attempt to follow Brahminical life and they give more importance to the prestige of the family than their interests or choices. The caste and religious systems in India also determined female education and employment.

The data of the Indian labour market showed that Indian female unemployment in urban areas is much higher than the rural areas. Because in rural areas many women worked in the primary sector but in urban areas, only fewer women worked in modern sectors. India is one of the rare countries to show a falling female labour force participation in the modern sector (Swaminathan, 1991). The backwardness of the industrial sector and lack of opportunities in the tertiary sector is the main reason behind this.

There exist a 'U' shaped relationship between women's education and working participation in India. Participation level is very high among the highly educated groups and low educated groups and participation is very low among the moderately educated groups (Goldin, 1995). The participation among the group secondary and post-secondary (10-12 standards) is very less compared to other groups. Women with education qualifications also prefer jobs that match their aspirations and many times it is very difficult to find such jobs causing unemployment among them. And another interesting thing that in the Indian labour market is many women left their job after marriage or maternity. Similarly, if women's productivity at the home is greater than the labour market that means women spend more time on domestic activities than labour market causing women to withdraw from the job market (Mehrotra and Sinha, 2017).

Another noticing thing is that in the agriculture sector women's participation increased and the male participation rates declined after the year 2000. The number of migrated women is very less compared to the male population in India. The total number of women migrants to the international level remained the same in the last decades (ILO). The National sample survey reported that recently the number of women's participation level in non-agricultural activities improved and various schemes of employment positively attracted female labourers. Mehrotra and Sinha (2017) identified there various factors behind the falling female labour force participation such as increased educational participation, mechanization in agriculture, improved family income, and a fall in international demand for products. They have also identified that structural factors like lack of skilled education, lack of entrepreneurial leadership, infrastructural bottlenecks, etc. discouraged women to enter the labour market.

Increased hours for unpaid domestic work also denied the women to enter the paid labour market. Domestic responsibilities were performed by roughly 46 percent of women aged five and up in rural areas and 52 percent in urban areas (NSSO, 2012).The lack of proper child care centers and other infrastructural facilities makes it difficult for to women work compared to other developed countries. To improve the quality of human capital our country also needs technical and skilled education for upcoming generations. The enrolment level of girls in ITI's very less compared to male students, 85 percent of students in ITI are male and only 15 percent are female students. The training programs were also not sufficient to train the women labourers in rural areas. Gender differences in acquiring land and credit facilities caused a lack of entrepreneurship and self-employment among women.

Education is the most determinant to measure the quality of employment in the labour market. Spence (1973) argued that a person's actions as a signaling device to employers regarding to measuring the quality of work and it helps to eliminate information asymmetry in the labour market. The Neo-classical theory of labour supply states that there exists a positive relationship between education and female working participation. A rise in education lead to a rise in wage rates in the market
and women prefer employment to leisure. But several economists also found a negative relationship between education and female labour force participation rates (Das and Desai, 2003). In the Indian scenario, the girl's enrollments in higher education increased and their working participation trend showed a declining tendency. The problem of measurement of women's participation also played a significant role in this. The women engaged most of their time in domestic work and it is not counted as a part of their employment.

Women's labour force involvement in India's economic and legal systems is examined from the demand side. But there are not created sufficient opportunities for women and in many cases, female unemployment can be considered voluntary unemployment. The NSSO (2011-12) reported that the majority of women in India worked in the agriculture sector and followed by the industrial sector. And the agriculture sector also shows a falling tendency of the female work force. Because as a result of income and substitution effects women prefer unpaid domestic work. Occupational crowding out is also an important factor leading to the lowest female participation in certain sectors in India. Because women always prefer a certain type of education like teaching, nursing, clerical posts, etc. There is an overcrowding of women in this field resulting in a lack of opportunities in these sectors. Klasen (2019) argued that with an increase in educational qualifications among women creates a high number of skilled females and they always prefer white-collar jobs and these results in educated unemployment both in urban and rural sectors.

The culture and norms of Indian society restrict the supply of female labour force participation. Mehotra (2017), economic growth increases economic opportunities but it cannot on its gender inequalities. As a result of the improved wage rate household income increased, most families in India prefer women to stay at home and they considered this as a symbol of social status. The wage gap is also higher in rural and urban India. This discrimination also keeps educated women outside the labour market.

The education expansion in India among females has changed their marriage prospects more than employment prospects. The educated female has a better
perception of their spouse and they have better views of their married life. The number of participants among divorced or separated or single women is higher than comparing married women. Married women had given more preference to family life, domestic work, the responsibility of children, etc., and this limits their opportunity to participate labour market. And society's norms and traditions also suggest that motherhood and domestic activities are the primary duties of married women and male members of the family took all the financial responsibilities. Women had no role to handle family income or budget; they were always considered a dependent group. Srinivas (1977) studied the rural beliefs in India and he found that there are widespread beliefs that women work for a wage as an indicator of the low social status of the family. The women from high-class families were kept away from the labour market.

### 1.2 Importance of the study

The human capital theory originated in the mid of $20^{\text {th }}$ century through the work of Mincer (1958), Shultz (1961), and Becker (1962). The theory states that individuals gain skills or education (human capital) which would make them more productive. Productivity leads to better opportunities and returns from the labour market. The theory is stated that an individual's income depends upon their productivity and productivity depends upon their investment in education and career. The theory concluded that education creates more opportunities in the labour market and builds gainful human capital. But studies showed that underdeveloped and developing countries show paradoxical results. India is the biggest example and it shows U shaped relationship between education and female employment (Goldin, 1995). That means the number of employment is highest among highly educated women and lowest educated women and there is high unemployment among moderately educated women.

Female unemployment, or lowest female economic participation, is one of the most serious issues confronting our economy. There are several reasons behind this such as the backwardness of agriculture and industry, the caste and religious system followed by the nation, the culture and norms of the society, lack of sufficient
opportunities in the service sector, etc. the women also spend most of their time for unpaid house hold activities and it is not calculated as an economic service. Unpaid domestic work is also more significant for the overall growth and development of our nation. Because it provides psychological and physical development of a family such as the caring of children and elders, cleaning, washing, cooking, etc. are the most time and effort consuming work. Therefore women paid work as well as unpaid works are equally significant for the overall growth and development of the country. There is further consideration needed for this subject.

The famous essay of Shultz (2000) quotes that "paid work is the platform on which equal citizenship should be built; paid work serves as a foundation that secures to women and men from all walks of life, a source of equal citizenship, economic withdrawal, social ties, and personal identity". Shultz also recognized that paid work and unpaid work are also important in life. The women built good citizens of the country. The mothers spend most of their time on child care and a better future for children. This cannot be valued in our society, it is equally important for the development of a nation. Basu (1991) and Sivakami (1997) studied the relationship between mother's employment and child health and they found an inverse relationship between mother's employment and child survival in less developed countries.

The importance of female working participation is needed to take much attention today. Female education, employment, and empowerment are the three terms mostly interrelated. Today the government had given more preference to female education and employment. Women can empower only through education and employment. It also leads to the overall growth and development of the nation. Female education and enrolment for higher education are much improved today. But their economic participation remained a question mark. Sharma (2015) reported that more than 50 percent of adults in India believed that a married woman should not be working outside the home if the husband earns a decent living. This is the common attitude of Indian society and they always denied females the right to choose employment. Most women are to depend on their male family members for their financial needs.

The Mahatma Gandhi National Rural Employment Act (MGNREGA) is the landmark of Indian history by the government introduced to empower rural women in India. The major beneficiaries of these programs are women and at the latest government-raised wage rates. And the program helped to reduce poverty and provide food security. But the number of participation of educated women in this program is very less and there are working women only with primary or secondary education. The unemployment among the educated remains an unsolved question because there are no opportunities for such a group in India.

Kerala's model of development is the most widely discussed topic and Kerala followed a different style of development compared to other Indian states. Kerala achieved a number one position in the case of social indicators such as literacy, sex ratio, female education, infant and maternal mortality rates, etc. The state gives more preference to its health and education sectors. In Kerala parents also gives equal preference for girls' education and wellbeing. The number of educated girls in Kerala is very high and a large number of girls in Kerala are enrolled in higher studies. But the problem of educated unemployment is very high in Kerala, especially among women. This is manifested most notably in a very pronounced incidence of unemployment which is more than two times of average in all India levels. This problem is very serious among the educated they are unable to utilize the skill and knowledge that they have acquired for effecting qualitative changes in the economy and society.

The female literacy rate in Kerala is 92 percent; Kerala is the highest among Indian states. The girls constituted 71.54 percent of the total enrolment of degree courses under various arts and science colleges under the four general universities in Kerala. The number of educated women is very high in Kerala. But the level of working participation is very low. The female working participation in Kerala is 24.8 percent which is very low compared to males ( 57.8 percent). There are different reasons behind this, and one of the main reasons is the attitude of society. Parents educate a girl to find better matches for them in the marriage market. After marriage, the employment of women is the choice of husband and their families. In many cases,
women are insisted to become homemakers after their marriage. Another reason is that the job opportunities for women in Kerala are very less compared to men. The women also faced lots of barriers to entering the labour market like the problem of security, dual roles in family, tradition, beliefs, religion, etc. the next noticeable fact in Kerala is that the quantity of education is only increased, but the quality of education is falling, this is another reason of increasing educated unemployment among women in Kerala. In Kerala, the number of arts and science colleges, engineering colleges, and self-financing colleges increased after 2000, and many of these colleges are below quality is another reason is for falling the quality of education in Kerala.

In the Kerala context, it is very important to analyse the problems of women because the state tries to give equal preference to women in economic, political, and social participation. The state succeeds in many fields like providing good education and health for girls. The Kerala government also launched different schemes for empowering women such as Sharanya (self-employment scheme for widows, unmarried or divorced women, and unwedded mothers), Seethalayam (women health care center), Aswasanidhi (scheme for the victims of sex crimes, acid attacks, and domestic violence), etc. and many of the programs succeed. As a result of migration and foreign income, the state can able to control its poverty and other inequalities. The noticing thing is that more than half of the population in Kerala constituted women and they also got better education but their employment participation is very less. Under these circumstances, the study is very important and it tries to explain the reasons and causes of the lowest female participation in the state.

### 1.3 Scope of the study

The study is conducted in the Malabar region in Kerala especially Malappuram and Kannur districts, focusing on Disparities in education and employment among women. The main intention of the study is to identify the problem of unemployment among educated women and what are the reasons behind the lowest female working participation in Malabar. The study analysed the gap between women's education
and employment and identified the variables like marriage, age, husband's education; income, religion, social norms, culture, etc. that determined the women working participation. The socio-economic background and the cultural features of the Malabar region influenced the social status and working participation of women in this region. The study of Disparities in Education and Employment among Women in Malabar would help the government and society to give awareness of this problem and to identify the main causes and reasons for this problem and to take the solution to this problem. Because unemployment, especially among the educated, is one of the main problems faced by the Kerala economy and more than half of women in Kerala are still unemployed it makes a great loss for the state and the country like India. Human resources are the major wealth of our country and the effective utilization of human resources leads to the growth and development of the economy.

The study also compares the level of unemployment among different types of education and it helps to know which type of education provides more employment opportunities among women and what the main drawbacks of our education system are. The study also helps to know about the need for employment for women and how women's employment education makes them financially independent and leads to women empowerment. The study also analyses this problem from the economics and sociological theoretical perspective and it helps to understand how the international theories can explain our scenario and what the theoretical importance of this problem is. The study also compares the domestic unpaid work of women and the paid work and explains the importance of both of these two in our economy. Because the domestic work of women is equally important as the paid work. In many families, the income contributor is the male members and at the same time, the family matters are handled by women and which reduces the mental stress of their husbands. Especially in Malabar regions most of the male partners are abroad and full family is handled by women. The study gives a picture of educated unemployment among women and the same time gives awareness about the importance of unpaid domestic activities handled by women.

### 1.4 Statement of the Problem and the Research Questions

The status of women in Kerala is very high and they recorded the highest achievements in all levels of education. The enrolment of female students for all levels of education is more than the number of male students. But all the existing data and literature point out that the female labour force participation in Kerala is very less compared to other Indian states and Kerala recorded number one in the case of educated unemployment. That means there is a large number of educated people outside of the labour market and there is a high gender difference. The female labour force participation is less than half of the male labour force participation.

The present study is tried to examine the gap or to identify disparities in education and employment among women in Malabar. And also tried to identify the reasons for the lower labour force participation of women and identify the factors determining the women's entry into the labour market. The study is mainly focused on the Malabar region. Because Malabar districts are belonging different sociocultural characteristics and the women work force participation in Malabar is less than all Kerala averages. As a result of gulf migration, a major change was witnessed in this region and the income level of this region increased and all causing a poverty reduction. With the increased income, they gave much preference to consumption, health, and education. As a result the education status of this region entirely changed and a lot of new educational institutions were also located. The parents were given more preference for the education of their children but they didn't bother about the employment of their daughters. Because of the social and cultural aspects of this region, women are expected to marry before they obtain employment, and the early marriage system is also prevalent in this region. Most of the girls are married at the starting of their twenties. All of these factors result in a high disparity between education and employment in this region. The study also hypothesized that there is a high disparity between women's education and their employment participation. There is also a close association between female education qualifications and their entry into labour markets.

Here the study attempt to probe into the following research questions
a) What is the role of social and economic factors to determine female employment status?
b) How do the education qualifications of the respondents influence their decision of working participation?
c) What are the major factors and determinants of female employment participation?
d) What are the major reasons for the gap between female education and employment in Malabar?

To answer these questions, the study was formulated the following objectives

### 1.5 Objectives

The objectives of the present study are the following:

1. To analyse educated women's unemployment among different socio-economic groups.
2. To study the impact of education qualification on women working participation level.
3. To identify major determinants and factors influencing female economic participation level.
4. To examine women's attitude toward employment and to analyse the reasons for the gap between women's education and employment.

### 1.6 Methodology of the Study

The study is carried out based on both primary and secondary data. The primary data are collected by a semi-structured interview schedule distributed among females in the age group of 18-60 and their education status is taken as S.S.L.C and above based on the definition of the NSSO (Educated persons are defined as those who
have attained the educational level of secondary and above). A case study was also conducted among employed and unemployed women in this region to identify the reasons for unemployment and their attitudes towards employment.

### 1.6.1 Study Area

The study area is determined based on 2011 census data and by the Periodic Labour Force Survey of 2018-19. In the 2011 census the highest Muslim populated district from Malabar is Malappuram (70.24) and the highest Hindu population from Kannur ((59.83). By the Periodic Labour Force survey of 2018-19, the lowest female workforce participation is from Malappuram (14.4) and Kannur (19.3). Religion and workforce participation are two criteria to select the two districts because the study is focused on the two religious groups Muslim and Hindu and also their workforce participation rates. The data is taken from both employed and unemployed women to study the selected objectives. The study also makes a rural and urban comparison and for this purpose, Malappuram Municipality and Areacode Panjayath were randomly selected from the Malappuram district, and Iritty Municipality and Kanichar panchayath are randomly selected from the Kannur district. The simple random technique is used to select the Municipalities and Panjayath from the selected district.

### 1.6.2 Sample Size Determination and Sampling Technique

The sample size is determined by the proportions of the female population and their working participation rates by using the sample size calculator. The total female population from each district is selected from the voter's list of the Election Commission of India and the female workforce participation of each district is determined by estimating the Periodic Labour Force survey of 2018-19. The total samples taken from Kannur (Kanichar) panchayath are 128 and Kannur (Iritty) Municipality is 127 . The samples taken from Malappuram Municipality (Malappuram) are 107 and Areacode Panjayath (Malappuram) is 111. The total sample size for the study is 473 from both two districts. The simple random method is used to select the required number of respondents from each study area.

### 1.6.3 Secondary Data Source

The secondary data are taken from NSS unit-level data on the Employment Unemployment survey of 2011-12, $68^{\text {th }}$ round, and Periodic Labour Force Survey of 2017-18 and 2018-19. The data is also taken from the EPW Research Foundation, the published sources of various reports of the census and Economic Reviews state Planning Board of Kerala, etc...

### 1.6.4 Tools Used for Analysis

For the analysis of primary data collected from the study area, the following quantitative tools and techniques are used:

## a) Descriptive Statistics

It is used to calculate frequencies, percentages, mean and standard deviations, etc.

## b) Cross Tabulation

Cross tabulation was used to analyse the different variables among the employed and unemployed women.

## c) Pearson's Chi-Square Test

The Pearson's Chi-Square test can be defined as a popular non-parametric test that is used to analyse the degree of association between two categorical variables.

Chi-square statistic is calculated using the equation:

$$
\chi^{2}=\sum \frac{\left(O_{i}-E_{i}\right)^{2}}{E_{i}}
$$

$o_{i}=$ Observed value
$E_{i}=$ Expected value

## d) One-Sample t-Test

One sample $t$-test is the parametric test used to check whether the population means equals a specified value. The test statistic is calculated using the following formula:

$$
t=\frac{m-\mu}{s / \sqrt{n}}
$$

t $=$ Student's t -test
$\mathrm{m}=$ mean
$\mu=$ Theoretical value
$\mathrm{S}=$ standard deviation
$\mathrm{N} \quad=\quad$ Variable size

## e) Factor Analysis

Factor analysis can be defined as a statistical method used to simplify the data by checking or measuring the correlation that exists among the selected variables and extracting the overhang information and decreasing the problem to just a few core factors or reducing the number of factors into core factors.

KMO: Means for Kaiser-Meyer-Olkin (KMO):
KMO was used to measure the adequacy of data taken into the factor analysis and it checks the sampling adequacy of every variable separately. The value of KMO always stands between zero and one. The meaning and interpretation of the data are as follows:

- KMO values range between 0.8 and 1 denoting that the sampling is adequate.
- KMO values less than 0.6 denote that the sampling is not adequate and that remedial action should be taken.
- KMO value close to zero indicates that there are widespread correlations among the variable taken and which is a problem for factor analysis.


## The Bartlett's Test

Bartlett's Test of Sphericity was used to measure the significance of the study and it can be shown the validity and suitability of the responses collected to the problem being addressed by the study. Bartlett's test of sphericity is less than 0.05 , which means that the Factor Analysis can be recommended and suitable for this study.

## Scree Plot

A scree plot shows the Eigen values on the $y$-axis and the number of factors on the x -axis. It always displays a downward curve. The point where the slope of the curve is leveling off (the "elbow) indicates the number of factors that should be generated by the analysis. The Default Eigen Value cut-off is set at greater than 1. Eigen of scalars associated with a linear system of equations or matrix. an Eigen value of 1 accounts for as much variance as a single variable, and the logic is that only factors that explain at least the same amount of variance as a single variable are worth keeping.

## Rotated Component Matrix

The Rotated Component Matrix shows the correlation between the variables that can be taken for analysis and the extracted factors. The factor column of the table shows the rotated factors that can be extracted from the total factors. The resulting variables are the most important variables related to the female employment status of the total variables.

## f) Logit -Probit Model

Logit and Probit models are among the most popular models. It is used in case of the dependent variable is a binary response, commonly coded as a 0 or 1 variable.

## - Logit model (Logistic regression)

The population Logit regression function is
$P\left(Y=1 \mid X_{1}, X_{2} \ldots X_{k}\right)=F\left(\beta_{0}+\beta_{1} X_{1}+\beta_{2} X_{2}+\cdots+\beta_{k} X_{k}\right)$

$$
=\frac{1}{1+e^{-\left(\beta_{0}+\beta_{1} X_{1}+\beta_{2} X_{2}+\cdots+\beta_{k} X_{k}\right)}}
$$

The idea is similar to Probit regression except that a different CDF is used:
$F(x)=\frac{1}{1+e^{-x}}$

Is the CDF of a standard logistically distributed random variable?

## - Probit model

Assume that Y is a binary variable

With the model
$\mathrm{Y}=\beta_{0}+\beta_{1}+\mathrm{X}_{1}+\beta_{2} \mathrm{X}_{2}+\cdots+\beta_{\mathrm{k}} \mathrm{X}_{\mathrm{k}}+\mathrm{u}$
With
$\mathrm{P}\left(\mathrm{Y}=1 \mid \mathrm{X}_{1}, \mathrm{X}_{2}, \ldots, \mathrm{X}_{\mathrm{k}}\right)=\Phi\left(\beta_{0}+\beta_{1}+\mathrm{X}_{1}+\beta_{2} \mathrm{X}_{2}+\cdots+\beta_{\mathrm{k}} \mathrm{X}_{\mathrm{k}}\right)$

Is the population Probit model with multiple regressors $\mathrm{X} 1, \mathrm{X} 2, \ldots, \mathrm{Xk}$ and $\Phi(\cdot)$ is the cumulative standard normal distribution function.

The predicted probability that $\mathrm{Y}=1$ given $\mathrm{X} 1, \mathrm{X} 2 \ldots \mathrm{Xk}$ can be calculated in two steps:

1. Compute $\mathrm{z}=\beta 0+\beta 1 \mathrm{X} 1+\beta 2 \mathrm{X} 2+\cdots+\beta \mathrm{KXk}$
2. Obtain the value of $\Phi(\mathrm{z})$
$\beta \mathrm{j}$ is the effect on z of a one-unit change in regressor Xj , holding constant all other $\mathrm{K}-1$ regressors.

### 1.7 Limitations of the Study

The study is limited to only two districts, Malappuram and Kannur from the Malabar districts. The secondary data analysis is done based on the $68^{\text {th }}$ round of NSSO in 2011-12 and the last two rounds Periodic Labour Force Survey. The primary data is collected from the women in the age group of 18-60 and some of them were hesitant to give their frank opinions on certain aspects due to fear or shyness. The difficulties also faced collecting the details of financial status and some of them are not ready to disclose their assets background. The problem is also associated with collecting the details of their economic and non-economic works. Because women simultaneously do many activities like cleaning, cooking, child care, gardening, tailoring, etc. and they never calculate their working and leisure time. It is very difficult to calculate the domestic work of a woman because they do all the household activities based on love and emotions for their family, not for monetary benefits.

### 1.9 Design of the Study

## Chapter I Introduction

The first chapter includes a short introduction and it deals with the background of the study of women working participation and it is explained based on the world, Indian, and Kerala scenarios. And the chapter also includes the importance and scope of the study, statement of the problem, major objectives, methodology, and limitations of the study. The research methodology deals with sample sources both primary and secondary, sample size determination, sampling methods, selection of respondents, selection of area, questionnaire construction, analytical tools, and techniques. It also includes the chapter design of the theses.

## Chapter II Literature and Theoretical Review

The second chapter includes literature and theoretical reviews of the present study and the previous studies arranged based on Kerala, Indian, and world perspectives. The theoretical review deals with the various economic theories of women's labour force participation, determinates of women's labour force participation,
unemployment, and gender differences in the labour market also. The chapter ends with a research gap identified from the existing literature review.

## Chapter III Women Workforce Participation: An over view

The third chapter starts with an introduction to women work force participation and also explained women in India and Kerala. The chapter deals with women's education and employment in the All India and Kerala scenarios. And the chapter gives a conclusion that there exists a gap between education and employment at the All India level and Kerala cases. The female labour force participation at both levels is very less compared to men.

## Chapter IV

## Female Workforce Participation in Kerala: A General Analysis

The fourth chapter is a general discussion of female labour force participation in Kerala based on secondary data. The data analysed here are from the $68^{\text {th }}$ round of the NSSO employment unemployment survey, Periodic Labour Force Survey of 2017-18 and 2018-19.

## Chapter V Data Analysis

The fifth chapter is an analysis of primary data collected from the study area. And this chapter analysed the socio-economic profile of the respondents and also analysed the socio-economic factors influencing women's decision of working participation and the role of education, education qualifications, and type of education on female employment status.

## Chapter VI

This chapter analysed the major determinants and factors of female employment participation.

## Chapter VII

The seventh chapter explained the cases of employed and unemployed women separately and also identified the major reasons for unemployment based on primary data and also included some case studies identified from the data collection.

## Chapter VIII Findings, Conclusion, and Recommendations

The findings of the study and the conclusion are summarized in this chapter as also suggested some recommendations based on the findings.

# Chapter II 

## LITERATURE AND THEORETICAL REVIEW

CONTENTS
1.1 Introduction1.2 Studies of women working participation: Kerala, Indian, and World scenario
1.3 Conclusion1.4 Theoretical Approach to female working participation1.5 Introduction
1.6 Theories of female labour participation
1.7 Conclusion
1.8 Research gap

### 2.1 Introduction

Women played a central role in the progress, development, and stability of the country. Women constituted half of the world population and they are the real pillars of a nation. From the traditional society now the society changed its attitude toward female education, employment, and financial independence. Education plays a key role in the success and empowerment of women; it helps them to understand their rights, ability, skill, and potential. The educated women give more preference to their career, future, employment, financial stability, and self-sufficiency.

But the problem is that there is a mismatch between women's education and employment all over the countries. The number of employed females is less than the number of employed men. The problem is much more crucial in developing and underdeveloped countries compared to developed nations. In these countries, female unemployment is a serious issue and women also faced many types of discrimination from the labour market. In many countries, women are paid fewer wages than equally qualified men employers and they do employment below their education qualification, ability, and skill. There are different factors influencing female employment such as type of work, the number of children, marital status, age, etc., and many women entered the labour market in their middle ages, and their younger age they spend on education, family, etc. Female unemployment is different types and it is closely related to their circumstances.

In India, we can see that different types of gender discrimination in all fields such as female population, education, literacy rate, working participation, etc. In India male population is more than the female population, the male literacy rate is greater than the female literacy rate, the enrolment of male students for higher education is much higher than the female students and the working participation rate among men is greater than the female working participation rates and the other thing that the majority of females were worked in informal sectors with low payments. But the situation of Kerala is different from India; in Kerala, the society is given more preference to girls' education. But the number of female unemployed is higher than that of male unemployment.

When we analysed the literature, it provides a clear picture of female unemployment, causes of female unemployment, and the major determinants of female employment. This chapter is analyzing the female employment status based on the Kerala scenario, Indian scenario, and world scenario.

### 2.2 Studies of women working participation: Kerala, Indian, and World scenario

Mathew (2015), states that a shift occurred in Kerala's female employment and working participation from 2004 - to 2012. In the 1990s the labour force participation in both India and Kerala among women was very high. But after 2005, their job participation declined not only in Kerala but also throughout the country. But fall in the rate of Kerala was comparatively higher than the national average. The working participation of women in Kerala is very less at their younger age. The younger women are delaying entering the labour market because they spend their younger age on education, marriage, child-caring, etc. The quality of employment also plays a very significant role among educated women. And the study concludes that Kerala has a wide wage differential between males and females. This problem is also faced by educated women. One of the limitations of this study is conducted only based on secondary data analysis. So there is a scope to analyse this problem based on a primary data basis.

Abraham (2013), states that the share of the women labour force and their participation were declining for the last quarter of a century. The main reason for this is that the unpaid domestic activity of women increasing and they spend more time on household activities. The economic or job participation creates dual responsibility and burden to them. Thus the withdrawal from the labour market to avoid the dual role and the women's withdrawal from the labour market are positively related to the level of education. The relationship between income and labour force participation is negatively related. Women in poor families engaged more time in the labour market than in unpaid family work. Thus the number of women in a household or domestic activities in India increasing and women spend
more time on household activities. But it is not considered an economic activity, it is unpaid work. And women's participation in paid jobs is decreasing trend.

Sebastian and Navaneetham (2008), that economic growth and education increase female workforce participation rates in Kerala. Kerala has the number one position in the case of women's education and the economic growth is higher than in other parts of India. But the state faces the problem of educated unemployment, especially among women. There is a contradiction that the education qualification of women in Kerala is increasing, but their job participation is decreasing. The study used multivariate logistic regression to analyse the determinants of women's job participation. And there are several factors like education, income, age; marital status, place of residence, etc. were influenced women's entry into the job market. One of the reasons for the low job market participation of women is the type of education that they received. In many categories of higher education women's participation is more than men's, but the contradictory fact is that female unemployment is very high in Kerala. The study raises more questions about the situation than the answers.

Mathew (2012), Kerala achieved a good score in social development like health, education, and wellbeing. But in the case of economic development, the state remains backward. In the case of female labour force participation, Kerala's contribution is very low. Some districts in Kerala like Kasargod, Palakad, and Wayanadu have some significant improvements in this matter. There are several factors like education, domestic duties, and Government programs that helped Kasargod to achieve an improvement in women's labour force participation rates. The rural female participation rate in the Kasargod district is higher than in the urban sector because of the coping strategies adopted by the households in this region. But other parts of Kerala shows a lower female working participation rate because women faced the problem of the double burden of managing paid job and household duties. In many families, the male members are migrated and full responsibility of family upon the women.

Mitra et al. (2007), state that Kerala enjoys the highest score in gender development indexes in a matter of education, health, sex ratio, etc. but in the case of unemployment, Kerala scored the number one position. And the number of suicide among women is also very high. Women face a lot of discrimination from job places and at home because the state of Kerala prevails the system of male domination. The educated women face a lot of difficulties to achieve better jobs and economic positions. Male domination and sex discrimination are the main causes of women's suicide. There are also several factors behind the lowest female working participation rate in Kerala such as changes in cropping patterns in the agriculture sector, the stagnancy of manufacturing sectors, and discrimination in the job market.

Mitra et al. (2006), an important policy for improving the status of women is education. Human capital theory suggests that education and training are significant determinants of employment and earnings. But in the case of Kerala, there is a contradiction between education and employment. There is high education attainment and lower labour force participation. By analyzing the budget allotments of the Kerala government spends more on education compared to other Indian states. But the government spends more on elementary or primary education than on technical or employment-oriented education. This is the main reason for the low working participation rate. The majority of women in Kerala graduated and they preferred white-collar jobs to red-collar or blue-collar jobs. But they are not ready to acquire technical or skilled education; they always give their first preference for arts and science colleges. Because they are believed that this is better for their marriages, child care, future, etc., these factors lead to the highest unemployment rates among them.

Kodoth and Eapen (2005), Kerala has been considered relatively free from the conventional restrictions against women's education, employment, and women owning property. The female education attainment of Kerala is very higher compared to other Indian states. The number of females enrolled for graduation and post-graduation has increased trend. But the majority of female students enrolled in arts and science colleges. Only less than one-third of female students enrolled in
engineering colleges. Thus the number of women under paid employment is very less in this state. Recently the states showed a declining trend of female job participation because women had not been able to find jobs of their preferences. They had given more preference to household activities and social status.

Eapen (2004), in recent years in Kerala, witnessed an involuntary withdrawal of women from the labour force. In rural Kerala, the female working participation rate is very low, but in urban Kerala, the female working participation rate is much better compared to all India levels. At all India levels, noted a decline in both urban and rural female working participation rates. But Kerala after the 90 witnessed stability in the case of female labour force participation. Another thing is that the wage rate in Kerala is much better compared to other Indian states. Hence in a situation of higher household earnings, many women were withdrawn from their full-time labour force participation. The level of education is also played a significant role in women's job participation. The majority of unemployed women reported in Kerala because they are not able to find a job based on their preference or education qualifications. Thus the women withdrew from the labour market and moved to domestic work as an unpaid household.

Panda (2003), the employment behaviors of women in Kerala were different among young, single, and married women. Single women have strong social support for engaging the labour market compared to married women. Gender discrimination in the job market is also very high in Kerala and is a barrier to women entering the job market. In Kerala, particular types of jobs are only open for women like teaching, nursing, semi-skilled and unskilled workers. There is also a positive relationship between employment and working age. Women in the urban areas worked more than women in rural areas and the women from Muslim communities were more conservative and give the highest preference to marriage over education and employment. Women belong to backward communities given more preference for wage employment than the women from higher castes. From his survey, he noted that women had high education their working participation is very less. One of the most important factors that determined employment for women is their marital
status. The married women had more responsibilities in the family than in the job market.

Chacko (2003), Kerala achieved a better position in social development without economic growth. Kerala has scored a better position in gender indexes and social development indicators. Compared to other Indian states, the average marriage age of girls in Kerala is very high, and girls are given more preference to their education not employment. The parents educate their girls only for qualifications, not for employment. The social practices in Kerala such as dowry, male superiority, etc. deny the property rights of women and their employment opportunities. It denies their opportunities for empowerment and works for their physical, psychological, and financial well-being. So the state needs to remove these cultural barriers against women and help them deal with issues like dowry, abuses, and domestic violence. Only education, employment, and financial independence are helping women to eliminate all these abuses against them. True women empowerment is only possible by the improvement of women's education and employment.
K.R Devi (2002), found that Kerala has an inverse relationship between women's education and employment. Improvement in the educational qualification of women in Kerala created them strong preference for white-collar jobs and salaried jobs. This caused a rise in educated female unemployment in Kerala. There are different factors influencing women's labour market entry other than education. The study is fully based on primary data analysis and based on the analysis she concludes that the type of education has played a significant role in women working participation. The number of unemployed is very less among professionally qualified women compared to the non-professional group. She summarized her study that restructuring education to a more job-oriented is very urgent.

Mathew (1999), Kerala has a paradox of high social development and low economic development. Unemployment is one of the serious issues faced by the state. But the surprising thing is that the state achieved a better position in the matter of education. Compared with other developing countries, the unemployment among women in Kerala was very high and those who are qualified with primary or higher education.

The people in Kerala prefer white-collar jobs and the absence of those kinds of jobs is one of the serious problems behind this. The lack of sufficient opportunities in the service sector and the youth's negative attitudes towards the primary and secondary sectors are the major reasons for the highest unemployment rates in Kerala.

Kumar (1994), Kerala tends to fall in female labour force participation after the 1990s. The demographic changes in Kerala are one of the factors that caused the lowest female labour force participation. The increased female population caused an increased supply of female labourers and it resulted's a lower demand for female labourers in Kerala. The labour supply among women in the age category 18-20 and above in the 40s was very high. The other category is given more preferences for home care. Industrialization in the 1990's increased the demand for skilled male labourers and it was also a reason for the higher female unemployment rate in Kerala. When the Kerala economy transferred from agriculture to the tertiary sector, there emerged a large number of unemployed, unskilled labourers and women displaced from their traditional employment. Thus the economic development and transformation are the reason for the falling female employment rates in Kerala.

Latha et al. (1993), analysed that different socio-economic factors influence female education and occupational aspirations. The important factors are the socioeconomic status of the family, self-imposed restrictions, the socialization process, and individual educational background. She also emphasized the role of career guidance and counseling in giving appropriate guidance for girls' education and employment. Many girls have extra talents and skills to improve their living conditions. But unfortunately, socialized women are given more preference to love, marriage, and family. Proper guidance and counseling at right time allowed women for achieving economic equality and independence

Kumar (1989), the majority of Indian states show gender discrimination in case of demographic features like sex ratio, female infanticide, enrolment for education, etc. but the state of Kerala is an exception to this; the gender discrimination is very low in Kerala. Income-wise, Kerala is a poor state, but in the case of social development, it has a better position. The reason behind this is that the state has given high priority
to women's education. In the case of the state, the role of historical factors in shaping cultural institutions that supported women was emphasized. But the state faced the problem of the highest rates of unemployment among the women. The highest educational qualifications among women and the lack of sufficient opportunities in the state are the major causes of female unemployment levels.
K.R Devi (1984) studied the working participation of women during the 1980s. In 1980 the total enrolment of girls for all levels of education in Kerala was much better than in the other states in India. The urban working participation in Kerala is during that period much higher than the all-India average. But in Kerala compared to urban and rural working participation, the rural working participation was much better than the urban participation. During that time a large number of women in Kerala worked agriculture sector and factory work like coir, cashew, spinning, etc. during the 1980 ' s the unemployment rate among the literate was higher than the illiterate. Because the illiterate women are worked in agricultural sectors and they also engaged in the traditional types of occupations like small scale and cottage industries.

Apte (1975), Kerala achieved a better position in a matter of education at all levels including higher education state achieved considerable progress. The majority of educations institutions in Kerala worked under private sectors like the Nairs, Ezhavas, and Syrian Christians. Girls constituted 50\% of the population and $40 \%$ of them enrolled in different arts and science colleges. More numbers among them enrolled in medical colleges and teachers' training institutes. But the problems of unemployment especially among women were very high in Kerala. Unemployment among professionally and technically qualified persons has reached a serious proportion. The migration and emigration from Kerala are very high. The emigration of professionally and skilled manpower is results depletion of human capital in Kerala. But it eliminates the state's poverty and unemployment at a certain level. But the state faced the serious problem that the lack of opportunities for skilled or professionally qualified workers.

Najeeb et al. (2020) examined the 'J' shaped relationship between women's education and labour force participation level. The women who had primary education contributed more to the employment sector comparing illiterate women. Women with secondary education contribute more than women with primary education. So education contributes more to labour force participation. But it is the opposite in the case of Indian women. The family income influence women's labour participation, in India women from rich families, preferred more leisure and household activities than economic participation. The relationship between women's labour force participation and education is a ' $U$ ' shaped but not positive. Women with secondary education or graduation had a lower participation rate. Women with education always prefer a high salaried job, but that kind of job is limited in India. And it is reserved for men. The lack of white-collar jobs and exclusion of women from these types of jobs were the reasons for the lower female working participation rates in India.

Rangarajan et al. (2014), analysed the $68^{\text {th }}$ round sample survey on employment and unemployment conducted between July 2011 and June 2012. They showed a declining trend in female labour force participation rate in India between 2004-2005 and 2009-2010. During these periods, both rural and urban India witnessed a sharp declining casually employed females. The survey showed a sharp increase in regular wage/ salaried employment between 2009-and 2010 among both males and females. Both male and female self-employed workers increased during this period, but there is a large declining female labour force in India and it is reached $27 \%$. But an interesting fact is that women's participation in education has increased in recent years, and many number of women enrolled in higher education during this period. The withdrawal of females from the labour market is witnessed in many developed countries during their initial stage of development so there is a ' $U$ ' shaped relationship between female education and economic development.

Lahoti and Swaminathan (2013), India has witnessed high economic growth, high education attainment, and rapid growth of urbanization. But the female working force participation has a declining trend in India. There is a relationship between
economic growth and female working force participation. It is found that a ' U ' shaped relationship. When the initial stage of economic development female labour force participation declines and after the minimum point, it will start to rise and the highest stage of economic development is associated with the highest level of female working force participation rate. And in the case of India, the economic growth is not been employment-intensive. Agriculture and manufacturing are labour-intensive, but it is not led to economic growth. This is also a reason for declining female labour force participation in India.

Thomas (2012) analysed that in 2004-05 and 2009-10, many females in India left agricultural work and moved to self-employment and other types of occupations. During this period, there is a sharp raising the number of rural females who were attending to domestic duties only. The reason for the movement of women to household work is the improvement of income-earning opportunities for the male members of the family. The social sectors also played a significant role in missing women labourers in the Indian economy. These include the restrictions from family, house hold and in-laws to move outside the household activities. The labour opportunities for educated women are very less in India. In India, only a small number of females are accounted for in high-quality jobs. Given the absence of better job opportunities, more women are withdrawn from the job market to attend to household duties.

Abraham (2009), there is an increment in the female labour force and work force during the period 2004-2005 in rural India the share of women in domestic duties declined and increased the number of women engaged in outdoor household duties. In farm and non-farm sectors, the number of female labour force participation increased during this period. In agriculture fields, the share of males declined and females increased. There is a feminization work in the region that experienced agricultural distress. One of the main reasons for this is male migration. As a result of male migration, many parts of rural India witnessed increased women's labour force participation.

Sharma (1990), made a study about different working women in India and she explained that employment does not give economic freedom to Indian women. They worked hard, but they had no power to handle their wages. In many cases, their wages are handled by husbands, mothers-in-law, and fathers. Women are always under the supervision of the senior households of the family. Only a few women claimed their money and property and they had no right to handle their husband's money. The personal autonomy of women is not relevant in the Indian context. Employment only increased their burden on the family because they are equally managed household activities and child care. The inside and outside work caused their dual responsibility and under this situation, they depended on other family members to manage their children and household activities. In many cases, women had less payment from the labour market and it increased their dependence on husbands. Employment does not provide Indian women with economic or personal freedom.

Gosh, et al. (1984), that female labour force participation is very important for economic development and family planning. But in India, the economic participation of women is ignored because of our tradition and culture. The Indian culture has always given preference to male domination and sex discrimination is very high in India. India has a high gender disparity between males and females in case of economic and political participation. The socioeconomic status of males and females is highly different in India, women possess lower economic status. There is a cultural and traditional barriers restricting women achieve a better position in society. But women have the potential to contribute to economic growth and development.

Tilak (1980) studied the discrimination in employment and wage against weaker sections including women, back ward casts, rural people, etc. in early periods; many societies in India denied education and employment to women. During this period the female labourers were immobile and their labour supply was inelastic. There is a lack of enough employment opportunities for women and the working hours for women are comparatively less than men and women spend more time on household
activities. The women labourers always received fewer wages compared to male labourers.

Eckstein and Lifshitz (2011) analysed that an increase in female employment and working participation rate have taken place in the last century, and it has both social and economic implications. The married women's job participation depends on their level of education and wage rate. The employment of married women causes an increase in the Gross Domestic Product (GDP) of the USA. The wage rate and education positively related to female working participation level. When the wage rate is higher, the women's entry into the labour market is also very high. Women always are looking for market wage rates to choose employment. Education also played a significant role in women's careers. The woman with higher qualifications has better opportunities in the labour market. The study concludes that female education boosts nations' GDP, economic growth, and development.

Verbakel and Greef (2009) investigated how partner career resources related to labour market outcomes? The study found that the partner career resources negatively affect the working hours and positively affect the job level. People have an incentive to work more hours if their partners have many career resources. Highly educated women restrict the working hours of their husbands, whereas highly educated men stimulate their wives' careers for normative reasons. And the result further revealed that the negative effect of a partner's career resources on working hours has become stronger for men and weaker for women. That the stimulating impact of a partner's career resources on job level has decreased for men as well as for women.

Lincove (2008) states that female education is directly related to economic growth in positive development outcomes such as fertility, child health, and employment opportunities. The female working participation rate is high in lower developed countries and highly developed countries. It is very low in middle-income countries. There exist a ' $U$ ' shaped relationship between national income and female labour force participation rate. The longitude analysis shows that in developing countries female labour force participation rates decline as national income increases. And the
economic growth is accompanied by girls’ education. The investment in girls' education results in a positive effect on home productivity and workplace productivity. It creates positive benefits in the family as child health, fertility, etc., and in the workplace, it also supplied a skilled labour force.

Donni (2007) studied what happened wife's labour supply when the husband's labour supply was fixed? That the wife labour supply is determined by the household consumption demand and there is a positive relationship between wife labour supply and commodity demand. The wife only has limited benefit from the husband's earnings and the husband's wage earnings influence his demand, not the wife's demand. The wife's wage rate influences her demand, not the husband's demand. So In this study conclude that a wife's demand only depends on her income, not her husband's income. Thus women's employment is very important to satisfy women their own needs.

Jenkins (2006) in the last fifty years there has been an increasing number of women's employment participation in developing countries. The education qualification is the most important factor determining women's job participation. Education is the most important factor determining female employment. The number of job participation among educated women is more compared to others. But many countries of the world are witnessed long-term unemployment among women their younger age. Because in younger age women spend their more time for family and take care of children. In developing countries, women with vocational education spend more time in the labour market. A woman always chooses a lifelong learning method to achieve more education, skill, and experience. It generates more employment opportunities for women.

Vella (1994) examines the relationship between the labour market behavior of females and their attitudes towards traditional gender roles. There exist a negative relationship between females' attitude towards traditional gender role and education. The attitudes of females were systematically related to family and background characteristics. Individual education, labour supply, and rate of return from education have a dramatic impact on female attitudes. The male attitude also has
some impact on female market behavior. The study concludes that traditional attitude and gender role affects labour market behavior.

Allen (1992) tries to explain the two terms as the feminization of poverty and women's poverty. These two were very broad and complex issues, in recent years the number of women among the poor has been increasing and there also reducing the standard of living of women in many countries. Poverty affects all the household members in a family but in case women always face inferior positions inside and outside the family. So the woman has low quality of life to compare other members of a family. Because families are provided women with less opportunity to take economic opportunities and economic freedom. In many situations, families denied women the right to enter the labour market and decide to choose paid employment. Lack of economic freedom and independence is the main problem faced by women. In that condition women always lead a low quality and sub-standard life.
A.H (1990), education has an important role in women's work and careers. Educated women have a lot of opportunities and better careers compared to lesser educated women. Educated women got better-earned jobs and it helps them to manage household activities and child care. Education also helps women to choose an educated and better life partner and it also helps them to share household activities equally. The most important thing is that education provides women with an equal opportunity in the labour market and is thus prepared to compete on an equal footing in the labour market. Education reduces the gender gap between men and women and it provides equal opportunities for both of them. Education played a significant role in the upliftment of women's careers and economic participation.

Sinclair (1990) explains there is an inequality between women's and men's labour market participation. Women's labour force participation depends on several variables like wage, family, motherhood, education, community, fertility, etc. women faces inferior position in the workplace and they faced many challenges in the workplace. There exists a relationship between wage rate and employment skills. The skilled women labourers were paid more wages than unskilled labourers. Education, training, and skill are the most important factors determining the
productivity of the labour and productivity determines the wage rate. The productivity of female employers is less compared to male employers because they are lacking more education, skill, and work experience. They spend more time on family and child-rearing. This is the reason for the wage gap between men and women.

Luck and Hotackr (1990) explains there is a difference between the working pattern of male and females. Men's work participation on a full-time basis is throughout their lifetime. But women working participation is characterized as a bi-model pattern of participation over their lifetime. They take a break for childbirth and child-rearing and return to part-time employment thereafter. This study explains with the help of dual labour market theory and it classifies the workers of the library into two sectors. The primary sector belongs to librarians they have high salaries with better facilities. And the secondary sector consists of lower clerical groups with low payment. The secondary sector is further divided into full-time workers and part-time workers. The majorities of women belong to the group secondary sector and are part-time workers.

Sticher and Parpart(1990) explained the male domination of female labour supply. Traditionally in the case of married women husbands take decisions regarding their labour supply. The study explained with the help of the neoclassical view, that the neoclassical economist analysed that in the case of married women, their preference for job participation is determined by their husbands. Male domination also affects fertility, fertility, and female labour force participation are indirectly related. Women spend their quality time on child care; it reduces their incentive to work. The male decided their fertility and employment participation.

Salaff (1990) stated that labour force participation among unmarried women is higher than compared of married women. Women work more with their younger age and after their middle age. The gap between these ages they spend on child-rearing and taking care of family. In Asian countries, young unmarried women continue their labour force participation and when the young women married, they typically entered the household activities. Married women with good education continue their
job and others were willing to undertake the household activities. When young women had children, they had difficulty doing work and households activities together. In this case, they only were willing to work with a high wage rate.

Sticher (1990) explains there is a wide gap between male and female working participation rates all over the countries. Industrialization and technological advancement demanded more skilled and trained workers for employment and it affected a lot of unskilled women labourers. In past years the majority of women worked in the traditional sectors with low wages but after industrialization, many labour-intensive works were replaced and the introduction of technologies and machinery resulted in many people loosening their employment, especially the women workers. These results in a global level of highest unemployment rates among women.

Psacharopoulos and Zamatos (1989), the economically active individual is known as a labour force. So the population engaged in unpaid family work or domestic activities were excluded from economic activity. Women are included in this category but they are excluded from statistical collections and enumerations. The neoclassical income leisure model explains the labour supply in terms of income and wages only. It ignores non-economic participation or unpaid participation. When the income wage rate is high, women participate in the labour market and when it falls they take more leisure and spend more time on unpaid household activities. The working participation of women depends on many factors like income, age, fertility, religion, education, and so on.

Fuchs (1988), many factors influenced women's working participation, they are: age, number of children, fertility, marital status, wage rate, etc. in recent years studies showed an increased working participation rate among older women compared to younger mothers. The working participation rate among single women is much higher than compared of married women. But in recent years a change occurred among married women and many of them entered into paid employment and which causes declining fertility among them. Many choose to divorce for better education,
job training, and occupation. It also caused an increased number of divorced women in recent years.

Blundell et al. (1989), tried to extend the standard model of labour supply and labour participation level. They assumed that zero hours of work represent unemployment or non-participation. In the case of married women, demand is an important factor to determine their participation rate. They analysed this study based on samples collected from married women and studied their family expenditure. Based on this study they collected family expenditure as an important role in determining female labour force participation.

Beneria(1985), explained that in many societies women worked more hours than men because all household activities were the responsibility of women only. But the problem is that it is not counted as an economic activity or as a part of calculating GNP. Women were always considered unpaid family workers, but in many developing countries women engaged in agricultural activities at the same time, and also did domestic activities. But here only she is considered an unpaid housewife because agriculture is considered her part-time activity or her secondary job. There are different reasons for this under-reporting, which is the irregularity of outside work or agriculture is only considered seasonal or marginal work. But in reality, women worked more hours than men as unpaid domestic workers.

Chiplin and Slonane (1976) explain the relationship between wage rate and labour force participation among married couples. Lower-waged women spend more time on household activities and high-waged women spend more time on labour market participation. In the case of married couples, the male also spends more time on household activities when the wage rate is low, and at a higher wage rate, they spend more time in the labour market. Married couples always depend on their spouse's income to decide on employment. But in the case of single women, they spend more time in the labour market because they are independent. From this, single women work more than married women and marriage is an important factor in determining employment.

### 2.3 Conclusion

There are different factors that directly or indirectly influenced female working participation rates such as education, income, wage rate, husband's employment, number of children, nature of the job, marital status, etc. in the case of married couples, women have two choices one is domestic duties and other is labour market participation. In this situation, women had decided based on the nature of the job and the level of market wage rate because, in many societies, there is a wage gap between men and women. In the case of single women, the number of employed women is more than we comparing to married women. Because they got more time to spend on better education, job training, and skill acquirement. The other thing is that the women worked more hours than men for domestic activities. But it is not counted as an economic activity or a part of national income. So economic participation makes a double burden on them and they are very difficult to handle both responsibilities together.

In the Indian scenario, one of the main reasons behind the lowest female working participation is the stagnancy of the Indian agriculture sector and the lack of industrialization. Because in India majority of women are working in the agriculture sector and we compared male and female education levels the number of male students enrolled in higher education is more than the number of female students in higher education. In India majority of women worked in the primary sector and which is a seasonal job and the women only worked seasonal time. The lack of industrialization is also a reason for the lowest female working participation level in India. There is also seen gender discrimination and male domination in all sectors. In many cases, women have no right to choose their careers and employment. It is always a choice of their family, father or husbands. In many cases, they are insisted on becoming homemakers.

In Kerala, we can see a gap between female education and the employment rate. Because of many reasons, society promotes very important for girls' education and the number of females enrolled in higher education is very high compared to other Indian states. But the problem is that educated unemployment is very high in this
state because, in Kerala, the numbers of job seekers are higher than the number of job vacancies. Recently the Gulf migration improved the economic status of families and in the absence of male members; women have full responsibility for their family and domestic activities. But during the time of 1980's the female working participation level is very high, because during these periods the state gave more preference to small scale and cottage industries. And many number of women worked in these sectors in those periods. But in recent times, women acquired better education and they give more preference to white-collar jobs and started to withdraw from traditional types of jobs. And the absence of white-collar jobs is also the main reason for the lowest female working participation rates.

### 2.4 Theoretical Approach to Female Job Participation

### 2.5 Introduction

Female education and employment reflect the economic growth and development of a country. As more and more women enter the labour market, economies have the potential to grow faster in response to higher labour inputs. It will increase the house holds incomes and reduce the poverty and increase the consumption of goods and services. It boosts the production and investments of a country. It also strengthens women to do outside work confidently and it reduces all discrimination toward women. And it increases the educational attainment of women and provides them with an opportunity to do better jobs with high payments.

Many developing countries witnessed huge cases of unemployment among women. And women also face much discrimination in the labour market based on skill, experience, and productivity. In India, there is a tendency to decline in the number of female working participation levels in recent periods. The other noticed fact is that many women are worked in unorganized sectors with low payments. The important reason behind this is the lack of education, and lack of quality of education, and skill. It limits the economic, social, and political opportunities of women in India. The dropout rate among the girl students is also very high in rural India and there is no sufficient employment for women there also. Because in rural

India majority of peoples depends on agriculture and there is an oversupply of population, it is also a type of seasonal employment.

Kerala has also shown a declining tendency in the female labour participation rate in recent years. In Kerala, there is a contradiction between education and employment. The enrolment of students for higher education is very high and the dropout rate of girl students is very less compared to other Indian states. But in Kerala, the number of female unemployed is very high, especially among educated women. In recent years there is a tendency of increasing the household activities of women as a result of migration. In many families, the male members are migrated to other countries and all the household duties are the responsibility of women such as tutoring children, taking care of old parents, etc. so the women are not able to go for better employment and under this situation, they compel to do work un-organized sectors with low payments.

Many numbers of women do many economic activities at a home-like painting, cake baking, tailoring, etc. but this type of participation is not counted in GDP. This is another reason for the low participation of women. As a result of gulf migration the income level of the family also raised, as a result, many women withdraw from the primary job market. And also the migration caused family gave more preference to children's education and they spend a good amount of their income on education, but they are not interested in girl child employment, after their education they give more preference to marriage than employment. These are the different reasons for the lowest female working participation level in Kerala.

## Theories of Female Labour Force Participation

Different economic theories tried to analyse female labour force participation, problems faced by women in the labour market, and the economic and social discrimination faced by women. When we examine these theories, we quickly discover the answer to the question of why unemployment among males is so much higher than among women. What are the reasons behind the disparity in unemployment rates between men and women? Etc.

One of the most important theories among these is the 'Theory of Marriage' developed by Gary Becker, he was the first economist who tried to find the economics of marriage. This theory also tried to analyse the concept of division of labour. He explained that marriage is the outcome of two people who decided to be together. After marriage, the spouse needs to answer the questions that who will go out to work? Who will do household chores? Will they have kids, who will take the responsibilities for the kids? Etc. The answer to this question is to lead to the division of labour among husband and wife. According to Becker that the one with comparative earnings wages will go out and works and the other one has to do household activities. And he points out that, women consider men as the bread earner of the family and men earn more than women from the labour market, and men hire women to bear and rear the children as women have superior skills for household activities. In this way, he explained the division of labour between husband and wife. The women choose family responsibility and domestic activities because of their skills and efficiency and the men choose wage employment and economic activities because of their skill and efficiency. This is one of the reasons behind the lowest female working participation rate.

The Neo-Classical economists also believed that men have more opportunities in the labour market and they have more productivity to comparing women. Because women spend a lot of time on childbearing and taking care of their families. Men got a lot of time for acquiring more education, skill, and work experience. Education, skill, and experience are important factors to determine job opportunities. Men have good opportunities to search for better employment and wages based on their qualifications. Society and traditions inject more competitive skills among men and women who choose family life rather than employment. This type of gender discrimination resulted in the highest working participation rate among men than women.

The other two approaches also explain the labour supply among women. The main developments that have taken place in the theory, practically all of which have come
from the USA, for a more in-depth survey of these theories are Heckman (1978), Lioyd, Andrews, and Gilory (1979) or Smith (1980).

The first approach is "The single-period decision model. This is the extension of the Neo-Classical theory of labour supply. The neoclassical economists assume that the individual derives utility from both leisure and income. An individual is to choose that combination of hours of leisure and hours of work, that will yield maximum satisfaction. When the hourly wage rate is high, the individual takes more leisure and less work, but they still have relatively more income, on the other hand, the opportunity cost of taking an extra hour of leisure becomes more expensive and there is an incentive to take less leisure. It is assumed that as the wage rate raises, the labour supply first increases, then start to decrease at a higher wage rate. Because when an increased income, individuals spend more time with family. The basic model is extended by Becker (1965) and others, they divided the hours of an individual between two, domestic work and leisure. They assume that individual derives satisfaction from a combination of home production and leisure. In the case of married couples, they decided their time between these three activities reflecting their preferences, market wage, and home productivity of both partners. If the market wage rate is high they gave preference to labour participation and otherwise they choose leisure or domestic production. When comparing the wage rate of husband and wife, in many societies men have higher wages than women. In this situation, the wife chooses leisure or domestic production and the husband prefers labour market participation.

Gronau (1977) made an empirical test in the USA and he found that an increase in the market wage rate would reduce the work time in the home. In the case of married couples, they take decisions together and the wife has more specialization in home production, so she chooses household activities and the husband chooses economic production (labour market). Based on this approach, we conclude that the unemployment rate among married women is very high compared to single women. Because domestic production have consumes up more time than economic
production for women. Unfortunately, home production is not counted as an economic activity or as part of GDP.

The second approach was the 'Life cycle model', developed by Mincer (1962); Mincer was one of the first economists to consider the female labour supply decision in a lifetime context. Married women taking their decision about how much time spend on lifetime employment based on different factors such as the number of children, their husband's income, and employment opportunities. Because of the difficulties involved in properly testing this type of model relatively few empirical studies, J P Smith (1977), Heckman and Macurdy (1980), and Moffitt (1984) have incorporated it. Thus the theory concludes that the labour market participation of married women is based on their whole life situations. Women have less freedom to choose their economic participation and it leads to an increase the number of unemployment among women. The other thing is that in the case of married women they have to enter the labour market in their middle ages, and in their younger age they spend more time with family and children. Women were spending more time in the labour market before their marriage and in their middle ages.

The 'Human Capital' model developed by Mincer (1962) and Becker (1975) also tried to explain; that workers got good employment, wages, and promotions based on their education, skills, and work experience. Education, skill, and work experience are regarded as an investment in human capital, and those who have invested got better jobs with higher wages compared with those who have not invested.

Men got more time and opportunities to invest their own life than comparing women. Because men spend their younger ages acquiring a good education, skill, and work experience at the same time women spend their younger ages for marriage, children, and family. The human capital investments decide once job offers and efficiency, the employers gave preference to hiring workers with more education, skill, and experience. And they got a better jobs, wages, and other allowances. For these aspects, men got better employment with good incentives with comparing
women. And this causes the lower working participation rates among women and the reason behind the discrimination faced by the women.
'Taste for Discrimination' by employers developed by Becker (1971), explained that employers that are members of a group that is discriminated against may have to work harder for the same wage or accept a lower wage for the same work as other employers. In simple words, employers will discriminate against employing some minorities, especially women because they dislike working with women or employing women. The employers have a taste for male workers and they dislike female workers for the same employment. This theory shows real discrimination against female employers and the reasons behind the wage gap between male and female workers. In modern times also many unorganized sectors witnessed a wage gap between male and female employers and many female employers withdraw from labour markets because of these reasons and choose home activities because they consider home employment is much better than comparing exploitation from labour markets.

This is not only a single theory that explained labour market discrimination the 'Dual labour Market Theory' associated with Doringer and Poire (1971) and deals with the structure of the labour market. The theory divided the labour markets into two: primary labour market and secondary labour market. The primary labour market is a sophisticated, stable, secure working atmosphere, with favorable job prospects, the scope for promotions, and high wages. But the secondary labour market is unstable working conditions, a poor atmosphere, and a low wage rate.

The employers will be divided into primary and secondary labour markets based on their past experiences, productivity levels, and education qualifications. This will lead to a concentration of female employers in the secondary market; because of comparing with male labourers, they have low productivity and less work experience. The firm and industries will continue the discriminations against women and the division is mainly based on their sex, not their potential. With dual labour market theory explained that male employers will still benefit from a better job, better payments, and a better working atmosphere. It will further improve their
productive capacity compared with female employers. This results in female employers will be forced to stick to the secondary labour market with lower wages.

This theory provides a clear picture of how female labourers are always facing discrimination from the labour market. This discrimination makes them less productive and capable of doing better jobs. The wage discrimination and job discrimination against female employers will force them to decide regarding economic production or home production. From this situation, most women employers choose home production because they are very difficult to handle both at the same time. And they are not ready to continue their work with the lowest working atmosphere with a low wage rate. In the case of capable and educated women, they try too hard to continue with good jobs but all this discrimination and exploitation compel them to decide on their jobs.

The 'Statistical Discrimination Theory' developed by Kenneth Arrow (1973) and Edmund Pheleps (1972) also explains the discrimination faced by women in the labour market. According to this theory, there is the dissimilarity between two distinct groups of workers such as males and females in the matter of productivity, skills, and experiences. In such conditions, employers discriminate against the group of workers based on this criterion (male and females). The theory deals with how female employers faced discrimination from the labour market based on their differences. Women are generally less educated and less experienced; they always faced discrimination from the labour market. The theory gives us an idea about labour market inequality and gender discrimination based on skill, experiences, and education. There is a wage difference between males and females based on this criterion.
'The occupational crowding model' developed by Barbara Bergmann (1971) shows the labour market discrimination against women. The theory explains sex discrimination and race discrimination in the labour market. And it explains the reason why women are paid lower wages in the labour market? The theory says the oversupply of female labourers is the reason for the low wage rate of female labourers. Because certain types of jobs in the economy are only reserved for
women such as nursing, teaching, child care, etc. the oversupply of females in these types of jobs resulted in a lower wage rate for women in such occupations. The occupational segmentation of sex is a major reason for the wage gap between males and females.

The 'Segmented labour market model' developed by Cairnes and J.S Mill also explains gender discrimination in the labour market. The labour market is segmented into two as competing groups and non-competing groups. Women were included in the non-competing groups because of their education, skills, and work experience. There exists a wage gap between competing and non-competing groups of workers. Non-competing groups of workers are paid a fewer wage and they always face discrimination from the labour market. These wage differences resulted in many female employers withdrawing from their jobs and it creates more unemployed women labourers.

This is not only a single case Jacob Mincer 'Labour force participation of married women' (1962) explains married women allocate their time for paid employment, work at home, and leisure. The time for work at home and leisure depend on their market wage rate, when the market wage rate is raised, an increase in the price of time spent working at home in leisure. When the wage rate is higher they spend more time on paid employment and take less leisure and work at home. The women used some of their increased earnings to buy goods and services and substitute the forgone work at home. From this theory, we can understand that women work more with higher wages and the wage rate is lower they spend more time on domestic activities and leisure. The lower wage rate also is a reason for the lower economic participation of women.

Wage differences also exist between equally productive men and women explained by Mrs. John Robinson's application of monopsony (1938). According to her wage rates in monopsony are not determined by MRP, they are determined by the elasticity of the supply of labour. A monopsonistic employer maximizes his profit by paying different wages to different groups of workers even if their MRP is the same, but different elasticity of labour supply. The women workers are less elasticity
of labour supply and they paid fewer wages and the men labourers are high elasticity of labour supply and they paid higher wages. Because female workers consider many factors to choosing a job such as place of work, type of work and they have many responsibilities in the family at the same time workplace. So they are ready to work with lower wage rates at the same time men employers are very flexible and they are only ready to work with higher wages. Otherwise, they quit their existing job and search for new employment.

Marx and Engels stated that the gender discrimination and superiority of men started in a very ancient society. They referred to the patriarchal family, they considered the family as an economic unit in the feudal era and agriculture is a productive activity. The male members of society directly controlled the family's land, cattle, and instruments and divided the labouring tasks among members. As time passed, the patriarchal family was destroyed production was undertaken by factories and women become independent wage earners.

### 2.6 Conclusion

When analyzing the male and female working participation rates, the female working participation rate is very less. It is not a new phenomenon, when we analyse history we can see a gap between males and females in the case of economic, social, and political participation. Society always believed men are the bread earner of the family and all the household activities are the duty of females. Economic participation determines many factors like productivity, skill, education; experiences, etc. men spend their younger ages acquiring better education and skill. But women spend their young age childbearing and rearing and taking care of their families. In comparison to women, the employer has always given higher preference to highly educated and experienced personnel. Men have all these qualifications and they got better job opportunities. We can see another difference between men and women in are types of jobs. The majority of men are worked in organized or formal sectors with high payments because they have better education and skill. But women choose informal or unorganized sectors because of a lack of skill and experience. This type of job discrimination also results in a wage gap between men and women. Men got higher wages and other incentives to comparing women.

And the other thing is that certain types of jobs are reserved for women such as nursing, daycare service, teaching at primary classes, etc. the wage rate in these sectors is also very low because of the oversupply of female labourers in these sectors, and the lack of sufficient opportunities. And the women also allocate their time for household activities, labour markets, and leisure. It creates an overburden among them and under these circumstances many women withdraw from the labour market and choose other options. Because in case women number of factors depends on their employment and their employment is not only their own choices, it depends on others decisions also. It makes them incapable of taking their own decision independently.

### 2.7 Research gap

There are different studies conducted in Kerala to analyse the problem of educated female unemployment or female labour force participation (Abraham, (2013); Sebastian and Navaneetham, (2012); Devi, (2002). But all the studies focused on the southern part and central part of Kerala and there are no studies that explained the problem of educated female unemployment in the Malabar regions. Malabar has unique features and there are a lot of variables that caused the development of this region. The cultural and religious characteristics of these districts are different from other parts of Kerala. There is also a research gap identified that there are only limited studies explaining the disparities in education and employment among women based on both primary and secondary data and there are also no studies explaining the reasons behind disparities in education and employment among women.

There is a high research gap felt in the case of economic theories of female labour force participation. There are no exact economic theories that explained this problem based on a gender perspective, only limited economists tried to explain female working participation and labour market discrimination from gender perspectives. Such a gap became the main thread of this study to explain the female labour force participation in combining gender and economic perspectives. A gap is also felt in the case of analyzing the attitude of women towards employment because there are no studies that make detailed analyses among employed and unemployed women to check their interest towards employment.

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### 3.1 Introduction

The key topics discussed nowadays are female education, employment, and empowerment, and this topic is given more priority in every country and community. Investing in girls' education would transform societies, countries, and the whole world. Girls' education helps them to lead a healthy and productive life. They earn a better income, they take decisions regarding themselves and they also obstruct the issues that affect them and also the society. Girls' education and employment reduce inequalities and strengthen the economies. The UNESCO data reported that, if all girls in developing countries completed primary education, child mortality would drop by a sixth, saving nearly one million lives annually. Also, maternal deaths which the UN vows are largely preventable would reduce by twothirds. Schools can provide girls with life skills, reproductive health knowledge, and social space to discuss issues.

But it is very difficult for women for finding a job comparing men and many times women are paid less than men. Women's economic empowerment helps them to realize their rights and gender equality. Women's economic empowerment results in more productivity, increase economic diversification, and income equality. When women are employed, they tend to work in low-quality jobs in vulnerable conditions, and there is little improvement forecast for the future. The present global female labour force participation is 49 percent. But in the case of men, it is 75 percent (ILO 2018). There is a difference of 26 percent and in some countries more than 50 percent. From an economic perspective, decreasing gender gaps in the labour market substantially boost global GDP and strengthen the global economy. Reducing gender gaps also shows a positive trend for a country and it is a good sign of economic growth and development.

### 3.2 Women in India

Women constitute almost half of our population and they played an important role in the economic growth and development of a nation. A historical analysis of the status of Indian women at an early age shows a declining trend. Ancient Indian history and
tradition show that women did not share an equal position with men. The role of women-only is limited to wives and mothers. The Indian patriarchal system and society never encourage women to handle the role in the economic, social, and political parts of the nation. Indian women are comparatively less empowered and they had lower status in society compared to men. In ancient India, the society unwelcomed the birth of daughters and they believed the son lived with his parents and earn for his family. The status of women deteriorated not only in society but also in the family. During that period women were denied to getting an education and their education only considered a qualification for marriage. During that time women faced many problems like early marriages, infanticide, not allowing remarriages, etc.

After the $19^{\text {th }}$ century, as a result of many social reformers and their movements, the slightest change occurred in the matter of women. They initiated by educating women and bringing progressive legislation. During that period the law prohibited many social evils against women like early marriages, Sati, female infanticide, Devadasis, etc. after independence women participate in all activities such as education, politics, media, art, culture, etc. the Indian constitution provides equality and guarantees no discrimination against women. But still, also women's empowerment is incomplete and a woman faces much discrimination in the field of economic, political, and social participation. Crimes towards women like dowry cases, rapes, female infanticide, sexual harassment, domestic violence, etc. show an increasing trend. Compared with the past women in modern times have achieved a lot but in reality, they have to still travel a long way. The latest sex ratio also showed that the attitude of society towards women never completely changed and they have to face many problems today like malnutrition, poor health, maternal mortality, lack of education, mistreatment, lack of power, overwork, and early marriage, dowry, etc.

### 3.3 Women's education in India

The government of India gives more preference to girls' education and ensures equal education for all. The government implemented various schemes and programs for educating girls. Education is essential for women to change their status in society.

But the female literacy rate in India is less compared to the male literacy rate and the enrolment of female students in all levels of education is less compared to the male students. There is an improvement in the case of women's education after the 1990s and today it is much improved than before. The 2011 census data shows, that the total literacy in India is 74 percent and the women's literacy rate is 65.65 percent and which is higher than comparing the previous years.

Table 3.1

## Female Literacy Rate in India

| Female literacy |  |  |
| :---: | :---: | :---: |
| Year | Female literacy | Total literacy |
| 1951 | 8.9 | 18.3 |
| 1961 | 15.4 | 28.3 |
| 1971 | 22 | 34.5 |
| 1981 | 29.8 | 43.6 |
| 1991 | 39.8 | 52.2 |
| 2001 | 53.7 | 64.8 |
| 2011 | 64.6 | 74 |

Source: Various years of census data
When we study the enrolment of girls' students at various levels of education, there is an increasing the rates are comparing to the previous years, and the statistics show narrowing the gender gaps in a matter of education.

Table 3.2
Gross Enrolment Ratio

## Gross Enrolment Ratio of Different Stages of Education

| Year | Primary Classes <br> I-V ( 6-10 Years) |  |  | Upper primary Classes VI-VIII ( 11-13 Years) |  |  | $\begin{aligned} & \text { Higher Secondary } \\ & \text { Classes } \\ & \text { IX-XII (14-17 Years) } \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female | Male | Total | Female | Male | Total | Female | Male | Total |
| 2005-06 | 105.8 | 112.8 | 109.4 | 66.4 | 75.2 | 71.0 | 35.8 | 44.6 | 40.4 |
| 2006-07 | 108.0 | 114.6 | 111.4 | 69.6 | 77.6 | 73.8 | 36.8 | 45.0 | 41.1 |
| 2007-08 | 112.6 | 115.3 | 114.0 | 74.4 | 81.5 | 78.1 | 41.9 | 49.4 | 45.8 |
| 2008-09 | 114.0 | 114.7 | 114.3 | 76.6 | 82.7 | 79.8 | 43.5 | 51.0 | 47.4 |
| 2009-10 | 113.8 | 113.8 | 113.8 | 79.0 | 84.3 | 81.7 | 46.1 | 52.5 | 49.4 |
| 2010-11 | 116.3 | 114.9 | 115.5 | 82.9 | 87.5 | 85.2 | 48.5 | 55.7 | 52.2 |
| 2011-12 | 107.1 | 105.8 | 106.5 | 81.4 | 82.5 | 82.0 | 54.5 | 58.8 | 56.8 |
| 2012-13 | 107.2 | 104.8 | 106.0 | 84.6 | 80.6 | 82.5 | 56.5 | 55.5 | 56.8 |
| 2013-14 | 102.6 | 100.2 | 101.4 | 92.8 | 86.3 | 89.3 | 62.6 | 60.9 | 62.5 |
| 2014-15 | 101.4 | 98.9 | 100.1 | 95.3 | 87.7 | 91.2 | 65.8 | 63.8 | 65.3 |
| 2015-16 | 100.7 | 97.8 | 99.2 | 97.6 | 88.7 | 92.8 | 56.4 | 56.0 | 56.2 |

Source: Census of India, Office of Registrar General, India.
Table 3.2 shows the Gross Enrolment Ratio of different stages of education in India and it shows that the girl's enrolment ratio in India is an increasing trend. In the case of higher education also there is an increase in the number of females enrollment rate of before. It is showing a positive sign of changing the attitudes of society toward the girl child and also denotes a sign of economic growth and development. A developed society is given more preference to female education, employment, and empowerment. The census data from 2005-06 to 2015-16 shows that the enrollment of females students in all stages of education increased and reduced the gender gap. The latest data shows that the gender gap between higher education and senior secondary education is narrowed and today girls are also given more preference to their higher education. It improves their social status and economic status and ensures their participation in economic, political, and social.

## Table 3.3

## Female Student's Enrolment

| Number Of Females Per 100 Males Enrolled In Different Stages Of Education |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Primary <br> Classes I- <br> V | Upper <br> Primary <br> Classes VI- <br> VIII | Secondary <br> Classes IX-X | Senior <br> Secondary <br> Classes XI-XII | Higher <br> Education |
| $2005-06$ | 87 | 81 | 73 | 72 | 62 |
| $2006-07$ | 88 | 82 | 73 | 74 | 62 |
| $2007-08$ | 91 | 84 | 77 | 76 | 63 |
| $2008-09$ | 92 | 86 | 79 | 77 | 65 |
| $2009-10$ | 92 | 88 | 82 | 80 | 67 |
| $2010-11$ | 92 | 89 | 82 | 79 | 78 |
| $2011-12$ | 93 | 90 | 84 | 81 | 80 |
| $2012-13$ | 94 | 95 | 89 | 87 | 81 |
| $2013-14$ | 93 | 95 | 89 | 89 | 85 |
| $2014-15$ | 93 | 95 | 91 | 90 | 85 |
| $2015-16$ | 93 | 95 | 91 | 90 | 86 |
| Souncer C |  |  |  |  |  |

Source: Census of India, Office of Registrar General, India.
Table 3.3 shows the number of females per 100 males enrolled for different stages of education in India. It shows that at all levels of education the number of females students increased and there are positive changes in the case of female enrollment at different stages of education in India and narrowing the gender gaps between the male and female student enrollment rates. But in all the stages of education, the male student's enrolment rates are more than the female student's enrolment rates. But in coming years we can expect equality between the male and female students' enrolment rates.

### 3.4 Women labour force participation In India

India is a country showing the lowest women labour force participation globally. The country shows that less than a quarter of women joined the labour market and only a fifth is employed. The World Bank 2017 reported that only the Arab country showed less female labour force participation comparing India. Mitali Nikore et al.
(2021) studied that there are different reasons for the lowest female working participation in India such as increased mechanization, income effect, gender gaps in higher education and skill training, social norms, etc. over the last three decades, household income increased in India and due to this reason families withdrew women from the labour market due to the result of the income effect. Indian women also constitute their more time on domestic unpaid household activities; the women spend an average of five hours per day on family work (NSSO 2019). It also increased their responsibility and caused them to withdraw from the labour market.

When studying the labour force participation in India, both rural and urban participation rate is less than the male participation rates and there is a decreasing trend. The Indian female unemployment rate is also showing an increasing rate. And comparing the male and female unemployment rates, the female unemployment rate in India is much higher than the male unemployment rate. That shows that female unemployment is a serious problem in India and more than half of our labour force is outside the labour market it lowers our economic growth and development and also results in social inequalities.

Table 3.4
Labour Force Participation Rates in India
Labour Bureaus Annual Employment And Unemployment Survey Age: 15 Years And Above

| Labour Force Participation |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Rural (1000) | Urban (1000) |  | Rural + Urban (1000) |  |  |  |
|  | Male | Female | Male | Female | Male | Female |  |
| $2011-12$ | 788 | 280 | 733 | 179 | 774 | 254 |  |
| $2012-13$ | 780 | 248 | 730 | 169 | 766 | 226 |  |
| $2013-14$ | 747 | 291 | 738 | 185 | 744 | 258 |  |
| $2015-16$ | 773 | 267 | 691 | 162 | 750 | 237 |  |

Source: EPWRF

Table 3.4 shows the Labour Bureaus Annual Employment and Unemployment Survey from the period 2011-12 to 2015-16. From the table, we can see the gap between the male and female participation rates in India. Female participation rates are less than half of the male participation rates in India. Female participation also
shows declining trends. When comparing the rural unemployment rates, urban unemployment rates among women aree much higher. Both the urban and rural female labour force participation is showing a decreasing trend. A higher gender gap also exists between the male and female labour force participation levels in both rural and urban India. That means more than half of our female labour force is unemployed or not utilizing their labour power.

Table 3.5

## Unemployment Rates in India

| Labour Bureaus Annual Employment And Unemployment Survey Age: 15 <br> Years And Above (EPWRF) |  |  |
| :---: | :---: | :---: |
|  | Unemployment Rate (Usual status) |  |
| Year | Rural + Urban (1000) |  |
|  | Male | Female |
| $2011-12$ | 29 | 69 |
| $2012-13$ | 40 | 72 |
| $2013-14$ | 41 | 77 |
| $2015-16$ | 40 | 87 |

Source: EPWRF

Table 3.5 shows the male and female unemployment rates in India from the period of 2011-12 to 2015-16. For the years the female unemployment rate is showing much higher than the male unemployment rate in India. But the other thing is that both the male and female unemployment rates in India show an increasing trend. When comparing the period of 2013-14 and 2015-16, in 2015-16 both the male and female unemployment rates are increased from the previous year. But the female unemployment rates are much higher than the male unemployment rate.

In 2011 female workforce participation at all Indian levels was only $25.51 \%$ and male participation was $53.26 \%$, the gender gap is more than half percentage (NSSO 2011). The survey also shows that the urban female participation (35.31\%) level is lower than the rural participation rate ( $41.8 \%$ ). When coming to the educated female's unemployment rate is also a very higher rate in India compared to other developed and developing countries. Educated unemployment can be defined as
when a person is educated and is not able to find a suitable and efficient job for him or her. According to the NSSO, a person is educated if he or she has completed school studies at least till the secondary level (9th or $10^{\text {th }}$ class). The NSSO survey 2017-18 reported that in urban Ares unemployment among educated women was twice that the male and it was $19.08 \%$ in 2017-18 and the rural unemployment rate was $17.3 \%$. Both are showing an increasing trend than before and it was $10.3 \%$ (urban) and $9.7 \%$ (rural) in the 2011-12 NSSO survey.

Table 3.6

## Educated Female Labour Force Participation Rates

Usual Status Rural + Urban Educated Female Labour Force Participation Rate
( 15 Years Above) All Educated Groups In Percent

| Year | Male | Female | Total |
| :---: | :---: | :---: | :---: |
| $2017-18$ | 75.8 | 23.3 | 49.8 |
| $2018-19$ | 75.5 | 24.5 | 50.2 |
| $2019-20$ | 76.8 | 30 | 53.5 |

Source: EPWRF

Table 3.6 shows the educated labour force participation rates in India from the period 2017-2018 to 2019-20. The educated female labour force participation among all the levels of education in India is very less compared to the male labour force participation rates. This denotes there is a problem behind the women's entry into the job market and there is a need to create many opportunities for educated women.

Table: $\mathbf{3 . 7}$

> Labour Force Participation
> Based On Education Qualification in India by Gender 2018

| Labour Force Participation Based On Education Qualification In India By <br> Gender 2018 |  |  |
| :--- | :---: | :---: |
| Level of education | Male | Female |
| Basic level of education | 74.78 | 16.4 |
| Intermediate level of education | 59.4 | 13.47 |
| Advanced level of education | 79.93 | 31.55 |

Source: Statista Research Department

The report of Statista Research Department published in 2018 shows that in 2018 the labour force participation among the male labourers with basic education was almost 75 percent in India. At the same time, female workers with basic education were only 16 percent. But the participation among the intermediate level both male and female was very less compared with basic education and the working participation among women with higher advanced education denotes much higher. That means women with advanced education have better opportunities than women with basic or intermediate education. That means better education can improve the working participation of both males and females.

Women withdrew from the labour market in India due to many reasons, women with a completed intermediate level of education always prefer white-collar jobs but such a type of job is limited in our country and they withdraw from agriculture and other related sectors. These withdrawals also cause an indirect relationship between women's education and workforce participation rates.

### 3.5 Women Education and Employment in Kerala

Kerala is known as God's own country and the state stood at the number one position in the case of social development. It is the only state having high social development with lower economic development. Kerala shows the highest sex ratio (1084/1000) in India, the all India average is only $943 / 1000$. In Kerala female population is higher than the male population and the state also gives much preference to women's rights. The Human Development Indicators of Kerala are higher than compared the other Indian states and it is similar to the advanced developed countries. The female literacy rate is also higher in Kerala $96.2 \%$ and Kerala stood at the number one position in the case of literacy.

The educational transformation of Kerala emerged during the $19^{\text {th }}$ century as a result of the effort of Christian missionaries and other institutions like the Travancore Royal Family, the Nair service society, Sree Narayana Dharma Paripalana Yogam (SNDP) and the Muslim Educational Society (MES) also did the significant role for the educational progress of the state. Christian missionaries and British rule
introduced a modern educational system in Kerala and they gave preference to the girl's education, as a result, Kerala achieved the highest literacy rate among women.

A survey conducted by the Ministry of statistics and program implementation (MOSPI) in January 2020 (Household social consumption education) reported that Kerala has the highest age-specific attendance ratio for women in both urban and rural areas in the case of pre-primary level to the pre-university level of education. The survey reported that 99.5 percent of girls children in Kerala were able to obtain higher secondary education and the national average is only 47.5 percent. For the enrollment of the pre-primary section, Kerala had more than 60 percent and the national average is only 32.1 percent.

Table 3.8
Male and Females Enrolment in School Education in Kerala

| School Enrolment in Kerala |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | Primary |  | Upper Primary |  |
|  | Boys | Girls | Boys | Girls |
| $2000-01$ | 50.85 | 49.15 | 52.46 | 47.54 |
| $2001-02$ | 51.24 | 48.76 | 52.35 | 47.65 |
| $2002-03$ | 51.12 | 48.88 | 52.31 | 47.69 |
| $2003-04$ | 51.10 | 48.90 | 52.27 | 480.83 |
| $2004-05$ | 51.04 | 48.96 | 52.25 | 47.75 |
| $2005-06$ | 51.06 | 48.94 | 52.11 | 47.89 |
| $2006-07$ | 51.02 | 48.98 | 51.98 | 48.02 |
| $2007-08$ | 50.49 | 49.51 | 51.83 | 48.17 |
| $2008-09$ | 50.97 | 49.03 | 51.61 | 48.39 |
| $2009-10$ | 50.95 | 49.05 | 51.71 | 48.29 |
| $2010-11$ | 51.04 | 49.0 | 51.70 | 48.30 |
| $2011-12$ | 51.06 | 48.94 | 51.58 | 48.42 |

Source: EPWRF

## Table 3.9

Secondary and Higher Secondary Enrolment in Kerala

| School Enrolment in Kerala |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | High/Secondary Schools | Higher Secondary Schools | (10+2 Pattern) |  |
|  | Boys | Girls | Boys | Girls |
| $2000-01$ | 50.59 | 49.41 | 48.03 | 51.97 |
| $2001-02$ | 49.64 | 50.36 | 44.98 | 55.02 |
| $2002-03$ | 50.09 | 49.91 | 45.22 | 54.78 |
| $2003-04$ | 51.11 | 50.70 | 49.76 | 50.24 |
| $2004-05$ | 50.34 | 49.66 | 46.94 | 53.06 |
| $2005-06$ | 50.78 | 49.22 | 47.80 | 52.20 |
| $2006-07$ | 50.72 | 49.28 | 46.34 | 53.66 |
| $2007-08$ | 50.68 | 49.32 | 45.60 | 54.40 |
| $2008-09$ | 50.66 | 49.34 | 46.44 | 53.56 |
| $2009-10$ | 50.82 | 49.18 | 46.68 | 53.32 |
| $2010-11$ | 50.81 | 49.19 | 47.40 | 52.60 |
| $2011-12$ | 53.82 | 48.93 | 46.77 | 53.23 |
| 5095 |  |  |  |  |

Source: EPWRF

The school enrollment rate in Kerala shows there is a little difference between the girl's and boys' enrollment rates. Both boys' and girls' enrollment for primary and upper primary education is almost equal, but the boy's enrollment is higher than the girl's enrollment rates. When we come to 2000-01 to 2011-12 both the enrollment rate of boys and girls is increasing and also decrease the gender inequality in case of primary and upper primary education. In the case of high/secondary education only the year 2001-02 shows that girls' enrollment rate is more than the boy's enrollment
rates. But all the other year's boy's enrollment rates were more than the girl's enrollment rates. This shows gender inequality in the case of school education but it is less when we compare to the all-India level. But the surprising fact is that in the case of higher secondary education, the entire year's girl's enrollment rates were more than the boy's enrollment rates. That is in higher secondary levels more girls enrolled than boys. That means the girl students in Kerala are always given more preference for their higher education.

The number of female students enrolled in higher education in India is increasing and Kerala stands at the second position (UGC). Among the states, Goa was the first position and Kerala was the second position. The Gender Parity Index is a socioeconomic index relatively used to measure the education of males and females. It is calculated by the number of females by the number of males enrolled in a given level of education. GPI less than 1 means gender parity in favor of males and GPI greater than 1 means gender parity in favor of females and equal to 1 means equality between males and females.

Table 3.10
Gender Parity Index of Higher Education in All India

|  | Higher Education <br> Gender Parity Index (GPI) |
| :---: | :---: |
| Year | (Index) |
| $2014-2015$ | All-India |
| $2015-2016$ | 0.92 |
| $2016-2017$ | 0.92 |
| $2017-2018$ | 0.94 |
| $2018-2019$ | 0.97 |

Source: EPWRF

Table 3.10 shows the GPI of All India in case of higher education from the year 2014-15 to 2017-18 were in favor of males and the year 2018-19 was equal to 1 and there is a positive sign that is the gender inequality is decreasing and the last year it was equal for both male and female.

Table 3.11 shows the GPI of Kerala, by all years shows that it is greater than one and it means that by all the years it is in favor of girls in Kerala. That means in Higher education the girl's enrolment is more than the boy's enrolment rates.

Table 3.11
Gender Parity Index of Higher Education in Kerala

| Higher Education <br> Gender Parity Index (GPI) |  |
| :---: | :---: |
| Year | Kerala |
| $2014-2015$ | 1.38 |
| $2015-2016$ | 1.32 |
| $2016-2017$ | 1.41 |
| $2017-2018$ | 1.26 |
| $2018-2019$ | 1.4 |

Source: EPWRF

The All India Survey of Higher education reported from 2014-15 to 2018-19, the data on the undergraduate level of enrollment in Kerala shows that the number of female students enrolled was higher than the male student's enrollment in the matter of the undergraduate level of education. The data is provided below:

## Table 3.12

Enrolment of Under Graduate Courses in Kerala

| Enrolment: Under Graduate <br> Boys <br> (Number) |  |  |  |  | Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Girls <br> (Number) | percent | Persons <br> (Number) |  |  |
|  | Kerala |  |  | Kerala |  |
| $2014-2015$ | 233371 | 41.73 | 325931 | 58.27 | 559302 |
| $2015-2016$ | 257312 | 43.04 | 340566 | 56.96 | 597878 |
| $2016-2017$ | 273120 | 42.55 | 368794 | 57.45 | 641914 |
| $2017-2018$ | 276683 | 41.36 | 392323 | 58.64 | 669006 |
| $2018-2019$ | 281525 | 41.48 | 397212 | 58.52 | 678737 |

Source: EPWRF

In case of post-graduate level of education also shows that the number of female students enrolled for post-graduation is more than the male students. The data provided by the All India Education Survey from the year 2014-15-2018-19 shows that in entire these years the enrollment of female students was more than the male students in Kerala. That means the female student ratio in higher education in Kerala is more than the number of male students. The Kerala state and society are given more preference to the education of girls. Empowerment of women is only achieved through education. Education is the main factor that leads to higher social development in Kerala and the state is also given its main source of income for the education sector. The data is provided in the below table shows the enrollment of students in the Post Graduate level of Education in Kerala:

Table 3.13

## Post Graduate Education in Kerala

Higher Education Enrolment: Post Graduate

| Boys (Number) |  | Percent | Girls <br> (Number) | Percent | Persons (Number) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Kerala |  | Kerala |  | Kerala |
| 2014-2015 | 24597 | 31.88 | 52565 | 68.12 | 77162 |
| 2015-2016 | 23873 | 29.78 | 56302 | 70.22 | 80175 |
| 2016-2017 | 21369 | 27.18 | 57243 | 72.82 | 78612 |
| 2017-2018 | 19937 | 24.81 | 60432 | 75.19 | 80369 |
| 2018-2019 | 20891 | 24.40 | 64717 | 75.60 | 85608 |

Source: EPWRF

The Gross Enrolment ratio of Kerala including all levels of education among the age group of 18-24 years shows that the enrolment rate for female students in Kerala for higher education is greater than the male students. When we studied the five years data from the year 2014-15 to 2018-19 the Gross Enrolment ratio of female students
was increasing and in the case of male students from the year 2018-19 is 30.8 percent and it was less than the previous year that is 32 percent.

Table 3.14
Gross Ratio in Kerala

|  | Higher Education <br> Gross Enrolment Ratio (GER) |  |  |
| :---: | :---: | :---: | :---: |
|  | Male <br> (Ratio) | Female <br> (Ratio) | Persons <br> (Ratio) |
| Year | Kerala | Kerala | Kerala |
| $2014-2015$ | 24.1 | 33.3 | 28.7 |
| $2015-2016$ | 26.6 | 35 | 30.8 |
| $2016-2017$ | 28.3 | 40.1 | 24.2 |
| $2017-2018$ | 32 | 40.4 | 36.2 |
| $2018-2019$ | 30.8 | 43.2 | 37 |

Source: EPWRF

Thus in the case of higher education in Kerala, the participation of female students in all types of education is higher than the male students and it is much higher than the All India level. That means the girl students in Kerala are given much preference for their higher education compared to other states of India.

### 3.6 Women Working Participation in Kerala

Labour force participation rate can be defined as the "percentage of persons in the labour force among the whole persons in the population". The Economic Review of State Planning Board of Kerala 2020, states that the female labour force participation rates in Kerala grew to 20.4 percent in 2018-19 from 16.4 percent in 2017-18. That means women's participation in economic activities has increased in Kerala, especially in rural areas. But almost all districts in Kerala showed that the female unemployment rate was more than the male unemployment rate. There is also a high gender disparity in wages among casual labourers.

A report by the economics and statistics department of the state government attests that wide gender disparities exist in Kerala's labour market. Women in Kerala are highly educated compared to the other states of India, and also we analyzing the higher education data of the state show that the female student's enrolment rate in higher education is more than the male student enrolment rates in Kerala. But the female unemployment rate is highest in Kerala and there is also a wide wage difference between the male-female labours both in urban and rural Kerala.

The report of Gender Statistics (2017-18) and various rounds of NSSO reports show that the labour force participation of women in Kerala is far less than that of men. And Kerala is showing the highest rate of female unemployment compared to all other states of India (NSSO Employment Unemployment Survey). According to the NSSO report of 2011-12 states that the overall unemployment rate in Kerala was 6.7 percent with a wide gender gap of 14.1 percent for women and 2.9 percent for men. In the case of wages too, there exists a high gender gap between male and female casual labourers. The male casual labours paid double of female casual labours.

The $68^{\text {th }}$ round of NSSO reported that Malappuram district (the highest populated district in Kerala) showed the widest gender gap in worker population ratio in both rural and urban areas. Female job seekers in Kerala (2017-18) were 63.20 percent of the total persons seeking employment in the state. The highest numbers of female job seekers were from the Thiruvananthapuram district and followed by Kollam and Kozhikode.

Educated unemployment can be defined as a situation where a person cannot find a job suitable for his/her qualifications. K.P Kannan a Development Economist in Kerala studied the educated unemployment situation in Kerala and he said that the unemployment rate among educated youth is always higher in Kerala because there are few opportunities for a permanent job or job suitable for educated youth. He also noticed that in Kerala, the educated unemployment rate for women is more than that of men. Because men are mobile and they migrate to other states and nations, mobility is limited in the case of women.

The periodic labour force survey of NSSO from the period 2017-18 to 2019-20 shows that the female labour force participation rates in Kerala including both urban and rural are very less compared to the male labour force participation rates. In 2019-20 male labour force participation rates are 56.4 percent and in the same year, female labour force participation is 26.3 percent. The female labour force participation is only half of the male participation rates, but there is a slightest increasing female labour force participation compared to the previous years.

Table 3.15
Labour Force Participation in Kerala

| Periodic Labour Force Survey Annual -Kerala   <br> Usual Status (ps+ss) : Rural+Urban   <br> Year   Person (percent) |  |  |  |
| :---: | :---: | :---: | :---: |
| Male (percent) | Female (percent) |  |  |
| $2017-18$ | 36.6 | 53.9 | 21.3 |
| $2018-19$ | 39.5 | 56.6 | 24.6 |
| $2019-20$ | 40.5 | 56.4 | 26.3 |

Source: EPWRF
The periodic labour force survey of NSSO by the age group 15-59 in Kerala from the period of 2017-18 to 2019-20 shows that from the age group 15-29 years the labour force participation of both male and female are very less compared the age group of $15-59$ years. From all the age groups female labour force participation is very less compared to the male labour force participation rates in Kerala.

Table 3.16
Labour Force Participation Rates in Kerala by Age Groups
$\left.\begin{array}{ccccccc}\hline \text { Periodic Labour Force Survey - Annual: Labour Force Participation Rate } \\ \text { (LFPR): By Age Group } \\ \text { In percent }\end{array}\right]$

Source: EPWRF

The labour force participation rates of rural and urban Kerala show that in rural Kerala both the male and female working participation rates increased when we compare to urban Kerala in recent years. The surprising fact that is in rural Kerala the female labour force participation in the year 2017-18 was 20.7 percent and it rose to 29.4 percent in 2019-20. But in urban Kerala the female labour force participation of the year 2017-18 was 22.1 percent and in 2018-19 was 24.2 percent and it reduce to 23.2 percent in 2019-20. That means rural Kerala increased women's labour force participation more than urban Kerala.

Table 3.17
Rural and Urban Labour Force Participation in Kerala

| Reference Year | Periodic Labour Force Survey - Annual: Labour Force Participation Rate (LFPR) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Usual Status (ps+ss) : Rural |  | Usual Status (ps+ss) : Urban |  |
|  | Male <br> Kerala | Female Kerala | Male <br> Kerala | Female Kerala |
|  | $\stackrel{\text { In }}{\text { Percent }}$ | In Percent | In Percent | In Percent |
| 2017-18 | 54.1 | 20.7 | 53.6 | 22.1 |
| 2018-19 | 56.9 | 25 | 56.3 | 24.2 |
| 2019-20 | 57.9 | 29.4 | 54.9 | 23.2 |

Source: EPWRF

The labour force participation rates among the educated groups also show that the male labour force participation is more than the female labour force participation rates. 2019-20 the educated male labour force participation rate is 71.7 percent and the female participation rate is 31.9 percent. But the female participation rates increased more than in the previous years. In 2017-18, it is only 26.5 percent and in 2019-20 it rose to 31.9 percent.

Table 3.18
Labour Force Participation in Kerala by Education Level

|  | Periodic Labour Force Survey - Annual: Labour Force <br> Participation Rate (LFPR): By Education Level (15 years <br> and above) |  |  |
| :---: | :---: | :---: | :---: |
| Reference Year | Usual Status (ps+ss) : Rural +Urban |  |  |
|  | Person | Male | Female |
|  | Kerala | Kerala | Kerala |
|  | In Percent | In Percent | In Percent |
| $2017-18$ | 46.5 | 70.1 | 26.5 |
| $2018-19$ | 49.3 | 71.2 | 30.6 |
| $2019-20$ | 50.3 | 71.7 | 31.9 |

Source: EPWRF

When analyzing the education level at secondary and above, the female working participation rates were almost half of the male labour force participation rates. In 2019-20 the male working participation rate is 71.4 percent and the female participation rate is 36.2 percent.

Table 3.19
Labour Force participation By Education 15 Years and above

|  | Periodic Labour Force Survey - Annual: Labour <br> Force Participation Rate (LFPR): By Education Level <br> (15 years and above) |  |  |
| :---: | :---: | :---: | :---: |
|  | Secondary and above |  |  |
|  | Usual Status (ps+ss) : Rural +Urban |  |  |
|  | Person | Male | Female |
|  | Kerala | Kerala | Kerala |
| $2017-18$ | In Percent | In Percent | In Percent |
| $2018-19$ | 50.1 | 68.8 | 33.8 |
| $2019-20$ | 50.7 | 67.8 | 35.5 |

Source: EPWRF

But in the case of education at the level of postgraduate and above, the gap between male and female participation rates is reduced and it is only almost 20 percent. That means when the education level increases among the female job seekers the gender gap in employment will be reduced and there are more opportunities in Kerala for highly educated women. But others noticed fact that the male working participation rates among the group post-graduation and above increased (2017-18 82.9 percent and in 2019-20 92.9 percent). But in the case of female labour is reduced (2017-18 74.1 percent and 2019-20 70.2 percent).

Table 3.20
Labour Force Participation Post Graduate and Above

|  | Periodic Labour Force Survey - Annual: Labour <br> Force Participation Rate (LFPR): By Education Level <br> (15 years and above) |  |  |
| :---: | :---: | :---: | :---: |
| Reference Year | Post Graduate and above |  |  |

Source: EPWRF

The periodic labour force survey also shows that the unemployment rate among women in Kerala is very high compared to the male unemployment rate. In 2017-18 the male unemployment rate is only 6.2 percent. But the female unemployment rate was much higher than the male unemployment rate and it was 23.2 percent. In 201819 the male unemployment rate reduced to 5 percent and the female unemployment rate reduced to 17.1 percent. But there is a high gap between the male and female unemployment rates in both rural and urban Kerala.

Table 3.21
Unemployment Rate by Age Group

| Reference Year | Periodic Labour Force Survey - Annual: Unemployment <br> Rate (UR): By Age Group |  |
| :---: | :---: | :---: |
| Usual Status (ps+ss) : Rural +Urban |  |  |
| Male | Female |  |
| Kerala | Kerala |  |
| In Percent | In Percent |  |
| $2017-18$ | 6.2 | 23.2 |
| $2018-19$ | 5 | 17.1 |

Source: EPWRF
The unemployment rate among females in urban areas is more than the rural area. The unemployment rate among females in rural and urban areas is both reducing than in the previous years.

Table 3.22

## Rural and Urban Unemployment Rate and Age Groups

|  | Periodic Labour Force Survey - Annual: Unemployment <br> Rate (UR): By Age Group |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Reference Year | All |  |  |  |
|  | Usual Status (ps+ss) : Rural | Usual Status (ps+ss) : Urban |  |  |
|  | Male | Female | Male | Female |
|  | Kerala | Kerala | Kerala | Kerala |
|  | In Percent | In Percent | In Percent | In Percent |
| $2017-18$ | 5.9 | 19.6 | 6.6 | 27.5 |
| $2018-19$ | 4.7 | 15.6 | 5.2 | 18.8 |

Source: EPWRF
By the education level (15 years and above), there is a high difference between the male and female unemployment rates. But the surprising fact is that in 2017-18 the male unemployment rate was 6.2 percent and in 2019-20 it increased to 7.4 percent. But the case female unemployment rate in 2017-18, was 23.2 percent and it reduced to 15.1 in 2019-20. That is education reduces the unemployment rate among female labourers.

Table 3.23
Unemployment Rate by Educational Level

|  | Periodic Labour Force Survey - Annual: Unemployment <br> Rate (UR): By Education Level (15 years and above) |  |
| :---: | :---: | :---: |
| Reference Year | Usual Status (ps+ss) : Rural +Urban |  |
|  | Male | Female |
|  | Kerala | Kerala |
|  | In Percent | In Percent |
| $2017-18$ | 6.2 | 23.2 |
| $2018-19$ | 4.9 | 17 |
| $2019-20$ | 7.4 | 15.1 |

Source: EPWRF
The unemployment rate among women both secondary and above and post-graduate and above is higher than the male unemployment rate. The female unemployment rate among postgraduates and above is increasing and the secondary and above is reducing. In 2017-18, the unemployment rate among the postgraduate and above is 29 percent and it increased to 36.5 percent in 2019-20. In the case of women with a secondary and above levels of education, the unemployment rate in 2017-18 was 35.3 percent and it reduced to 24.6 percent in 2019-20.

Table 3.24
Unemployment Rate Post Graduation and Above

|  | Periodic Labour Force Survey - Annual: Unemployment Rate <br> (UR): By Education Level (15 years and above) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Post Graduate and above |  | Secondary and above |  |
| Reference <br> Year | Usual Status (ps+ss) : Rural <br> +Urban | Usual Status (ps+ss) : Rural <br> +Urban |  |  |
|  | Male | Female | Male | Female |
|  | Kerala | Kerala | Kerala | Kerala |
|  | In Percent | In Percent | In Percent | In Percent |
| $2017-18$ | 18.4 | 29 | 11 | 35.3 |
| $2018-19$ | 6.6 | 34.3 | 9.1 | 28.3 |
| $2019-20$ | 10.5 | 36.5 | 12.3 | 24.6 |

Source: EPWRF

The data shows that educated female unemployment rates in Kerala are increasing than comparing to the male unemployment rates. And there exists a high gap between female education and the labour force participation rates in Kerala. The female enrollment at various levels of education in the state data shows that much higher than the male enrollment rates. But the problem is associated with the case of labour force participation level. The female unemployment especially the educated female unemployment rates in the state are much higher than the male unemployment rates.

### 3.7 Conclusion

The chapter discussed the state of women's education and employment in India as well as in Kerala,. In comparison to earlier years, the standing of women in India has greatly improved. The number of women enrolled in school at all levels is increasing. The Gender Parity Index of higher education 2018-19 was equal to one and it means that there is no inequality between the male and female students in the case of higher education. Kerala always shows good signs in the case of female education. The Gender parity index of Kerala in the case of higher education is always greater than one and that means that the number of female students enrolled in higher education in Kerala is always more than the number of male students in all levels of higher education.

But in the case of female working participation rates, there exist high disparities between the male and females in the All India level and Kerala also. In our country, more than half of the women are still unemployed. The unemployment among the educated group is also very high in our country, there is a new trend we can see that urban unemployment is more than the rural unemployment rates. When we come to Kerala, the state always shows the highest female unemployment rate, the unemployment among all groups of women in Kerala is very high compared to the All India level. The unemployment among educated women is also very high in Kerala, the interesting fact is that Kerala always shows the highest female enrolment
for higher education but the educated unemployment is also shown very high in Kerala. That means there is a disparity in education and employment among women in Kerala. In the present scenario, urban unemployment is more than the rural unemployment rate both in the case of the male and female populations.

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### 4.1 Introduction

Kerala's socioeconomic profile is distinct from that of other Indian states and Kerala has unique characteristics especially in the case of education, elimination of poverty, health, female participation, gender perspectives, etc. Kerala is the state showing the highest sex ratio, highest female literacy, lowest female infanticides, highest female student enrolment for education, etc. The 2011 census reported that Kerala is the second most urbanized major state in the country and 47.7 percent of its population is urban population. And the 2011 census also noted that Kerala and Pondicherry are the only domiciles in India with a female to a male ratio higher than 0.99 with the national figure being only 0.940 .

This chapter explains the general profile of the female labour markets and their workforce participation in Kerala. Different socio-economic factors determine women's labour force participation. And the researcher tries to analyse the female workforce participation in Kerala among different districts, religious and social groups, different age groups, and among different sectors, etc. And also analyse the relationship between education and female workforce participation level. The main variables used for analyses are age, marital status, education, religion, caste, etc., and also makes a rural and urban comparison of female labour force participation rates.

This chapter analyses the case of Kerala by using secondary data, that is authors' estimation from NSS unit-level data on employment and unemployment of the $68^{\text {th }}$ round (2011-12) and the periodic labour force survey from the years 2017-18 and 2018-19. For analysis mainly use figures and tables and try to show a real picture of Kerala's female labour market.

### 4.2 Labour Market in Kerala: An Overall Discussion

When we analyse the labour market of Kerala, the overall working participation rate is very less compared to other Indian states. The overall working participation among the female is very less compared to the male participation level. The analysis was done by using the data of three periods, which are 2011-12 NSS unit-level data on the employment unemployment survey ( $68^{\text {th }}$ round) and the periodic labour force survey from the last two years 2017-18 and 2018-19.

Table 4.1
Percentage distribution of workforce ( $\mathbf{p s}+\mathrm{ss}$ )
by gender and sector (Age: 18-60) in Kerala

| Years | Male | Female | Persons | Rural | Urban | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2011-12$ | 85.2 | 31.9 | 56.2 | 56.8 | 54.9 | 56.2 |
| $2017-18$ | 78.2 | 25.3 | 49.5 | 50.5 | 48.3 | 49.5 |
| $2018-19$ | 79.9 | 30.3 | 52.9 | 53.2 | 52.6 | 52.9 |

Source: Authors' estimation from NSS unit-level data on employment and unemployment survey of 68 ${ }^{\text {th }}$, PLFS: and 2017-18 \& 2018-19

Table 4.2
The sample size for the workforce ( $\mathrm{ps}+\mathrm{ss}$ ) by gender and sector (Age: 18-60) in Kerala

| Years | Male | Female | Persons | Rural | Urban | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2011-12$ | 4,078 | 1,815 | 5,893 | 3,541 | 2,352 | 5,893 |
| $2017-18$ | 3,626 | 1,348 | 4,974 | 2,329 | 2,645 | 4,974 |
| $2018-19$ | 3,656 | 1,597 | 5,253 | 2,329 | 2,924 | 5,253 |

Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Table 4.1 by percentage distribution of the workforce by gender and sector in Kerala and table 4.2 show the sample size for the workforce by gender and sector in Kerala. Both are from the age group of 18-60. Analyzing the 2011-12 NSS unit-level data on the employment unemployment survey, the male participation rate was 85.2 percent and the female working participation rate was only 31.9 percent. There is a high gender gap between the male and female labour force participation rates. The overall working participation of the sample size was 5893 persons and out of this the male participation was 4078 and the female participation was 1815 . That means out of the overall persons the difference between the male and female participation was 2263. That means more than half of the females were unemployed.

When we come to the period of 2017-18 the male working participation decreased to 78.2 percent and also the female working participation also decreased to 25.3 percent by comparing the 2011-12 data on employment unemployment survey. And
the overall working participation decreased from 56.2 percent (2011-12) to 49.5 percent. In 2018-19 the male working participation increased to 79.9 percent and the female participation also increased to 30.3 percent. That is the overall participation rate increased to 52.9 percent from the previous year's 49.5 percent.

Figure: 4.1

## Percentage distribution of Workforce (ps+ss) (Age: 18-60) during the last three NSS Survey in Kerala



Source: Authors' estimation from NSS unit-level data on employment and unemployment of 68thround (2011-12) and PLFS: 2017-18 \& 2018-19

Note: Estimated values are weighted by sampling weight given in NSS unit-level data

Figure 4.1 shows the percentage distribution of the workforce during the last three NSS surveys in Kerala among the age group of 18-60. From this, the overall workforce participation is in 2011-12 was 56.2 percent and out of the sample force, 43.8 percent were not in the workforce. In 2017-to 18 , 50.5 percent were in the workforce and 49.5 percent were not in the workforce. That means almost half of the persons in Kerala were unemployed. During the year 2017-18 the overall workforce
participation was 52.9 percent and among this 47.1 percent was not in the workforce. The analysis shows that there is the slightest improvement in workforce participation when we compare to the last two years' periodic labour force surveys (2017-18 and 2018-19).

### 4.3 District Wise Workforce Participation in Kerala

By analyzing the three years of data (2011-12, 2017-18, and 2018-19) on labour force participation in Kerala based on gender, it is very important to analyse the data on the districts levels also. Because it gives a complete picture of the overall working participation status and also shows which district shows a higher level of participation and which district shows lower participation rates. Table 4.3 analyses the overall district-level workforce participation data of Kerala, the raw wise shows the same data showed the first table.

Table 4.3
District wise Workforce participation (ps+ss) (Age: 18-60) by gender in Kerala

| Districts | 2011-12 |  |  |  | 2017-18 |  |  | $\mathbf{2 0 1 8 - 1 9}$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  | Male | Female | Persons | Male | Female | Persons | Male | Female | Persons |  |
| Kasaragod | 85.8 | 35.1 | 57.2 | 73.9 | 10.9 | 40.1 | 76.9 | 25.5 | 48.5 |  |
| Kannur | 82.9 | 27.6 | 52.5 | 77.2 | 18.2 | 41.9 | 75.3 | 19.3 | 43.4 |  |
| Wayanad | 91.6 | 40.2 | 63.6 | 87.1 | 29.7 | 57.8 | 87.1 | 30.0 | 53.8 |  |
| Kozhikode | 87.1 | 20.6 | 49.7 | 79.2 | 25.6 | 50.7 | 84.0 | 21.4 | 50.2 |  |
| Malappuram | 85.2 | 14.6 | 44.5 | 72.7 | 13.1 | 39.7 | 70.0 | 14.4 | 38.9 |  |
| Palakkad | 89.2 | 27.7 | 55.1 | 80.4 | 25.8 | 52.0 | 75.8 | 22.5 | 47.0 |  |
| Thrissur | 85.0 | 32.9 | 55.9 | 79.2 | 27.0 | 50.8 | 73.7 | 28.4 | 49.3 |  |
| Ernakulam | 84.8 | 33.3 | 58.7 | 73.8 | 17.3 | 45.2 | 83.3 | 32.4 | 56.0 |  |
| Idukki | 86.3 | 57.7 | 71.1 | 87.6 | 50.2 | 67.5 | 85.3 | 54.1 | 70.8 |  |
| Kottayam | 86.0 | 46.1 | 65.1 | 87.9 | 35.9 | 60.5 | 82.8 | 41.9 | 62.2 |  |
| Alappuzha | 87.8 | 40.6 | 63.3 | 79.3 | 27.3 | 50.7 | 79.8 | 37.0 | 57.5 |  |
| Pathanamthitta | 81.1 | 35.2 | 56.9 | 71.3 | 24.8 | 46.9 | 84.5 | 29.4 | 52.5 |  |
| Kollam | 83.9 | 33.6 | 56.5 | 76.5 | 29.3 | 50.1 | 84 | 38.9 | 58.5 |  |
| Thiruvananthapuram | 81.3 | 40.8 | 60.0 | 79.4 | 34.6 | 54.2 | 84.4 | 46.8 | 63.6 |  |
| Total | 85.2 | 31.9 | 56.2 | 78.2 | 25.3 | 49.5 | 79.9 | 30.3 | 52.9 |  |

Source: Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19 (Same as Table 1 (row-wise))

By the analysis of 2011-12 NSSO unit-level data, the highest male participation was Wayanad district 91.6 percent, and Wayanad was the only district that showed working participation above 90 percent. The second position was Palakkad 89.2 percent and followed by Alappuzha 87.8 percent. The lowest male participation was Pathanamthitta 81.1 percent and followed by Thiruvananthapuram 81.3 percent. The highest female participation was Idukki 57.7 percent and it was the only district showing above 50 percent. The second position was Kottayam 46.1 percent and followed by Thiruvananthapuram 40.8 percent. The lowest female participation from Malappuram was 14.6 percent and followed by Kozhikode at 20.6 percent and Kannur at 27.6 percent. The overall highest participation from Idukki was 71.1 percent followed by Kottayam at 65.1 percent and Wayanad at 63.6 percent.

In 2017-18 Periodic Labour Force Survey shows that the highest male working participation is from the Kottayam district at 87.9 percent, followed by Idukki at 87.6 percent, and Wayanad at 87.1 percent. The highest female participation from Idukki was 50.2 percent and followed by Kottayam at 35.9 percent and Thiruvananthapuram was 34.6 percent. The lowest male participation was from Pathanamthitta 71.3 percent and followed by Malappuram 72.7 percent and Ernakulum 73.8 percent. The lowest female participation was from Kasargod was 10.9 percent and followed by Malappuram at 13.1 percent and Ernakulum at 17.3 percent. The overall working participation was highest from Idukki at 67.5 percent followed by Kottayam at 60.5 percent and Wayanad at 57.8 percent.

In 2018-19 PLFS highest male participation from Waynad was $87.1 \%$ percent and followed by Idukki at 85.3 percent and Pathanamthitta at 84.5 percent. The lowest male participation was from Malappuram 70.0 percent followed by Trissur 73.7 percent and Palakkad 75.8 percent. The highest female participation from Idukki was 54 percent followed by Thiruvananthapuram 46.8 percent and Kottayam 41.9 percent. The lowest female participation from Malappuram was 14.4 percent followed by Kannur at 19.3 percent and Kozhikode at 21.4 percent. The overall working participation is highest in Idukki 70.8 percent followed by Thiruvananthapuram 63.6 percent and Kottayam 62.2percent.

Table 4.4 shows the district-wise workforce participation in Kerala by rural and urban sectors by the period of 2011-12 NSSO employment unemployment unit-level survey and the PLFS for the last two years of 2017-18 and 2018-19. Row wise show the table of table 4.1.

Table 4.4
District wise Workforce participation (ps+ss) (Age: 18-60) by Sector in Kerala

| Districts | $\mathbf{2 0 1 1 - 1 2}$ |  | $\mathbf{2 0 1 7 - 1 8}$ |  |  | $\mathbf{2 0 1 8 - 1 9}$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Rural | Urban | Total | Rural | Urban | Total | Rural | Urban | Total |
| Kasaragod | 58.5 | 53.1 | 57.2 | 46.6 | 33.4 | 40.1 | 49.9 | 44.7 | 48.5 |
| Kannur | 56.5 | 48.7 | 52.5 | 45.5 | 39.9 | 41.9 | 45.3 | 42.6 | 43.4 |
| Wayanad | 63.9 | 58.7 | 63.6 | 57.8 | $@$ | 57.8 | 53.8 | $@$ | 53.8 |
| Kozhikode | 51.6 | 46.8 | 49.7 | 51.9 | 50.1 | 50.7 | 50.3 | 50.2 | 50.2 |
| Malappuram | 44.0 | 47.9 | 44.5 | 40.1 | 38.7 | 39.7 | 37.1 | 42.4 | 38.9 |
| Palakkad | 54.4 | 58.9 | 55.1 | 52.7 | 48.2 | 52.0 | 47.5 | 43.6 | 47.0 |
| Thrissur | 55.4 | 56.9 | 55.9 | 48.8 | 51.6 | 50.8 | 44.8 | 51.2 | 49.3 |
| Ernakulam | 56.4 | 61.1 | 58.7 | 41.2 | 47.3 | 45.2 | 54.3 | 56.5 | 56.0 |
| Idukki | 72.4 | 52.7 | 71.1 | 68.5 | 46.6 | 67.5 | 71.5 | 62.3 | 70.8 |
| Kottayam | 66.3 | 58.0 | 65.1 | 62.5 | 56.3 | 60.5 | 62.4 | 61.7 | 62.2 |
| Alappuzha | 64.8 | 59.7 | 63.3 | 48.2 | 53.3 | 50.7 | 59.4 | 56.0 | 57.5 |
| Pathanamthitta | 55.6 | 68.5 | 56.9 | 46.9 | 47.0 | 46.9 | 51.6 | 62.3 | 52.5 |
| Kollam | 56.3 | 57.4 | 56.5 | 52.3 | 45.0 | 50.1 | 60.5 | 56.0 | 58.5 |
| Thiruvananthapuram | 62.0 | 55.7 | 60.0 | 53.9 | 54.4 | 54.2 | 67.2 | 61.6 | 63.6 |
| Total | 56.8 | 54.9 | 56.2 | 50.5 | 48.3 | 49.5 | 53.2 | 52.6 | 52.9 |

Source: Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19( Same as Table 1 (row-wise))

The analysis of data shows that the overall rural labour force participation in Kerala is more than the urban labour force participation rates. In the year 2011-12, the rural workforce participation rate was 56.8 percent and the urban participation was 54.9 percent. From the rural-urban comparison, the highest rural participation was from Idukki 72.4 percent followed by Kottayam 66.3 percent and Alappuzha 64.8 percent.

The lowest female participation was from Malappuram at 44 percent followed by Kozhikode at 51.6 percent and Palakkad at 54.4 percent. In the case of urban participation rates, the highest from Pathanamthitta 68.5 percent followed by Ernakulum at 61.1 percent and Kottayam at 59.7 percent. The lowest urban participation was from Kozhikode 46.8 percent followed by Malappuram 47.9 percent and Kannur 48.7 percent.

By analyzing the 2017-18 PLFS data, the rural workforce participation was 50.5 percent and the urban was only 48.3 percent. It also shows that the rural workforce participation in Kerala is more than the urban workforce participation level. In 201718 the highest rural participation from Idukki was 68.5 percent followed by Kottayam at 62.5 percent and Wayanad at 57.8 percent. The lowest female participation was Malappuram at 40.1 percent followed by Ernakulum at 41.2 percent and Kannur at 45.5 percent. The highest urban workforce participation was Kottayam 56.3 percent followed by Thiruvananthapuram 54.4 percent and Alappuzha 53.3 percent. The lowest urban female participation was from Kasargod at 33.4 percent followed by Malappuram at 38.7 percent and Kannur at 39.9 percent.

From the analysis of 2018-19 PLFS data, the rural workforce participation was 53.2 percent and the urban was 52.6 percent. The rural workforce participation was higher than the urban participation rates. In 2018-19 the highest rural workforce participation from Thiruvananthapuram was 67.2 percent followed by Kottayam at 62.4 percent and Kollam at 60.5 percent. The lowest urban workforce participation was Malappuram at 37.1 percent followed by Trissur at 44.8 percent and Kannur at 45.3 percent. From the analysis of urban workforce participation the highest from Idukki and Pathanamthitta, both are 62.3 percent followed by Kottayam 61.7 percent, and Thiruvananthapuram 61.6 percent. The lowest workforce participation from Malappuram was 42.4 percent followed by Kannur at 42.6 percent and Palakkad at 43.6 percent.

Figure 4.2
Percentage Distribution of Workforce by Rural and Urban Sectors of Kerala


Source: Source: Authors' estimation from NSS unit-level data on employment and unemployment survey of 68 ${ }^{\text {th }}$, PLFS: and 2017-18 \& 2018-19

Figure 4.2 explains the percentage distribution by rural and urban sectors of Kerala by the analysis of the 2011-12 employment unemployment survey, PLFS data for the last two years 2017-18 and 2018-19. In 2011-12 the male workforce participation was 85.2 percent and the female workforce participation was 31.9 percent. And overall rural participation was 56.8 and urban participation was 56.2 percent and overall Rural and urban participation were 56.8 percent. In 2017-18, the male participation was 78.2 percent and the female participation was 25.3 percent. Overall rural participation was 50.5 percent and urban was 48.3 percent. Both urban and rural participation was 49.5 percent. And in 2018-19 the male participation is 79.9 percent and the female participation is 30.3 percent. Total participation is 52.9 percent. The rural participation is 52.6 percent and the urban participation is 52.6 percent. Both the urban and rural participation is 52.9 percent. By analyzing the rural and urban sectors in Kerala, the rural workforce participation is more than the urban participation level.

## Table 4.5

Workforce participation (ps+ss) by sector in Kerala (Age: 18-60)

| Workforce | $\mathbf{2 0 1 1 - 1 2}$ |  |  | $\mathbf{2 0 1 7 - 1 8}$ |  |  |  | $\mathbf{2 0 1 8 - 1 9}$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  | Rural | Urban | Total | Rural | Urban | Total | Rural | Urban | Total |  |
| Self-employed (W) | 12.8 | 13.8 | 13.1 | 13.2 | 13.2 | 13.2 | 12.2 | 11.8 | 12.1 |  |
| self-employed (E) | 3.4 | 2.5 | 3.2 | 2.4 | 2.2 | 2.3 | 3.0 | 3.3 | 3.1 |  |
| Unpaid-family work | 2.6 | 2.1 | 2.4 | 1.3 | 1.0 | 1.2 | 1.6 | 1.5 | 1.5 |  |
| Regular waged | 11.0 | 20.6 | 13.6 | 15.8 | 19.4 | 17.4 | 14.9 | 21.6 | 18.0 |  |
| Casual labour | 27.0 | 15.9 | 24.0 | 17.9 | 12.6 | 15.5 | 21.4 | 14.4 | 18.2 |  |
| Total workforce (a) | 56.8 | 54.9 | 56.2 | 50.5 | 48.3 | 49.5 | 53.2 | 52.6 | 52.9 |  |
| Not workforce (b) | 43.3 | 45.1 | 43.8 | 49.5 | 51.7 | 50.5 | 46.8 | 47.4 | 47.1 |  |
| Total (a+b) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |  |

Source: Authors' estimation from NSS unit-level data on employment and unemployment of 68 ${ }^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Note: W: worker, E: Employer

Table 4.5 the different types of workforce participation in rural and urban Kerala. In 2011-12 the self-employed worker both rural and urban was 13.1 percent. From them, urban is more than rural. The case the total self-employed employer was 3.2 percent and the rural participation is more than the urban participation. The unpaid family workers were 2.4 percent and among them, rural unpaid family workers are more than the urban unpaid family workers. The regular waged workers were 13.6 percent and among them, the urban participation is more than the rural participation rates. The total number of casual labourers was 15.9 percent and the rural percentages are more than the urban percentages. In rural Kerala, more persons are casual labourers and in urban Kerala, more persons are regular waged workers. The total number of the rural workforce was 56.8 percent which means 43.3 percent were not in the workforce in Rural Kerala.

In 2017-18 the self-employed worker both rural and urban was 12.1 percent and it shows a decreasing trend compared to the previous year's data. The case total selfemployed employer was 3.1 percent and it 1 percent than the previous year. The
unpaid family workers were 2.4 percent and among them, rural unpaid family workers are more than the urban unpaid family workers. The regular waged workers were 17.4 percent and among them, the urban participation is more than the rural participation rates. The number of regular waged is increased more than the previous year. The total number of casual labourers was 15.5 percent and the rural percentages are more than the urban percentages. In rural Kerala, more persons are casual labourers and in urban Kerala, more persons are regular waged workers. The total number of the rural workforce was 49.5 percent and the percentage not in the workforce was 50.5 percent. That means the number of the total workforce in that year is less than the total percentage not in the workforce.

In 2018-19 the self-employed worker both rural and urban was 13.2 percent. From this, both urban and rural participation showed the same percentages. In this case, the total self-employed employer was 2.3 percent and the percentage of urban was more than the rural. The unpaid family workers were 1.5 percent and among them, rural unpaid family workers are more than the urban unpaid family workers. The regular waged workers were 18 percent and among them, the urban participation is more than the rural participation rates. The number of regular waged is increased more than the previous year. The total number of casual labourers was 18.2 percent and the rural percentages are more than the urban percentages. In rural Kerala, more persons are casual labourers and in urban Kerala, more persons are regular waged workers. The total number of rural workforce is 52.9 percent and not in the workforce is 47.1 percent. That means the overall workforce participation increased than before and not in the workforce decreased.

Figure 4.3
Workforce Participation by Sector


Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Table 4.6
Workforce participation ( $\mathrm{ps}+\mathrm{ss}$ ) by gender in Kerala (Age: 18-60)

| Workforce | 2011-12 |  |  | 2017-18 |  |  | 2018-19 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Persons | Male | Female | Persons | Male | Female | Persons |
| Self-employed(W) | 20.6 | 6.8 | 13.1 | 23.3 | 4.7 | 13.2 | 19.3 | 6.0 | 12.1 |
| self-employed (E) | 5.6 | 1.1 | 3.2 | 4.4 | 0.5 | 2.3 | 6.4 | 0.4 | 3.1 |
| Unpaid-family work | 1.8 | 3.0 | 2.4 | 0.4 | 1.8 | 1.2 | 0.6 | 2.3 | 1.5 |
| Regular waged | 18.2 | 9.7 | 13.6 | 23.0 | 12.6 | 17.4 | 23.0 | 13.9 | 18.0 |
| Casual labour | 39.0 | 11.4 | 24.0 | 27.2 | 5.7 | 15.5 | 30.6 | 7.8 | 18.2 |
| Total workforce (a) | 85.2 | 31.9 | 56.2 | 78.2 | 25.3 | 49.5 | 79.9 | 30.3 | 52.9 |
| Not workforce (b) | 14.8 | 68.1 | 43.8 | 21.8 | 74.7 | 50.5 | 20.1 | 69.7 | 47.1 |
| Total (a+b) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Note: W: worker, E: Employer

Table 4.6 analyses the workforce participation in Kerala among the age group of 1860 by gender. In 2011-12, the employment unemployment survey shows that the male self-employed workers were 20.6 percent and the female workers were 6.8 percent. In the case of self-employed employers, the male participation was 5.6 percent and the female was only 1.1 percent. The male unpaid family workers were 18 percent and the female was 3 percent. Regular waged workers among the male were 18.2 and females were 9.7 percent. The percentages of male casual labourers were 39.0 percent and female were 11.4 percent. The total workforce among males was 85.2 percent and females were 31.9 percent. And the percentage of males in the not workforce is 14.8 percent and females in not workforce is 68.1 percent. There is a high gap between male and female workforce participation rates.

In 2017-18 the percentage of male self-employed workers increased to 23.3 percent but female participation decreased to 4.7 percent. Both the male and female participants of self-employed employers were decreased to 4.4 percent and 0.5 percent. The percentages of unpaid family workers among both males and females decreased to 0.4 percent and 1.8 percent. The percentage of male regular employed workers increased to 23.0 percent and the female increased to 12.6 percent. The casual labour among males increased to 27.2 percent and the female decreased to 5.7 percent. The overall working participation of both males and females decreased to 78.2 percent and 25.3 percent.

In 2018-19 the self-employed workers among the male were decreased to 19.3 percent and the female were increased to 6.0 percent. In the case of self-employed employers, the male percentage increased to 0.6 percent, and the female further reduced to 0.4 percent. In the case, of unpaid family workers, the male participation reduced to 0.6 percent and the female participation increased to 2.3 percent. Regular waged workers both male and female increased to 23.0 percent and 13.9 percent. Casual labour among males increased to 30.6 percent and the female is 7.8 percent. The overall male and female workforce participation increased to 79.9 percent and 30.3 percentages. Not workforce participation among the male is 20.1 percent and among the female is 69.7 percent.

Figure 4.4
Workforce Participation by Gender


Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Figure 4.4 shows the same table of 4.6 , the male and female workforce participation in the last three surveys of NSSO. There is a high gender gap between the participation and in all periods' female participation is less than half of the male participation rates.

### 4.4 Working Participation among Educated Females

Table 4.7 shows the workforce participation in Kerala by educational status among the age group of 18-60. Educational status can be divided into not literate, primary, middle, secondary, higher secondary, diploma certificate, and graduate and above. The data are analysed based on the 2011-12 employment unemployment survey of NSSO and the periodic labour force surveys of the last two periods 2017-18 and 2018-19.

Table: 4.7
Workforce participation (ps+ss) (Age: 18-60) by educational status in Kerala

| Educational status | 2011-12 |  |  | $\mathbf{2 0 1 7 - 1 8}$ |  |  |  | $\mathbf{2 0 1 8 - 1 9}$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  | Male | Female | Total | Male | Female | Total | Male | Female | Total |  |
| Not-literate (a) | 1.8 | 6.3 | 3.2 | 2.1 | 4.8 | 2.8 | 2.1 | 4.5 | 2.8 |  |
| Primary | 19.4 | 20.0 | 19.6 | 13.0 | 12.4 | 12.8 | 12.2 | 14.3 | 12.8 |  |
| Middle | 38.2 | 28.3 | 35.2 | 36.7 | 27.3 | 34.1 | 36.0 | 27.3 | 33.3 |  |
| Secondary | 18.6 | 17.2 | 18.2 | 20.0 | 13.5 | 18.2 | 19.4 | 15.7 | 18.3 |  |
| Hr.sec | 5.9 | 7.8 | 6.5 | 9.0 | 7.4 | 8.6 | 9.0 | 7.7 | 8.6 |  |
| Diploma/certificate | 6.4 | 5.7 | 6.2 | 7.5 | 10.1 | 8.2 | 8.6 | 8.0 | 8.4 |  |
| Garaduate> (g) | 9.7 | 14.7 | 11.2 | 11.8 | 24.5 | 15.3 | 12.8 | 22.5 | 15.8 |  |
| Secondary and above | 40.6 | 45.4 | 42.1 | 48.2 | 55.5 | 50.3 | 49.8 | 54.0 | 51.1 |  |
| Total (a-g) | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |  |

Source: Authors' estimation from NSS unit-level data on employment and unemployment survey of 68 ${ }^{\text {th }}$, PLFS: and 2017-18 \& 2018-19

In 2011-12 the total workforce participation among the group of not-literate was 3.2 percent and 1.8 percent were males and 6.3 percent were females. Female workforce participation among this group is more than the participation rates. The total workforce participation among the group of the primary was 19.6 percent among them 19.4 percent were male and 20 percent were female. The female participation in this group is higher than the male participation level. The total participation among the group of middle educated was 35.2 percent and 38.2 percent were male and 28.3 percent were female In the case of secondary education, the total workforce participation was 18.2 percent and among them 18.6 percent was male and 17.2 were females. The total participation in the group of the higher secondary was 6.5 percent 5.9 percent were male and 7.8 percent were female. Female participation is higher than male participation. The workforce participation among the group of diploma/ certificate was 6.2 percent and among them 6.4 percent were male and 5.7 percent were females. Male participation is more than the female participation level. The participation among the graduate and above was 11.2 percent and among them, male participation was 9.7 percent and females were 14.7 percent. The female
participation is more than the male participation rate. The total participation rates for secondary and above was 42.1 percent and the male participation was 40.6 percent and the female 45.4 percentages.

The PLFS of 2017-18 shows that the total workforce participation among the group of not-literate was decreased to 2.8 percent the male participation among this group increased to 2.1 percent and the females were reduced to 4.8 percent. The participation levels of education with primary were 12.8 percent and the male was 13 percent and the females were 12.4 percent. The participation in the group education with middle was 34.1 percent and the male was 36.7 percent and the females were $27.3 \%$. The workforce participation among the group of secondary education was the same at 18.2 percent (2011-12). Among them, the male participation is 30 percent and the female was 13.5 percent. The workforce participation among the group of the higher secondary was increased to 9 percent; the male participation is more than the female. The female is 7.5 percent and the male is 10 percent. The total participation among the group of graduates was 15.3 percent which was more than the males 24.5 percent and the male were 11.8 percent. Overall participation of secondary and above was 50.3 percent and among them 48.2 percent were male and 55.5 percent were females.

In the 2018-19 PLFS, the total share of workforce participation among the group of not-literate is increased to 2.8 percent and the share of the male is 2.1 percent and the females are 4.5 percent. The female participation is higher than the male participation rate. Participation with primary is 12.8 percent and 12.2 percent are males and 14.3 percent are females. The share of participation in middle education is 33.3 percent and the male is 36 percent and the females are 27.3 percent. The participation levels of a female with secondary education are 18.3 percent and among them 19.4 percent are males and 15.7 percent are females. The total workforce share of higher secondary is the same at 18.3 percent (2017-18). And the male is 19.11 percent and the female are 7.7 percent the total share of diploma/certificates are 8.4 percent and out of the 8.6 percent are males and 8 percent are females. The total workforce participation among the group of graduates
was 15.8 percent and out of this 12.8 percent in males and 22.5 percent are females. The overall participation among the group secondary and above is 51.1 percent among them 49.8 percent are males and 54 percent are females.

Figure 4.5
Workforce Participation by Educational Status


Source: Source: Authors’ estimation from NSS unit-level data on employment and unemployment of 68 ${ }^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Figure 4.5 shows the total share of workforce participation among the age group of $18-60$ by gender. When we analyse the data, it is clear that the overall participation among the females was higher than the male by all the years 2011-12, 2017-18, and 2018-19. The total participation of females with graduation and above is more than the male. But in the case of diplomas or certificates, the male participation is more than the female participation level. The overall participation among the group of secondary and above females participation is more than the male participation level which means education improves the female workforce participation at all Kerala levels.

## Table: 4.8

Workforce participation (ps+ss) (Age: 18-60) by technical and non-technical education status by gender in Kerala

| Technical education | $\mathbf{2 0 1 1 - 1 2}$ |  |  |  |  |  |  |  |  |  |  |  | $\mathbf{2 0 1 7 - 1 8}$ |  |  |  | $\mathbf{2 0 1 8 - 1 9}$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{M}$ | $\mathbf{F}$ | $\mathbf{T}$ | $\mathbf{M}$ | $\mathbf{F}$ | $\mathbf{T}$ | $\mathbf{M}$ | $\mathbf{F}$ | $\mathbf{T}$ |  |  |  |  |  |  |  |  |  |  |
| No technical | 91.1 | 91.4 | 91.2 | 89.3 | 82.7 | 87.5 | 88.5 | 83.9 | 87.1 |  |  |  |  |  |  |  |  |  |  |
| Technical | 0.8 | 0.8 | 0.8 | 1.6 | 3.0 | 2.0 | 2.2 | 4.1 | 2.8 |  |  |  |  |  |  |  |  |  |  |
| Diploma/certificate(below graduate) | 6.9 | 5.8 | 6.5 | 7.9 | 9.6 | 8.4 | 8.4 | 9.7 | 8.8 |  |  |  |  |  |  |  |  |  |  |
| Diploma/certificate(above graduate) | 1.3 | 2.0 | 1.5 | 1.2 | 4.7 | 2.2 | 0.9 | 2.3 | 1.3 |  |  |  |  |  |  |  |  |  |  |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |  |  |  |  |  |  |  |  |  |  |

Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Note: M-Male, F-Female, and T-Total
Table 4.8 shows the workforce participation among the group of technical and nontechnical educators' in Kerala among the age group of 18-60 by the period 2011-12, 2017-18, and 2018-19. The total workforce participation among non-technical educators in 2011-12 was 91.2 percent, among them 91.4 percent are females and 91.1 percent are males. The workforce participation among the group of technically qualified persons is 0.8 percent and both the male and female participants were the same at 0.8 percent. In the group of people with diploma/certificate (below graduate) are 6.5 percent and among them 5.8 percent were females and 6.9 percent were males. The participation among the group with a diploma or certificate (above graduation) was 1.5 percent and the male was 1.3 percent and the females were 2 percent.

In 2017-18 PLFS, the total workforce participation among the group with no technical education is 87.5 percent, and among this group 89.3 percent in males and 82.7 percent are females. The workforce participation among the group of technical education is 2 percent and the males are 1.6 percent and the females are 3 percent. The total workforce participation among the group of diploma or certificate (undergraduate) is 8.4 percent and the males are 7.9 percent and the females were 9.6 percent. The workforce participation among the group of diploma or certificate
(above undergraduate) was 2.2 percent and the male participation is 1.2 percent and females are 4.7 percent.

In the PLFS of 2018-19 by NSSO, the total workforce participation among the group of no technical educators is 87.1 percent and among them 88.5 percent are males and 83.9 percent are females. The total workforce participation among the group of technical educators is 2.8 percent and the males are 2.2 percent and the females are 4.1 percent. The total participation among the group of diploma or certificate (undergraduate) is 8.8 percent and the male is 8.4 percent and females are 9.7 percent. The share of participation among the group with a diploma or certificate (above graduation) is 1.3 percent and the males are 0.9 percent and the females are 2.3percent.

Figure 4.6
Workforce Participation by Technical Education Status


Source: Source: Authors' estimation from NSS unit-level data on employment and unemployment of 68 ${ }^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Figure 4.6 shows the share of workforce participation among the group of technical and technical educators. The workforce participation among the group with no technical education both males and females are very high compared to the technical educators. When we comparing to the male and females only in 2011-12
participation among the females was higher than the male and both the two years males are higher than females in this group. In the case of technical and professional educators female participation in all years is more than male participation. That means women with professional or technical educators are more willing to participate in the labour market in Kerala.

Table: 4.6
Workforce participation (ps+ss) by education in Kerala (Age: 18-60)

| Year | Workforce | Not-lit | Primary | Middle | Secondary | Hr.sec | Diploma/c | Graduate | Total |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011-12 | Self-employed(W) | 9.0 | 12.9 | 15.9 | 15.1 | 6.9 | 13.4 | 9.6 | 13.1 |
|  | Relf-employed (E) | 0.1 | 2.3 | 2.7 | 3.9 | 2.1 | 7.4 | 4.8 | 3.2 |
|  | Unpaid-family work | 2.6 | 1.7 | 2.4 | 3.0 | 2.2 | 3.0 | 2.7 | 2.4 |
|  | Casual labour | 32.9 | 37.3 | 31.8 | 20.4 | 7.9 | 13.3 | 3.8 | 24.0 |
|  | Total workforce (a) | 47.5 | 59.5 | 62.1 | 56.1 | 32.0 | 67.1 | 57.2 | 56.2 |
|  | Not workforce (b) | 52.5 | 40.5 | 37.9 | 43.9 | 68.0 | 32.9 | 42.9 | 43.8 |
|  | Self-employed(W) | 5.6 | 14.4 | 17.6 | 17.0 | 8.0 | 11.6 | 7.0 | 13.2 |
|  | self-employed (E) | 0.5 | 2.0 | 2.2 | 2.8 | 1.9 | 3.6 | 2.2 | 2.3 |
|  | Unpaid-family work | 2.2 | 1.0 | 1.1 | 1.2 | 0.9 | 1.3 | 1.4 | 1.2 |
| 2017-18 | Regular waged | 8.7 | 7.2 | 12.3 | 15.9 | 10.9 | 36.8 | 35.5 | 17.4 |
|  | Casual labour | 30.2 | 28.5 | 23.5 | 15.2 | 5.9 | 5.7 | 2.0 | 15.5 |
|  | Total workforce (a) | 52.9 | 47.0 | 43.3 | 47.7 | 72.4 | 41.0 | 52.0 | 50.5 |
|  | Not workforce (b) | 47.1 | 53.0 | 56.7 | 52.3 | 27.6 | 59.0 | 48.0 | 49.5 |
|  | Self-employed(W) | 8.8 | 12.5 | 16.9 | 15.7 | 5.9 | 12.7 | 5.9 | 12.1 |
|  | self-employed (E) | 0.6 | 1.4 | 3.2 | 4.8 | 2.2 | 4.6 | 3.4 | 3.1 |
| Unpaid-family work | 1.2 | 1.7 | 1.6 | 1.6 | 1.7 | 0.6 | 1.6 | 1.5 |  |
| Total (a+b) | 4.2 | 9.6 | 11.8 | 16.8 | 11.2 | 32.7 | 38.7 | 18.0 |  |
|  | Regular waged | 34.8 | 33.8 | 28.0 | 17.9 | 7.5 | 10.1 | 1.3 | 18.2 |
| Casual labour | Not workforce (b) | 50.4 | 41.1 | 38.5 | 43.2 | 71.6 | 39.2 | 49.1 | 47.1 |

Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Note: Not lit: Not literate, Diploma/c: Diploma/certificate

Table 4.6 shows the workforce participation among the age group of 18-60 by 201112, 2017-18, and 2018-19 and the division of participation among them. In 2011-12, the total participation of self-employed workers was 13.1 percent and among this not literate was 9 percent, persons with primary were 12.9 percent, with secondary 15.1 percent, with higher secondary 6.9 percent, diploma 13.4 percent and with graduate is 9.6 percent. The self-employed employer was 3.2 percent and among them, 7.4 percent were diploma holders and 4.8 percent were graduates. The participation of unpaid family workers was 2.4 percent and among them, 3 percent were from the group of secondary educators and 3 percent from diploma certificate holders. The participation of regular wage employers was 13.6 percent and among them, 36.3 percent were graduates and 30.1 percent from diploma certificate holders. The total participation of casual labourers was 24 percent and among them, 37.3 percent were from the group of primary educators and 32.9 percent from illiterates. The overall work participation of not literate was 47.5 percent and not workforce from them are 52.5 percent. The overall participation of the group of the primary was 59.5 percent and 40.5 percent of them were not employed. The total participation from the person with middle education was 62.1 percent and 37.9 percent are not employed. From the group of secondary educators, the overall participation was 56.1 percent and 43.9 percent were in not workforce. The total participation among the group higher secondary was 32 percent and among them, 68 percent is not employed. Of the diploma or certificate courses, overall 67 percent and 32.9 percent among them were not employed. The share of participation among graduates was 57.2 percent and 42.9 percent were not in the workforce. The highest workforce participation is from the group of diploma holders and not in the workforce from the higher secondary group.

The total workforce participation in 2017-18 among the group of self-employed workers was 13.2 percent and among them, the highest participation was from the group of persons with middle and secondary education. The share of self-employed employers was 2.3 percent and among the highest among diploma holders (3.6\%) and persons with secondary education ( $2.8 \%$ ). The total share of unpaid family workers was 1.2 percent and the share of not literate was 2.2 percent and the graduate was 1.4 percent. The share of participation from regular waged employers
was 17.4 percent and among the highest 36.8 percent from diploma holders and 35.5 percent from graduators. The share of casual labour was 15.5 percent and among the highest from not literate 30.2 percent and persons with primary education 28.5 percent. The total share of the workforce from the group of persons illiterate was 52.9 percent and 47.1 percent are not in the workforce. The share of persons with primary education was 47 percent and 53 percent among them in the group not in the workforce. The overall share of a person with middle education was 43.3 percent and in the group not in the workforce was 56.7 percent. The total participation from the group of persons with secondary education was 47.7 percent and 52.3 percent of them were not in the workforce. The total share of the workforce among the group higher secondary was 72.4 percent and 27.6 percent among them were not in the workforce. The share of diploma holders was 41 percent and 59 percent of them were not in the workforce. The share of the workforce from graduates was 52 percent and 48 percent of them were not in the workforce. The highest percentages of workforce participation are from the group of higher secondary holders and second from not literates. The lowest participation is from the group of diploma holders and the persons with secondary education.

The total workforce participation in 2018-19 among the group of self-employed workers was 12.1 percent and among them, the highest participation was from the group of persons with primary 12.5 percent and diploma holders 12.7 percent. The share of self-employed employers is 3.1 percent and among the highest among secondary ( $4.8 \%$ ) and the person with diplomas (4.6\%). The total share of unpaid family workers was 1.5 percent and the share of primary is 1.7 percent and higher secondary is 1.7 percent. The share of participation from regular waged employers was 18 percent and among the highest was 38.7 percent from graduates and 32.7 percent from diploma holders. The share of casual labour was 18.2 percent and among the highest from not literate 34.8 percent and persons with primary education 33.8 percent. The total share of the workforce from the group of persons illiterate was 49.6 percent and 50.4 percent are not in the workforce. The share of persons with primary education was 58.9 percent and 41.1 percent among them in the group not in the workforce. The overall share of a person with middle education was 61.5 percent and in the group not in the workforce was 38.5 percent. The total participation from the group of persons with secondary education was 56.8 percent
and 43.2 percent of them were not in the workforce. The total share of the workforce among the group of the higher secondary was 28.4 percent and 71.6 percent of them were not in the workforce. The share of diploma holders was 60.8 percent and 39.2 percent among them were not in the workforce. The share of the workforce from graduators was 50.9 percent and 49.1 percent of them were not in the workforce. The highest percentages of workforce participation are from the group of persons with middle education and second from diploma holders. The highest not participation is from the group of higher secondary and the illiterates.

Table: 4.9
Workforce participation (ps+ss) by technical education in Kerala (Age: 18-60)

| Year | Workforce | No technical | Technical | Diploma/ certificate (Ag) | Diploma/ certificate (B g) | T |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011-12 | Self-employed(W) | 13.2 | 16.1 | 12.3 | 6.4 | 13.1 |
|  | self-employed (E) | 2.9 | 2.1 | 7.2 | 4.7 | 3.2 |
|  | Unpaid-family work | 2.4 | 0.0 | 3.1 | 4.2 | 2.4 |
|  | Regular waged | 11.9 | 48.9 | 30.8 | 43.9 | 13.6 |
|  | Casual labour | 25.2 | 5.2 | 11.8 | 2.2 | 24.0 |
|  | Total workforce (a) | 55.5 | 72.4 | 65.3 | 61.4 | 56.2 |
|  | Not workforce (b) | 44.5 | 27.6 | 34.7 | 38.7 | 43.8 |
| 2017-18 | Self-employed(W) | 13.5 | 5.6 | 12.4 | 10.0 | 13.2 |
|  | self-employed (E) | 2.1 | 3.0 | 3.6 | 3.0 | 2.3 |
|  | Unpaid-family work | 1.1 | 2.6 | 1.9 | 0.0 | 1.2 |
|  | Regular waged | 14.8 | 45.2 | 35.2 | 49.1 | 17.4 |
|  | Casual labour | 16.9 | 0.7 | 5.5 | 1.0 | 15.5 |
|  | Total workforce (a) | 48.4 | 57.1 | 58.6 | 63.0 | 49.5 |
|  | Not workforce (b) | 51.6 | 42.9 | 41.4 | 37.0 | 50.5 |
| 2018-19 | Self-employed(W) | 12.4 | 3.2 | 13.0 | 2.0 | 12.1 |
|  | self-employed (E) | 3.0 | 3.3 | 4.3 | 8.3 | 3.1 |
|  | Unpaid-family work | 1.6 | 0.2 | 1.0 | 2.3 | 1.5 |
|  | Regular waged | 15.3 | 56.8 | 34.2 | 41.7 | 18.0 |
|  | Casual labour | 19.7 | 0.0 | 8.8 | 0.2 | 18.2 |
|  | Total workforce (a) | 51.9 | 63.5 | 61.3 | 54.6 | 52.9 |
|  | Not workforce (b) | 48.1 | 36.5 | 38.8 | 45.4 | 47.1 |
| Total (a+b) |  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Source unemp | Authors' estima oyment of $68^{\text {th }}$ round | ion from NS (2011-12) and | S unit-leve PLFS: 201 | $\begin{aligned} & \text { data on } \\ & 7-18 \& 2018 \end{aligned}$ | employment $-19$ |  |

Note: W: worker, E: Employer; T: Total, A g: Above graduate, Bg: Below graduate
Table 4.9 shows the workforce participation among the group of persons with technical education in Kerala. In 2011-12 the total share of workforce participation among the group of persons with non-technical education was 55.5 percent and among them, 44.5 percent is not in the workforce. The total participation from the group of technical education was 72.4 percent and 27.6 percent was in the group not in the workforce. The share of participation among the group with a diploma or certificate above graduation is 65.3 percent and 34.7 percent among them were not in the workforce. The total share of the workforce with a diploma or certificate below graduation was 61.4 percent and 38.7 percent of them were not in the workforce. The overall workforce participation in the 2011-12 employment unemployment survey was 56.2 percent and 43.8 percent of them were not in the workforce.

In 2017-18 PLFS, the total share of workforce participation among the group of persons with non-technical education was 48.4 percent and among them, 51.6 percent is not in the workforce. The total participation from the group of technical education was 57.1 percent and 42.9 percent was in the group not in the workforce. The share of participation among the group with a diploma or certificate above graduation is 58.6 percent and 41.4 percent among them were not in the workforce. The total share of the workforce with a diploma or certificate below graduation was 63 percent and 37 percent of them were not in the workforce. The overall workforce participation of the 2017-18 periodic labour force survey was 49.5 percent and 50.5 percent of them were not in the workforce

In 2017-18 PLFS, the total share of workforce participation among the group of persons with non-technical education was 51.9 percent and among them, 48.1 percent is not in the workforce. The total participation from the group of technical education was 65.5 percent and 36.5 percent was in the group not in the workforce. The share of participation among the group with a diploma or certificate above graduation is 61.3 percent and 38.3 percent among them were not in the workforce. The total share of the workforce with a diploma or certificate below graduation was
54.6 percent and 43.4 percent of them were not in the workforce. The overall workforce participation of the 2018-19 periodic labour force survey was 52.9 percent and 47.9 percent of them were not in the workforce.

Table: $\mathbf{4 . 1 0}$
Workforce participation (ps+ss) (Age: 18-60) by professional education in last two rounds of PLFS (2017-18 \& 2018-19) survey in Kerala

| Year | Workforce | No tec | Engi | Med | Agri | Crafts | Other sub | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2017-18 | Self-employed(W) | 13.5 | 12.3 | 11.3 | 23.1 | 31.6 | 8.3 | 13.2 |
|  | self-employed (E) | 2.1 | 6.4 | 0.4 | 0.0 | 0.0 | 1.8 | 2.3 |
|  | Unpaid-family work | 1.1 | 1.6 | 1.4 | 0.0 | 0.0 | 2.1 | 1.2 |
|  | Cesular waged | 14.8 | 39.4 | 47.5 | 30.6 | 11.8 | 37.1 | 17.4 |
|  | Total workforce (a) | 48.4 | 64.0 | 60.5 | 72.6 | 47.3 | 53.5 | 49.5 |
|  | Not workforce (b) | 51.6 | 36.0 | 39.5 | 27.4 | 52.7 | 46.6 | 50.5 |
| $2018-19$ | Self-employed(W) | 12.4 | 13.4 | 3.3 | 0.0 | 8.9 | 8.9 | 12.1 |
|  | Relf-employed (E) | 3.0 | 8.3 | 0.9 | 0.0 | 0.0 | 2.8 | 3.1 |
|  | Unpaid-family work waged | 1.6 | 1.4 | 0.8 | 0.0 | 0.0 | 0.7 | 1.5 |
|  | Casual labour | 15.3 | 36.2 | 47.0 | 0.0 | 27.0 | 40.7 | 18.0 |
|  | Total workforce (a) | 51.9 | 8.0 | 0.8 | 0.0 | 0.0 | 6.2 | 18.2 |
|  | Not workforce (b) | 48.1 | 32.8 | 52.8 | 0.0 | 35.8 | 59.3 | 52.9 |
|  | Total (a+b) | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Note: For the comparison purpose (these classifications) only the last two rounds are estimated on the workforce by technical education. No tech: No technical, Eng.: Engineering (all), Medicine (all), Agri: Agriculture (all), Crafts (all), another sub: other subjects (all).

Table 4.10 shows the workforce participation among the age group of $18-60$ by professional education in the last two rounds of PLFS (2017-18 and 2018-19) in Kerala. From the professional group in 2017-18, total participation from engineering holders is 64 percent and 36 percent are not in the workforce. In the medical field, the share of participation is 60.5 percent and 39.5 percent were not in the workforce.

In agricultural education, the share of participation is 72.6 percent and 27.4 percent were not in the workforce. The share of participation from crafts is 47.3 percent and 52.7 percent are not in the workforce. In other subjects, the overall participation is 53.5 percent and 46.6 percent are not in the workforce. The total workforce participation in professional education is 49.5 percent and 50.5 percent are not in the workforce.

In 2018-19, the share of participation from the group of persons with engineering is 67.2 percent, and is not the workforce is 32.8 percent. The share of participation in medical education is 52.8 percent and not in the workforce is 47.2 percent. Of the participants from the group of crafts, 35.8 percent and 64.2 percent are unemployed. The total participation from other groups is 59.3 percent and 40.7 percent are not in the workforce. The overall working participation from the group of professionals in 2018-19 is 52.9 percent and 47.1 percent are not in the workforce.

### 4.5 Workforce participation and income

Table 4.11, shows the distribution of workforce participation among different economic classes during the periods of 2011-12, 2017-18, and 2018-19. The classifications did base on marginal propensity to consumption expenditure (MPCE), MPCE is categorized into five quintiles that are poorer, poorer, middle, richer, and richest. The first quintile included the lowest 20 percent income group (poorer) and the fifth quintile included the highest 20 percent income group (richest).

In 2011-12, the lowest workforce participation is from the first quintile which is 4.8 percent and male participation is 5 percent and female participation is 4.3 percent. The table also shows that when increases the workforce participation among both males and females also increases. In the fifth quintile, the overall participation is 48.6 percent and among this, the male participation is 47.8 percent and female participation is 50.5 percent. That is the female participation from the richest group is more than the male participation but in the poorest group, the male participation is more than the female participation.

Table: 4.11
Workforce participation (ps+ss) (Age: 18-60) by quintile class

| Quintile (MPCE) | 2011-12 |  |  | 2017-18 |  | 2018-19 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Persons | Male | Female | Persons | Male | Female | Persons |
| 1 | 5.0 | 4.3 | 4.8 | 5.8 | 4.6 | 5.5 | 4.6 | 4.3 | 4.5 |
| 2 | 10.8 | 10.8 | 10.8 | 13.5 | 10.4 | 12.6 | 9.8 | 7.1 | 9.0 |
| 3 | 13.8 | 12.4 | 13.4 | 15.0 | 11.7 | 14.1 | 18.8 | 14.1 | 17.3 |
| 4 | 22.7 | 22.1 | 22.5 | 27.3 | 25.6 | 26.9 | 21.0 | 22.2 | 21.4 |
| 5 | 47.8 | 50.5 | 48.6 | 38.4 | 47.6 | 41.0 | 45.8 | 52.3 | 47.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

In 2017-18 PLFS, the workforce participation among the poorest increased to 5.5 percent, the male participation is 5.8 percent and the female participation is 4.6 percent. The male participation is higher than the female participation. And also when income raises both male and female participation increases. The total participation of the fifth quartile is 41 percent and the male participation is 38.4 percent and the female participation is 47.6 percent and the female participation among the richest group is more than the male participation rates. The other thing is that when income increases female participation also increases and it reduced the gender gap in the fifth quintile the participation rate is in favor of women.

In the 2018-19 PLFS, the workforce participation among the first quintile is 4.5 percent and among them 4.5 percent are males and 4.3 percent are females. The male participation is higher than the female participation rate. The data also shows that when income increases both male and female participation also increases and it reduces the gender gap in workforce participation rates. In the fifth quintile the total workforce participation is 47.8 percent and among this 45.8 percent are males and
$52.3 \%$ are females. The overall analysis shows that workforce participation is highest among the richest and lowest among the poorest.

Figure 4.7
Workforce Participation by Quintile Class


Source: Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Figure 4.11 shows that in all the three surveys the workforce participation of both male and females are highest in the fifth quartile and lowest in the first quartile and also shows that when income increase participation also increases.

Table: 4.12
Workforce participation (ps+ss)
by Quintile class (MPCE) in Kerala (Age: 18-60)

| Year | Workforce | Q1 | Q2 | Q3 | Q4 | Q5 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011-12 | Self-employed(W) | 10.6 | 11.7 | 13.3 | 12.4 | 13.9 | 13.1 |
|  | Self-employed (E) | 0.9 | 0.6 | 1.1 | 2.1 | 5.0 | 3.2 |
|  | Unpaid-family work | 0.8 | 1.8 | 1.4 | 2.1 | 3.2 | 2.4 |
|  | Regular waged | 9.1 | 11.4 | 11.3 | 12.7 | 15.7 | 13.6 |
|  | Casual labour | 29.7 | 32.9 | 27.4 | 27.4 | 18.9 | 24.0 |
|  | Total workforce (a) | 51.0 | 58.4 | 54.5 | 56.7 | 56.6 | 56.2 |
|  | Not workforce (b) | 49.0 | 41.6 | 45.5 | 43.3 | 43.4 | 43.8 |
| 2017-18 | Self-employed(W) | 13.0 | 13.1 | 12.5 | 13.4 | 13.4 | 13.2 |
|  | self-employed (E) | 1.3 | 1.6 | 1.8 | 2.2 | 2.9 | 2.3 |
|  | Unpaid-family work | 0.8 | 0.7 | 1.2 | 1.0 | 1.5 | 1.2 |
|  | Regular waged | 12.0 | 13.5 | 15.5 | 18.0 | 19.6 | 17.4 |
|  | Casual labour | 18.5 | 17.5 | 18.2 | 17.3 | 12.5 | 15.5 |
|  | Total workforce (a) | 54.4 | 53.7 | 50.8 | 48.1 | 50.2 | 50.5 |
|  | Not workforce (b) | 45.6 | 46.3 | 49.2 | 51.9 | 49.8 | 49.5 |
| 2018-19 | Self-employed(W) | 11.2 | 10.3 | 11.5 | 12.8 | 12.4 | 12.1 |
|  | self-employed (E) | 1.7 | 2.3 | 2.9 | 2.6 | 3.8 | 3.1 |
|  | Unpaid-family work | 1.1 | 0.9 | 1.1 | 1.6 | 1.8 | 1.5 |
|  | Regular waged | 10.9 | 13.5 | 17.2 | 17.6 | 20.2 | 18.0 |
|  | Casual labour | 23.9 | 22.7 | 17.9 | 18.8 | 16.4 | 18.2 |
|  | Total workforce (a) | 48.8 | 49.6 | 50.6 | 53.3 | 54.7 | 52.9 |
|  | Not workforce (b) | 51.2 | 50.4 | 49.4 | 46.7 | 45.3 | 47.1 |
| Total (a+b) |  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Note: W: worker, E: Employer
Table 4.12 shows the quintile workforce participation among different sectors in Kerala. In 2011-12 data, the first quintile participation is 51 percent, and 49 percent of them are not in the workforce and the highest among them were casual labourers 29.7 percent and 10.6 percent were self-employed workers. In the second quintile, the total participation is 58.4 percent and 41.6 percent were not in the workforce.

The highest among them were casual labourers 32.91 percent and 11.7 percent were self-employed workers. The total participation of the third quintile was 54.5 percent and not in the workforce was 45.5 percent. The highest of them was casual labour 27.4 percent and 13.3 percent were self-employed workers. In the fourth quintile, the highest participation is from casual labourers 27.4 percent, and 12.7 percent were regular waged workers. And overall workforce participation was 56.7 percent and 43.3 percent were not in the workforce. In the fifth quintile, the highest participation from casual labourers was 24 percent and 13.6 percent was regular waged workers. The overall workforce participation was 56.2 percent and 43.8 percent was not in the workforce.

In 2017-18, the overall participation from the first quintile is 54.4 percent and 45.6 percent are not in the workforce. The highest among them was casual labour 18.5 percent and 13 percent, self-employed workers. In the second quintile total participation was 53.7 percent and 46.3 percent were not in the workforce. Casual labours were 17.5 percent and regular waged employers were 13.5 percent. In the third quintile, overall 50.8 percent and 49.2 percent were not in the workforce. Out of the 18.2 percent were casual labourers and 15.5 percent were regular waged employers. The total share of the fourth quintile was 48.1 percent and 51.9 percent were not in the workforce. Out of them, 18 percent were regular waged employers and 17.3 percent were casual labourers. In the fifth quintile overall participation was 50.2 percent and 49.8 percent of them were not in the workforce. Out of them, 19.6 percent were regular waged employers and 12.5 percent were casual labourers. During this period the highest share of participation from the first quintile is the poorest and the lowest participation from the fourth quintile (richer). And in the fourth and fifth quintile, the number of regular waged employers is higher than the casual labours.

In 2018-19 PLFS, the total share of participation from the first quintile is 48.8 percent and 51.2 percent are not in the workforce. The highest among them were casual labour 23.9 percent and the lowest among self-employed workers 11.2 percent. The overall participation of the second quintile is 49.6 percent and among
them, 50.4 percent are not in the workforce. The highest out of them are casual labours 22.7 percent and regular waged employers are 13.5 percent. The overall share of the third quintile is 50.6 percent and 49.4 percent of them were not in the workforce. The highest of them is casual labour 17.9 percent and 17.2 percent are regular waged employers. The share participation of the fourth quintile is 53.3 percent and not in the workforce is 46.7 percent. Out of them, 18.8 percent are casual labourers and 17.6 percent are regular waged employers. The total participation of the fifth quintile is 54.7 percent and among them, 45.3 percent are not in the workforce. The highest among them are regular waged employers 20.2 percent and casual labour 16.4 percent. During this period when income increases workforce participation also increases. The highest participation is from the richest class and the lowest from the poorest class.

### 4.6 Workforce participation and social group

Table 4.13 shows the workforce participation among different social groups in Kerala such as SC, ST, OBC, and Others by 2011-12, 2017-18, and 2018-19 periods among the age group of 18-60.

Table: 4.13
Workforce participation (ps+ss) (Age: 18-60) by social group in Kerala

|  | $\mathbf{2 0 1 1 - 1 2}$ |  | $\mathbf{2 0 1 7 - 1 8}$ |  |  |  | $\mathbf{2 0 1 8 - 1 9}$ |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Social group | Male | Female | Persons | Male | Female | Persons | Male | Female | Persons |
| ST | 1.0 | 2.5 | 1.5 | 1.4 | 1.4 | 1.4 | 1.6 | 1.5 | 1.6 |
| SC | 10.0 | 12.3 | 10.7 | 10.1 | 12.6 | 10.8 | 10.2 | 12.7 | 10.9 |
| OBC | 65.0 | 57.0 | 62.5 | 62.5 | 54.2 | 60.2 | 62.7 | 57.4 | 61.1 |
| Others | 24.0 | 28.1 | 25.3 | 26.0 | 31.9 | 27.6 | 25.5 | 28.4 | 26.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

In 2011-12, the total participation of ST persons was 1.5 percent and out of this male participation is 1 percent and female participation is 2.5 percent. The female participation in this group is more than the male participation. From SC population total workforce participation is 10.7 percent and among them, the male participation is 10 percent and female participation is 12.3 percent. That is female participation is more than male participation. From the group of OBC the total shares of participation are 62.5 percent and out of this 65 percent are male and 57 percent are females. The participation from all other categories is 25.3 percent and among them, the male participation is 24 percent and the female participation is 28.1 percent. The female participation is higher than the male participation.

In 2017-18 the overall participation from the group of ST persons is 1.4 percent and out of this both males and females are the same at 1.4 percent. The share of participation of the SC population increased to 10.8 percent. The male participation is also increased to 10.1 percent and females were 12.6 percent. The female participation is higher than the male participation. The participation in the OBC is 60.2 percent. The male and female participation decreased, the male participation is 62.5 percent and the female is 54.2 percent. The male participation is higher than the female participation. The total person's participation among the others is increased to 27.6 percent and out of this, the male participation is 26 percent and females are 31.9 percent. The female participation is higher than the male participation.

In 2018-19 PLFS, the total participation of ST persons is 1.6 percent and out of this 1.6 percent are males and 1.5 percent are females. The male participation is more than the female participation. The shares of participation among SC persons are 10.9 percent and among this 10.2 percent are males and 12.7 percent are females. The female person's participation is more than the male participation. The workforce participation among the OBC persons was 61.1 percent and out of this the male participation is 62.7 percent and females' participation is 57.4 percent. The male participation is more than the female participation. The shares of participation among the group of others are 26 percent and out of this 25.5 percent are males and
28.4 percent are females. The female participation is higher than the male participation.

Figure 4.8
Workforce Participation by Social Groups


Source: Source: Authors' estimation from NSS unit-level data on employment and unemployment of 68 ${ }^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

The table shows that in all the surveys highest participation from OBC groups and the lowest from the ST population. In SC, ST, and Others female participation shows more than male participation. But in OBC male participation in all three surveys are more than female participation.

Table: 4.14
Workforce participation (ps+ss)
by Social group (MPCE) in Kerala (Age: 18-60)

| Year | Workforce | ST | SC | OBC | Others | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011-12 | Self-employed(W) | 1.9 | 8.6 | 13.6 | 14.0 | 13.1 |
|  | self-employed (E) | 0.9 | 0.1 | 2.5 | 6.3 | 3.2 |
|  | Unpaid-family work | 3.4 | 0.3 | 2.6 | 2.8 | 2.4 |
|  | Regular waged | 18.2 | 10.8 | 11.8 | 19.5 | 13.6 |
|  | Casual labour | 50.8 | 44.2 | 23.5 | 16.2 | 24.0 |
|  | Total workforce (a) | 75.1 | 64.0 | 53.9 | 58.8 | 56.2 |
|  | Not workforce (b) | 24.9 | 36.0 | 46.1 | 41.2 | 43.8 |
| 2017-18 | Self-employed(W) | 10.2 | 8.5 | 13.8 | 13.6 | 13.2 |
|  | self-employed (E) | 0.0 | 0.8 | 2.2 | 3.1 | 2.3 |
|  | Unpaid-family work | 1.7 | 0.7 | 1.1 | 1.5 | 1.2 |
|  | Regular waged | 11.0 | 16.4 | 15.0 | 23.6 | 17.4 |
|  | Casual labour | 38.9 | 33.2 | 14.8 | 10.4 | 15.5 |
|  | Total workforce (a) | 61.8 | 59.6 | 46.8 | 52.1 | 49.5 |
|  | Not workforce (b) | 38.3 | 40.5 | 53.2 | 47.9 | 50.5 |
| 2018-19 | Self-employed(W) | 4.4 | 9.2 | 12.6 | 12.3 | 12.1 |
|  | self-employed (E) | 1.5 | 1.2 | 3.0 | 4.4 | 3.1 |
|  | Unpaid-family work | 3.5 | 0.7 | 1.3 | 2.3 | 1.5 |
|  | Regular waged | 7.7 | 15.5 | 16.8 | 22.8 | 18.0 |
|  | Casual labour | 35.5 | 32.5 | 17.5 | 13.2 | 18.2 |
|  | Total workforce (a) | 52.6 | 59.1 | 51.1 | 55.0 | 52.9 |
|  | Not workforce (b) | 47.4 | 40.9 | 48.9 | 45.0 | 47.1 |
| Total (a+b) |  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Note: W: worker, E: Employer
Table 4.14 shows the share of workforce participation of different social groups among different sectors in Kerala. In 2011-12, the total workforce participation of the ST population is 75.1 percent and out of that, 24.9 percent were not in the workforce. The highest among them were in casual labours 44.2 percent and percent 18.2 are regular waged workers. From the SC population, the workforce e
participation was 64 percent and 36 percent were not in the workforce. The highest among them were 44.2 casual percent labourers and 10.8 percent regular waged workers. The share of the workforce from the OBC population was 53.9 percent and 46.1 percent of them were not in the workforce. The highest among them was 23.5 percent casual labourers and 11.8 percent regular waged employers. The total participation from others is 58.8 percent and 41.2 percent were not in the workforce. The highest among them were regular waged employers 19.5 percent and 16.2 percent were casual labourers.

In 2017-18, the ST workforce participation was decreased to 61.8 percent, and 38.3 not in the workforce. The highest participation among them casual labourers was 38.9 percent and 11 percent were regular waged employers. The share of the SC population was also decreased to 59.6 percent and 40.5 percent among them were not in the workforce. The highest among them 33.2 percent were casual labourers and 16.4 percent were regular waged employers. The share of participation from OBC is 46.8 percent, 40 percent are employed and 5 percent are not employed. The highest out of them was regular waged employers 15 percent and 14.8 percent of them were casual labourers. The participation share of others is 52.1 and percent 40.9 percent of them were not in the workforce. The highest of them was regular waged employers (23.6\%). And 13.6 percent were self-employed workers.

2018-19 the total workforce participation of the ST population is 52.6 percent and 47.4 percent of them were not in the workforce. Out of them, 35.5 percent are casual labourers and 7.7 percent are regular waged employers. The share of the SC population is 59.1 percent and among them, 40.9 percent are not in the workforce. Out of them, 32.5 percent are casual labourers and 15.5 percent are regular waged employers. The participation from OBC is 51.1 percent and out of that, 48.9 percent are not in the workforce. The highest among them 17.5 percent are casual labourers and 16.8 percent are regular waged employers. The share of participation from others is 55 percent and out of them, 45 percent are not employed. The highest of them are regular waged employers 22.8 percent and 13.2 percent are casual labourers.

### 4.7 Workforce participation and marital status

Table 4.15 shows the district-wise workforce participation among single and married persons. The total workforce participation among married is 77.2 percent in 2011-12 and among single is 22.8 percent. In 2017-18 the participation from married is increased to 78.8 percent and among single deceased to 21.3 percent. In 2018-19 participation from married increased to 79 percent and single decreased to 21 percent.

Table: 4.15
District wise workforce participation (ps+ss) (Age: 18-60) by marital status in Kerala

| Districts | 2011-12 |  | 2017-18 |  | $\mathbf{2 0 1 8 - 1 9}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Married | Single\# | Married | Single\# | Married | Single\# |
| Kasaragod | 70.9 | 29.1 | 69.6 | 30.4 | 82.2 | 17.8 |
| Kannur | 75.0 | 25.0 | 81.1 | 18.9 | 74.3 | 25.7 |
| Wayanad | 77.8 | 22.2 | 79.1 | 20.9 | 85.8 | 14.2 |
| Kozhikode | 76.1 | 23.9 | 78.7 | 21.3 | 75.4 | 24.6 |
| Malappuram | 73.0 | 27.0 | 76.2 | 23.8 | 82.6 | 17.4 |
| Palakkad | 76.1 | 23.9 | 77.4 | 22.7 | 80.2 | 19.9 |
| Thrissur | 75.4 | 24.6 | 78.6 | 21.4 | 83.3 | 16.7 |
| Ernakulam | 80.2 | 19.8 | 81.5 | 18.5 | 79.4 | 20.6 |
| Idukki | 82.7 | 17.3 | 71.3 | 28.7 | 74.3 | 25.8 |
| Kottayam | 81.1 | 18.9 | 79.1 | 20.9 | 77.0 | 23.0 |
| Alappuzha | 76.4 | 23.6 | 86.7 | 13.3 | 80.4 | 19.6 |
| Pathanamthitta | 78.0 | 22.0 | 87.5 | 12.5 | 80.8 | 19.2 |
| Kollam | 80.8 | 19.3 | 80.8 | 19.2 | 78.7 | 21.3 |
| Thiruvananthapuram | 77.3 | 22.7 | 74.9 | 25.1 | 78.3 | 21.7 |
| Total | 77.2 | 22.8 | 78.8 | 21.3 | 79.0 | 21.0 |
| Soure: |  |  |  |  |  |  |

Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Note: values are given in row-wise; \# single is merged with the other two categories of the widow and divorced/separated

In 2011-12 highest participation is among the married women from Idukki 82.7 percent and the lowest from Malappuram 73 percent. The highest participation from
single is Malappuram 27 percent and the lowest from Idukki 17.3 percent. In 201718 the highest participation is from the married women from Pathanamthitta 87.5 percent and the lowest from Kasargod 71.3 percent. From single lowest is from Pathanamthitta and the highest is from Kasargod. In 2018-19 the highest participation from married is Wayanad 85.8 percent and the lowest from Idukki and Kannur 74.3 percent. From single highest participation is from Idukki and the lowest from Wayanad.

Table: 4.16
Workforce participation (ps+ss) by marital status (MPCE) in Kerala (Age: 18-60)

| Year | Workforce | Unmarried | Married | Widow | Divorce/separated | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011-12 | Self-employed(W) | 7.4 | 14.8 | 9.2 | 13.8 | 13.1 |
|  | self-employed (E) | 1.2 | 3.6 | 3.0 | 4.2 | 3.2 |
|  | Unpaid-family work | 2.5 | 2.5 | 0.3 | 4.1 | 2.4 |
|  | Regular waged | 16.6 | 13.2 | 8.8 | 11.1 | 13.6 |
|  | Casual labour | 25.1 | 23.7 | 23.5 | 24.7 | 24.0 |
|  | Total workforce (a) | 52.7 | 57.8 | 44.7 | 58.0 | 56.2 |
|  | Not workforce (b) | 47.3 | 42.2 | 55.3 | 42.0 | 43.8 |
| 2017-18 | Self-employed(W) | 6.5 | 15.4 | 9.8 | 8.5 | 13.2 |
|  | self-employed (E) | 0.9 | 2.7 | 3.2 | 0.0 | 2.3 |
|  | Unpaid-family work | 0.5 | 1.4 | 0.3 | 0.7 | 1.2 |
|  | Regular waged | 16.8 | 17.4 | 16.2 | 29.4 | 17.4 |
|  | Casual labour | 13.3 | 16.2 | 14.4 | 18.4 | 15.5 |
|  | Total workforce (a) | 38.0 | 53.0 | 43.9 | 57.1 | 49.5 |
|  | Not workforce (b) | 62.0 | 47.0 | 56.1 | 43.0 | 50.5 |
| 2018-19 | Self-employed(W) | 4.1 | 14.7 | 8.0 | 10.9 | 12.1 |
|  | self-employed (E) | 1.3 | 3.8 | 1.1 | 1.7 | 3.1 |
|  | Unpaid-family work | 0.9 | 1.8 | 0.1 | 1.9 | 1.5 |
|  | Regular waged | 19.0 | 17.7 | 15.8 | 28.9 | 18.0 |
|  | Casual labour | 14.5 | 19.2 | 15.3 | 37.0 | 18.2 |
|  | Total workforce (a) | 39.7 | 57.2 | 40.2 | 80.3 | 52.9 |
|  | Not workforce (b) | 60.3 | 42.8 | 59.8 | 19.7 | 47.1 |
| Total (a+b) |  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Note: W: worker, E: Employer

Table 4.16 shows the total workforce participation among the group of unmarried, married, widow, and separated or divorced women. In 2011-12, the share of participation of unmarried women was 52.7 percent and 47.3 percent among them were not in the workforce. The highest among them were casual labourers 25.1 percent. The participation of married women was 57.8 percent and 42.2 percent were not in the workforce. The highest among them was 23.7 percent, casual labourers. The participation of the widow is 44.7 percent and 55.3 percent were not in the workforce. The highest of them is casual labour 23.5 percent. The participation of divorced or separated women was 58 percent and 58 percent of them were not in the workforce.

In 2017-18, the participation of unmarried women is 38 percent and 62 percent of them were not in the workforce. The highest among them is regular waged employers 16.8 percent. The share of married women is 53 percent and 47 percent of them are not employed. Out of them, 17.4 percent are regular waged employers. The share of participation of widow is 43.9 percent and out of them, 56.1 percent is not employed. Out of them, 16.2 percent are casual labourers. The participation of separated or divorced women is 57.1 percent and out of the 43 percent is not employed. The highest among them 29.4 percent is regular waged employers.

In 2018-19 the overall participation of unmarried women is 39.7 percent and out of them, 60.3 percent are not in the workforce. The highest among them 14.5 percent is casual labour. The participation of married women is 57.2 percent and among them, 42.8 percent are not employed. Out of them, 19.2 percent is casual labour. The share of participation of widows is 40.2 percent and among them, 59.8 percent are not in the workforce. Out of the highest are regular waged employers 15.8 percent. The share of separated or divorced women is 80.3 percent and out of the 19.7 percent not employed and highest among them, 37 percent are casual labourers.

Figure 4.9
Workforce Participation by Marital Status


Source: Source: Authors' estimation from NSS unit-level data on employment and unemployment of $68^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

The highest workforce participation is from separated or divorced women in all the periods of 2011-12, 2017-18, and 2018-19. The lowest participation is from the group of widows in all the surveys.

Table: 4.17
Workforce participation (ps+ss) (Age: 18-60) by marital status in Kerala

| Year | Workforce | Married | Single\# | Total |
| :---: | :---: | :---: | :---: | :---: |
| 2011-12 | Self-employed(W) | 14.8 | 8.0 | 13.1 |
|  | self-employed (E) | 3.6 | 1.7 | 3.2 |
|  | Unpaid-family work | 2.5 | 2.2 | 2.4 |
|  | Regular waged | 13.2 | 15.0 | 13.6 |
|  | Casual labour | 23.7 | 24.8 | 24.0 |
|  | Total workforce (a) | 57.8 | 51.5 | 56.2 |
|  | Not workforce (b) | 42.2 | 48.5 | 43.8 |
| 2017-18 | Self-employed(W) | 15.4 | 7.2 | 13.2 |
|  | self-employed (E) | 2.7 | 1.3 | 2.3 |
|  | Unpaid-family work | 1.4 | 0.5 | 1.2 |
|  | Regular waged | 17.4 | 17.2 | 17.4 |
|  | Casual labour | 16.2 | 13.7 | 15.5 |
|  | Total workforce (a) | 53.0 | 39.8 | 49.5 |
|  | Not workforce (b) | 47.0 | 60.2 | 50.5 |
| 2018-19 | Self-employed(W) | 14.7 | 4.9 | 12.1 |
|  | self-employed (E) | 3.8 | 1.3 | 3.1 |
|  | Unpaid-family work | 1.8 | 0.8 | 1.5 |
|  | Regular waged | 17.7 | 18.8 | 18.0 |
|  | Casual labour | 19.2 | 15.4 | 18.2 |
|  | Total workforce (a) | 57.2 | 41.2 | 52.9 |
|  | Not workforce (b) | 42.8 | 58.8 | 47.1 |
| Total (a+b) |  | 100.0 | 100.0 | 100.0 |

Source: Authors' estimation from NSS unit-level data on employment and unemployment of 68 ${ }^{\text {th }}$ round (2011-12) and PLFS: 2017-18 \& 2018-19

Note: \# single is merged with the other two categories of the widow and divorced/separated

Table 4.17 shows the total workforce participation among the single and married women in different sectors among the age group of 18-60. In 2011-12 the workforce participation among the group of married women is 57.8 percent and not in the workforce was 42.2 percent. The share of participation among the group of single women is 51.5 percent and 48.5 percent were not in the workforce. In 2017-18, the
total participation of married women is 53 percent and 47 percent is not in the workforce. The share of participation among single women is 39.8 percent and 60.2 percent of them are not employed. In 2018-19 the total participation among married women is 57.2 percent and out of that, 42.8 percent are not employed. The participation of single is 41.2 percent and 58.8 percent of them are not employed.

## Conclusion

This chapter analysed the Kerala labour market using secondary data. The data are taken from the 2011-12 NSSO employment unemployment survey and the periodic labour force survey of 2017-18 and 2018-19. By the analysis, it is found that the lowest working participation is a serious issue in Kerala, when we comparing to the male and female-female labour force participation, the female labour force participation is less than the male labour force participation. There is a high gender gap in workforce participation in Kerala. It is also discussed the district-wise male and female workforce participation and it is identified that the highest participation is from Idukki and Wayanad districts and in this area lot of people worked as casual labourers and in agricultural sectors. The lowest participation in the case of both males and females is in Malabar districts, especially in Malappuram, Kozhikode, and Kannur. The overall surveys show that Malappuram showed the lowest participation both in the case of males and females.

The sectorial analysis of Kerala (rural and urban) clears that in-state rural labour force participation is higher than the urban labour force participation both in males and females. Rural participation is showing an increasing trend in all the districts of Kerala. The data of working participation based on occupational divisions shows that both in rural and urban Kerala most of the persons are casual labourers and the second-highest participation is in regular waged employers. In the case of both males and females also the majority of workers are casual labourers and the second among them were regular waged employers. The analysis also shows that the unpaid family workers are more females than males.

While analyzing the labour force participation based on education status a noticeable thing identified that education improves female working participation and it reduces the gender gap in economic participation. In all three periods, female workforce participation is more than the male workforce participation rates. There is also makes a comparison between the workforce participation among the groups of nontechnical education the female participation is more than the male participation. That means better education improves the workforce participation of females. Education is the most determinant factor of employment. But overall workforce participation is highest among the group of persons with primary education and graduation and the lowest participation is among the group of persons with higher secondary education. The overall workforce participation in technical or professional education is also higher than the workforce participation is among the group of non-technical education. While the analysis of professional group the participation from medical and engineering holders are more than others.

The analysis of economic class gives a positive relationship between income and labour force participation. When income increases workforce participation also increases. The lowest participation is among the first class which is the poorest section and the highest participation is among the fifth section which is the richest.

The analysis of workforce participation among different social groups SC, ST, OBC, and Others shows that among the ST communities in 2011-12 female participation is more than male participation and in the remaining years male and female participation share is almost equal. That means the gender differences in economic participation are very less among the ST communities. In SC communities all three surveys show that the female workforce participation is higher than the male workforce participation rates. The highest workforce participation is among OBC communities. And among these communities, the male participation rates are always higher than the female participation rates. And there is a high gender gap between the participation levels. In the case of all other categories, female participation is higher than male participation rates.

In the analysis of female working participation and marital status, the highest participation is among the married women in all the fourteen districts of Kerala and the lowest participation is among single women. When classified the women as a group of the married, unmarried, widow, and divorced or separated it is found that the highest participation is from the group of divorced or separated groups, and the lowest participation is from the group of widows. By making an occupational comparison, most of them are casual labourers and regular waged employers.

The conclusion reached by the analysis of secondary data is that the economic participation of women is determined by a lot of factors such as income, education, marital status, etc. There is a direct relationship between income and female workforce participation. Education is also an important determinant of women's workforce participation. The unemployment rate is reduced when education status improved and it reduces the gender gap in economic participation.

# Chapter V <br> SOCIO-ECONOMIC CHARACTERISTICS OF EDUCATED FEMALE LABOUR FORCE: AN OVERALL ANALYSIS 

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5.3 Educated women unemployment among different social and economic groups
5.4 Female Education and its Role in Female Employment
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5.6 Female employment and types of education
5.7 Female employment and education status
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### 5.1 Introduction

The previous chapters were analysed based on secondary data, but this study is mainly focused on the primary data analysis. Different socio-economic factors influenced female labour force participation such as age, religion, caste, income, marital status, number of children, education status of husband and parents, etc. From all the works of literature, the researcher found a strong relationship between social, economic, and cultural factors and female employment level. This chapter tries to explain the main socio-economic factors that determine the women's decision of employment and other individual factors that also influence their working participation level. And this analysis will surely help us to understand the real picture of the female decisions regarding their economic participation and what factors influenced them to decide on employment.

### 5.2 General Characteristics of the Sample Respondents

The rising female labour force has been a remarkable change in economic growth and development of the present century. Different factors determined female labour force participation. Social and cultural factors are played an important role in India keeping women outside the labour force. Individual and household characteristics strongly influenced the lowest female workforce participation in India Sora et al. (2015).

This study is carried out in two districts Malappuram and Kannur based on the lowest female workforce participation. To represent urban areas Malappuram municipality and Iritty Municipality are selected from both districts and to represent rural areas Areacode panchayath and Kanichar panchayath are selected from both districts. The district-wise and area-wise distributions of the samples are given in table 5.1.

Table 5.1
District Wise Distribution of the Individual Samples

| Districts | Frequency | Percent | Cumulative Frequency |
| :--- | :---: | :---: | :---: |
| Malappuram | 218 | 46.1 | 46.1 |
| Kannur | 255 | 53.9 | 100.0 |
| Total | 473 | 100.0 |  |
| Areacode Panjayath | 111 | 23.5 | 23.5 |
| Malappuram Municipality | 107 | 22.6 | 73.2 |
| Kanichar Panjayath | 128 | 27.1 | 50.5 |
| Iritty Municipality | 127 | 26.8 | 100.0 |
| Total | 473 | 100.0 |  |
| Sore: Prary |  |  |  |

Source: Primary data

The sample size from districts, panchayaths, and municipalities is selected based on the proportion of female labour force participation and the total female population under the age group of 18-60. The total percentage of samples from Malappuram districts is 46.1 percent and the Kannur district is 53.9 percent. Out of this, 23.5 percent is from Areacode panchayath and 22.6 from Malappuram municipality. From the Kannur district, 27.1 percent represent rural and 26.8 percent represent urban.

Globally about one out of two, every woman participates in the labour market compared to three out of every four-man (ILO 2020). The main determinant of female entry into the labour market in developing countries is the economic and social norms of the society. Different social norms like harassment and violence of women in public spaces, restrictions placed on women's freedom to interact and move, restrictions from family and also women considered as who does the responsibility of child care and household chores, etc. restricted their economic participation (Jayachandran 2021). Thus it is very important to analyse the socialeconomic and individual characteristics of women before us analyzing their economic participation.

Table 5.2
Social Background of the Respondents

| Characteristics | Group | Frequency | Percent |
| :--- | :--- | :---: | :---: |
| Region | Rural | 239 | 50.52 |
|  | Urban | 234 | 49.47 |
| Total | Rural + Urban | 473 | 100.0 |
| Religion | Hindu | 294 | 62.2 |
|  | Muslim | 179 | 37.8 |
| Total | Hindu +Muslims | 473 | 100.0 |
| Caste | General | 109 | 23.0 |
|  | OBC | 332 | 70.2 |
|  | SC/ST | 32 | 6.8 |
| Total | General + OBC + SC/ST | 473 | 100.0 |

Source: Primary data
The total sample forces from both districts are 473 and out of this 239 are from rural and 234 represent urban areas. The study is only limited to the two major religious groups Hindus and Muslims. 62.2 percent of the total samples are from the Hindu religion and 37.8 percent are from the Muslim religion. The caste-wise distribution represents General, OBC, SC, and ST. Out of the samples, 23.0 percent were from general, 70.2 percent from OBC , and 6.8 percent from SC/ST.

Table 5.3
Economic Background of the Respondents

| Characteristics | Group | Frequency | Percentage |
| :---: | :---: | :---: | :---: |
| Income | Below 10000 | 102 | 21.56 |
|  | 10001-20000 | 105 | 22.19 |
|  | 20001-30000 | 151 | 31.92 |
|  | 30001-40000 | 32 | 6.77 |
|  | 40001-50000 | 63 | 13.31 |
|  | Above 50000 | 18 | 3.9 |
| Expenditure | Below 10000 | 188 | 39.75 |
|  | 10001-20000 | 199 | 42.07 |
|  | 20001-30000 | 83 | 17.55 |
|  | 30001-40000 | 3 | 0.63 |
|  | Above 40000 | 0 | 0 |
| APL/BPL | APL | 367 | 77.6 |
|  | BPL | 106 | 22.4 |
| Land ownership | Acre | 41 | 8.6 |
|  | Cent | 422 | 89.2 |
|  | Nil | 10 | 2.2 |
| House ownership | Ownership | 443 | 93.7 |
|  | Rent | 30 | 6.3 |
| Number of vehicles | Nil | 21 | 4.4 |
|  | One | 295 | 62.4 |
|  | Two | 140 | 29.6 |
|  | More than two | 17 | .3.6 |
| Type of house | Tile | 79 | 16.7 |
|  | Single floor | 169 | 35.7 |
|  | Double floor | 225 | 47.6 |

Source: Primary data

When we analyse the economic background of the respondents, it is clear that the majority of the respondents, 31.92 percent belong to the income level of 2000130000. And only 3.9 percent are from above 50000 . At the same time analyzing the consumption expenditure, 42 percent are from RS 10001-20000 and also 39.5 percent are from below 10000. Categorizing the APL and BPL classifications 77.6
percent of the samples are from APL backgrounds and 22.7 percent are from BPL backgrounds. When we analyse house ownership 93.7 percent have their own house. The data also shows that 62.4 percent of samples have belongs to their own vehicle and 4.4 percent have no vehicles. The type of house shows that 47.6 percent have double floor houses and 35.7 percent have single floor houses. The overall economic background shows that the majority of samples are from middle-class families.

Table 5.4
Distribution on the basis of Individual characteristics of the respondents

| Characteristics | Group | Frequency | Percent |
| :--- | :--- | :---: | :---: |
| Age | $18-29$ | 148 | 31.3 |
|  | $30-39$ | 230 | 49 |
|  | $40-49$ | 87 | 18.4 |
| Marital status | $50-59$ | 8 | 1.7 |
|  | 60 and above | 0 | 0 |
|  | Single | 27 | 5.7 |
|  | Married | 413 | 87.3 |
| Number of children | Widow | 26 | 5.5 |
|  | 0 | 7 | 1.5 |
|  | 1 | 65 | 13.7 |
|  | 2 | 116 | 24.5 |
|  | 3 | 197 | 41.6 |
|  | 4 | 13 | 2.7 |

Source: Primary data

It is very important to analyse the individual characteristics of respondents when we analyse their employment status. There are different characteristics of individuals such as their age, marital status; numbers of children, etc. are closely related to their
choice of employment. From these samples majority of the respondents are belongs to the age group of 30-39 (49\%). The women belonging to the age group of 18-29 are 31.3 percent. Only 1.7 percent is from the age group of 50-59.

When we analyse the marital status, the majority of women are married (87.3 percent) and out of the samples 5.7 percent are belongs to the group of single. The divorced or separated women are 5.5 percent and 1.5 percent of women are under the category of the widow.

Figure 5.1

## Marital Status of the Respondents



Source: Field survey
The number of children is also an important determinant of the female decision of employment. Because our social norms and tradition insisted women take care responsibilities of for their children and it is their primary duty of them. In these samples, 41.6 percent of women have two children and 24.5 percent have only one child. 16.9 percent have three children and only 2.7 percent have four children. Only 0.4 percent have five children.

Education and employment are the two factors closely related to each other and education played an important role in determining female employment participation rates. When analyzing the problem of educated female employment, it is very important to analyse the education status of sample respondents.

Table 5.5
Distribution of respondents based on education

| Distribution of respondents based on education |  |  |
| :--- | :---: | :---: |
| Education qualification | Frequency | Percent |
| S.S.L.C | 95 | 20.1 |
| Plus Two | 114 | 24.1 |
| Graduation | 106 | 22.4 |
| Post-Graduation | 69 | 14.6 |
| Technical/Vocational | 50 | 10.6 |
| Other | 39 | 8.2 |
| Total | 473 | 100.0 |
| Education status | Frequency | Percent |
| Professional | 152 | 32.1 |
| Non- Professional | 260 | 55.0 |
| Others | 61 | 12.9 |
| Total | 473 | 100.0 |
| Type of education | Frequency | Percent |
| Govt. | 364 | 77.0 |
| Self-financing | 63 | 13.3 |
| Private aided | 41 | 8.7 |
| Private unaided | 4 | .8 |
| Other | 1 | .2 |
|  | 473 | 100.0 |
| Soure Primal |  |  |

Source: Primary data

Of the total number of samples, 20.1 percent are those who qualified S.S.L.C and 24.1 percent are from the group of Plus Two. Out of the total samples, 22.4 percent are graduated and 14.6 percent are post graduated. Of this group, 10.6 percent are those who qualified for technical or vocational education and 8.2 percent are those
who qualified for any other educational qualifications. Out of this the highest number of samples from the group of Plus Two.

By analyzing the education status 32.1 percent are from professional qualified persons and 55 percent are from non-professional groups. The numbers of nonprofessionals are higher than the number of professionals.

From the type of education, 77 percent are studied under the Government stream and 13.3 percent are self-financing stream. Out of this 8.7 percent are from private aided and 0.8 percent are from private unaided groups.

Table 5.6
Employment status of the respondents

| Employment status of the respondents |  |  |
| :--- | :---: | :---: |
| Employed/unemployed | Frequency | Percentage |
| Employed | 88 | 18.6 |
| Unemployed | 385 | 81.4 |
| Total | 473 | 100.0 |

Source: Primary data
Figure: 5.2 Employment Statuses of the Respondents


Source: Field Survey

Table 5.5 and figure 5.1 show the employment status of the total respondents. From the total sample size, unemployed women are more than the number of employed women. Out of the sample, 81.4 percent are unemployed and 18.5 percent are employed. There exists a huge gap between employed and unemployed women.

### 5.3 Female Employment Status among Different Socio-economic Groups

It is very important to analyse female employment status among different socioeconomic groups. The socio-economic factors played a vital role in female education, employment, and empowerment. Here we analyse socio-economic groups by categorizing two groups: social groups and economic groups. In social groups, we analyse the variables like region (rural and urban), religion (Hindu and Muslims), and caste. In economic groups, we analyse the variables such as income, expenditure, house ownership, land ownership, etc.

## District wise employment unemployment status of educated women

The study is carried out in two districts in Malabar, Malappuram, and Kannur. Malappuram is the most populated district in Kerala, around 13 percent of the population of the state belongs to the Malappuram district. It is also the third-largest district in Kerala. And also it is the third major contributing district to state GDP. The major religion in Malappuram district is Muslim 70.2 percent and 27.2 percent are Hindu population. Christians and Others belong to only 2 percent of the total population.

Kannur is the sixth-largest urban agglomeration in Kerala and it is located in the North Malabar region. Kannur is the sixth most urbanized district in Kerala and more than 50 percent of its population lives in urban areas. It is the second-highest urban populated district in Kerala. As per the data of the 2011 census and 2021 population data Hindu population is the majority in the Kannur district and the second-largest Muslim population is 29.43 percent and Christians belong to 10.41 percent of the total population.

Table 5.7
District-wise Distribution of samples based on Employment Status

| Districts | Employed | Unemployed | Total |
| :--- | :---: | :---: | :---: |
| Malappuram | 40 | 178 | 218 |
|  | 18.3 | 81.7 | 100.0 |
| Kannur | 48 | 207 | 255 |
|  | 18.8 | 81.2 | 100.0 |
| Total | 88 | 385 | 473 |
|  | 18.6 | 81.4 | 100.0 |

Chi-square value : $\mathbf{0 . 0 1 8}$ (p-value $\mathbf{0 . 8 9 5}$ )
There is no significant association
Source: Field Survey

The district-wise comparison of total employed and unemployed women can be cross-tabulated in Table 5.7. The total percentage of employed women in Malappuram district is 18.3 percent and in Kannur district also 18.8 percent. The total percentage of unemployed women in Malappuram district is 81.7 percent and in Kannur district is 81.2 percent. When comparing both districts the employed and unemployed percentages of women are almost equal. Comparatively the number of employed women in the Kannur district is more than in the Malappuram district but only the slightest variations. The total percentage of employed women in both districts is 18.6 percent and unemployed women is 81.4 percent. The percentage of unemployed is more than the percentage of employed. That means more than 80 percent of educated females in both districts are unemployed.

Analyzing the association between districts and employment status by using the chisquare test, the ' P -value is more than 0.05 ( 0.895 ), and there is no significant association between districts and employment status. The NSSO data 2018-19 also reported that Malappuram and Kannur showed the lowest female labour force participation in Kerala (Malappuram 14.4 percent and Kannur 19.3 percent). It is the most probable reason behind the result of the chi-square test.

## Rural-Urban Educated Female Employment Status

The study is carried out a detailed analysis of rural and urban comparisons of the employment status of females. Sing et al. (2019), states that more than one-fourth of the rural educated and one-fifth of the urban educated are unemployed in Kerala, and female unemployment is higher than male unemployment rates.

## Table 5.8

Rural and Urban Comparison of the Samples

| Districts | Rural |  |  | Urban |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  |  |  |  |  |  |
|  | Employed | Unemployed | Total | Employed | Unemployed |  |
| Malappuram | 21 | 90 | 111 | 19 | 88 | 107 |
|  | 18.9 | 81.1 | 100.0 | 17.8 | 82.2 | 100.0 |
| Kannur | 24 | 104 | 128 | 19 | 88 | 107 |
|  | 18.8 | 81.3 | 100.0 | 17.8 | 82.2 | 100.0 |
| Total | 45 | 194 | 239 | 38 | 176 | 214 |
|  | 18.82 | 81.17 | 100.0 | 17.75 | 82.24 | 100 |

Chi-square value : $\mathbf{0 . 0 6 7}$ (p-value $\mathbf{0 . 9 9 5}$ )
There is no significant association
Source: Field Survey

Table 5.8 shows the rural and urban employed and unemployed women in both Malappuram and Kannur districts. The total number of samples from the rural level in the Malappuram district is 127 and in the Kannur district is 127 . The total percentage of employed women in rural Malappuram is 18.9 percent and in urban Malappuram is 17.8 percent. Rural and urban unemployment is almost the same but comparatively, urban unemployment is more than rural unemployment. The total percentage of employed women in Kannur (rural) is 18.8 percent and urban is 18.9 percent. The rural and urban participation are almost the same in the Kannur district.

The total percentage of unemployed women in rural Malappuram is 81.1 percent and in urban Malappuram is 82.2 percent. In the Kannur district total percentage of rural unemployed women is 81.3 percent and urban is 81.1 percent. It is clear that there is no difference between rural and urban employment status, in both districts are almost the same. But in Malappuram district urban unemployment is greater than rural unemployment because mainly of the attitude of women. When the time of
primary data collection, it is evident that in urban Malappuram many of the females are not interested to do employment below their education status. But in the Kannur district, both rural and urban unemployment is almost the same.

The chi-square test is used to analyse the association between the employment status in both rural and urban sectors in both districts. The ' P -value is more than 0.05 and the result is no significant relationship between the employment status and rural and urban sectors. The most probable reason identified behind this is that most of the studies (Friroz et al. 2014; State Urbanization Report 2012; and Sreekumar 1990) defined Kerala as a semi-urban character and it is difficult to make a distinction between urban and rural Kerala. The 2011 census reported that Kerala is the secondlargest urbanized state in India and 47.7 percent of its population lives in urban areas Kerala overtook Maharashtra ( 48.4 percent). So there is no association between rural and urban division and employment status in our study areas.

## Female employment status among different Religion and caste

A caste is a form of social stratification and it is characterized by hereditary, social barriers, occupational and ritual divisions in society. Religion and caste are important factors to influence women's role in society and in deciding their occupations and choices. A detailed classification of employed and unemployed women and their employment status can be given in the below tables.

Table 5.9

## Religious wise Employment Status

| Religion | Employment Status |  | Total |
| :--- | :---: | :---: | :---: |
|  | Employed | Unemployed |  |
| Hindu | 58 | 236 | 294 |
|  | 19.7 | 80.3 | 100.0 |
| Muslims | 30 | 149 | 179 |
|  | 16.8 | 83.2 | 100.0 |
| Total | 88 | 385 | 473 |
|  | 18.6 | 81.4 | 100.0 |

Chi-square value : $\mathbf{0 . 6 4 7}$ (p-value $\mathbf{0 . 4 2 1 )}$
There is no significant association
Source: Field Survey

Table 5.9 shows the employed and unemployed women among the two religious groups Hindus and Muslims. The total percentages of employed women in the Hindu religion are 19.7 and Muslims are 16.8. The total percentage of women employed in the Hindu religion is more than in the Muslim religion and the number of unemployed females is more among the Muslims. The chi-square test is used to check the association between religion and female employment status. The result is that the ' P -value is greater than $0.05(0.421)$ and there is no significant association between religion and female employment status. The percentages of employed and unemployed women among both religious groups are almost the same because both districts show the lowest female employment status. There is a large number of females who are still outside the labour market.

Table 5.10
Caste wise Employment Status

| Caste | Employment Status |  | Total |
| :--- | :---: | :---: | :---: |
|  | Employed | Unemployed |  |
| General | 28 | 81 | 109 |
|  | 25.7 | 74.3 | 100.0 |
| OBC | 56 | 276 | 332 |
|  | 16.9 | 83.1 | 100.0 |
| SC/ST | 4 | 28 | 32 |
|  | 12.5 | 87.5 | 100.0 |
| Total | 88 | 385 | 473 |
|  | 18.6 | 81.4 | 100.0 |

Chi-square value : $\mathbf{1 3 . 2 1 8}$ (p-value $\mathbf{0 . 0 1 0}$ )
There is significant association
Source: Field Survey
Table 5.10 shows the female employment status among major castes in Kerala, the castes are divided into three General groups, OBC, SC, and ST. Women's employment in the General category is higher than the other two ( $25.7 \%$ ). The highest unemployment is among SC and ST $81.4 \%$. The highest samples are from OBC 332 and their employment is 16.9 percent and 83.1 percent among them are
unemployed. The overall picture shows that the highest unemployment is in SC/ST communities and the lowest in the General category.

The Chi-square test is used to test the association between caste and employment status, the result shows that the ' P -value is less than 0.05 and there is an association between caste and employment status. The main reason behind this is that in our study area most of the educated unemployed are identified from SC/ST communities and also from OBC. The other thing is that the total samples from SC/ST communities are very less because of their educational backwardness. Only a few women are qualified SSLC and above.

## The Relationship between Income, Expenditure, and Female Employment Status

Income can be defined as an amount of money that a person receives in return for working, providing a product or service, or investing capital. A person's income can be derived from a pension, govt. benefits or gifts. In economics, expenditure is defined as money spent on purchasing any goods or services. The income and expenditure determine the economic characteristics of an individual.

Table 5.11
Income wise Employment Distribution

| Income | Employed | Unemployed | Total |
| :--- | :--- | :--- | :--- |
| $0-10000$ | $4(4.5)$ | $98(25.5)$ | $102(21.6)$ |
| $10000-20000$ | $12(13.6)$ | $93(24.2)$ | $105(22.2)$ |
| $20000-30000$ | $28(31.8)$ | $123(31.9)$ | $151(31.9)$ |
| $30000-40000$ | $7(8)$ | $25(6.5)$ | $32(6.8)$ |
| Above 40000 | $37(42)$ | $46(11.9)$ | $83(17.5)$ |
| Total | $88(100)$ | $385(100)$ | $473(100)$ |

p-value : $<0.001$
Inference : There exists significant association

Source: Field Survey

Table 5.11 shows the number of employed and unemployed women at various levels of income. Only 4.5 percent of employed women are in the income group of 0 10000. Of this group, the majorities are unemployed 25.5 percent and 21.6 percent of total respondents are in this group. In the income groups of 10000-20000, there is 22.2 percent of total respondents and out of these 13.6 are employed and 24.2 percent are unemployed. The total percent of respondents between the income groups of 20000-30000 is 31.9 percent. Out of this 31.8 percent are employed and 31.9 percent are unemployed. In this income group almost employed and unemployed are equal. The total women respondents in the income group of 3000040000 are 6.8 percent and out of this 8 percent are employed and 6.5 percent are unemployed. The total percent of respondents above the income group of 40000 is 17.5 percent and out of this 42 percent are employed and 11.9 percent are unemployed. The cross-tabulation between income and employment status shows that there is a relationship between income and employment status. That means employed women have contributed to their family income and among the highest income above 40000 , the percentage of employed women is much higher than compared to unemployed women.

By checking the association between income and female employment status by using the chi-square test and the result of the test there exists a significant association between income and employment status of women. That means the highest number of unemployed women are from the middle-income groups. The family's income increases when both the male and females are employed. Panda (2013) identified a U-shaped relationship between the economic class of the family and female employment status. After reaching a particular point there is a positive relationship between female employment status and income. This study area also identified that there is a positive relationship between family income and female employment status.

Table 5.12
Expenditure wise Employment Distribution

| Expenditure | Employed | Unemployed | Total |
| :--- | :---: | :---: | :---: |
| $0-10000$ | $28(31.8)$ | $160(41.6)$ | $188(39.7)$ |
| $10000-20000$ | $46(52.3)$ | $153(39.7)$ | $199(42.1$ |
| $20000-30000$ | $14(15.9)$ | $69(17.9)$ | $83(17.5)$ |
| $30000-40000$ | $0(0)$ | $3(0.8)$ | $3(0.6)$ |
| Total | $88(100)$ | $385(100)$ | $473(100)$ |

p-value : 0.155
Inference: There is no significant association

Source: Field Survey
Table 5.12 shows the expenditure of employed and unemployed women. The total percent of female respondents between the expenditure of $0-10000$ is 39.7 percent out of this 31.8 percent are employed and 41.6 percent are unemployed. The majority of them are unemployed. There is 42.1 percent of total female respondents are between the group of 10000-20000. And among them 52.3 percent are employed and 39.7 percent are unemployed. The total percent of female respondents between the groups of 20000-30000 is 17.5 percent and out of this 15.9 percent are employed and 17.9 percent are unemployed women. There are no employed women between the expenditure of $30000-40000$. Only 0.6 percent is between these groups and they all are unemployed women.

The result of the chi-square test is, that the ' P -value is greater than 0.05 and there is no association between expenditure and female employment. The most probable reason behind this is that in our study area most of the employed and unemployed respondents are spend equally. The female employment status is not influenced the family expenditure. Because most of our respondents are the wives of the gulf migrants and in their families, women took all the responsibility of managing the family budget and there is no association between their expenditure and employment status. Sukumar (2011) analysed the expenditure pattern of employed women in Kerala and identified that employed women do not spend too much on their personal
needs. They spend also for the needs of the family and the majority of them are given more preference for saving and investment than expenditure.

## Table 5.13

Mean Income and Expenditure of Employed and Unemployed Women

|  | Employment status | N | Mean | Std. <br> Deviation | t | p- <br> value | Inference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Monthly expenditure | Employed | 88 | 16965.91 | 6174.56 | 0.957 | 0.339 | There is no significant difference |
|  | Unemployed | 385 | 16210.39 | 6788.07 |  |  |  |
| Monthly income | Employed | 88 | 38011.36 | 16479.52 | 7.185 | <0.001 | There exists significant difference |
|  | Unemployed | 385 | 24420.78 | 13764.18 |  |  |  |

Source: Field Survey

Table 5.13 shows the average income and expenditure of employed and unemployed women. The average income and expenditure are analysed by Student's t-test. The mean family expenditure of employed women is 16965.91 and the standers deviation is 6174.56 and the mean family expenditure of unemployed women is 16210.39 and the standers deviation is 6788.07 . The mean family expenditure of both employed and unemployed are almost equal and the result of the test is there are no significant differences between the expenditure of both employed and unemployed.

The mean family incomes of employed women are 38011.36 and the standard deviation is 16479.52 and the mean family income of unemployed women is 24420.78 and the standard deviation is 13764.18 . There is a high difference between the mean family income of employed and unemployed women and the result of the test is that there is a significant difference between the family income of employed and unemployed women. The family income of employed women is much higher compared to the family income of unemployed women.

## Employment Status among the Group of APL and BPL

APL can be defined as the number of persons above the poverty line and BPL is also defined as the number of persons below the poverty line. An APL and BPL classification determines the economic capability of the sample respondents.

Table 5.14
Female Employment among APL and BPL Category

| APL/BPL | Employed | Unemployed | Total |
| :--- | :--- | :--- | :--- |
| APL | 75 | 292 | 367 |
|  | 20.4 | 79.6 | 100.0 |
| BPL | 13 | 93 | 106 |
|  | 12.3 | 87.7 | 100.0 |
| Total | 88 | 385 | 473 |
|  | 18.6 | 81.4 | 100.0 |

Chi-square value : $\mathbf{3 . 6 2 7}$ (p-value $\mathbf{0 . 0 5 7}$ )
There is no significant association

Source: Field Survey

Table 5.14 examines the percentage of employed and unemployed women among two economic groups APL and BPL. There is 20.4 percent of employed women are belongs to the APL category and 79.6 percent of unemployed women also in the APL category. There are 12.3 percent of employed women and 87.7 percent of unemployed women also in the BPL category. The percentage of employed women in the APL category is more than that compared to the BPL category.

The chi-square is used to check the association between employment status and APL and BPL category and the result is there is no significant association between these two. Because the total percentages of unemployed women are in these two categories is more than that of employed women.

## The Employment Status and House Ownership, Land Ownership, Number of Vehicles, and Type of House

Food, shelter, and clothes are the basic needs of human beings, in this section, the researcher tried to explain the economic factors like house ownership, land ownership, number of vehicles, and type of house among the employed and unemployed group of women and also tried to find out the association between among these variables and employment status of women.

Table 5.15
Distribution of Samples based on House Ownership

| House Ownership | Employment Status |  | Total |
| :--- | :---: | :---: | :---: |
|  | Employed | Unemployed |  |
| Ownership | 82 | 361 | 443 |
|  | 18.5 | 81.5 | 100.0 |
| Rent | 6 | 24 | 30 |
|  | Total | 20.0 | 80.0 |

Chi-square value : $\mathbf{0 . 0 4 1}$ ( p -value $\mathbf{0 . 8 3 9 \text { ) }}$
There is no significant association
Source: Field Survey

## Table 5.16

Distribution of Samples based on Land Ownership

| Land Ownership | Employment Status |  | Total |
| :--- | :---: | :---: | :---: |
|  | Employed | Unemployed |  |
| Acre | 12 | 29 | 41 |
|  | 29.3 | 70.7 | 100.0 |
| Cent | 76 | 346 | 422 |
|  | 18.0 | 82.0 | 100.0 |
| Nil | 0 | 10 | 10 |
|  | 0.0 | 100.0 | 100.0 |
| Total | 88 | 385 | 473 |
|  | 18.6 | 81.4 | 100.0 |

Chi-square value : 5.463(p-value $\mathbf{0 . 0 6 5}$ )
There is no significant association
Source: Field Survey

Table 5.15 cross-tabulated the house ownership and table 5.16 land ownerships of the respondents. By analyzing house ownership 18.5 percent of employed women have their own houses and 20 percent have rented houses. Out of the total respondents, 81.5 percent of unemployed women have their own owned house and 80 percent have rented houses. By analyzing the house ownership and employment
status by using the chi-square test the ' P -value is 0.89 and it is greater than 0.05 and there is no association between employment status and house ownership. Because in our study area most of the respondents have their own houses and few are in rented houses.

Table 5.16 shows the land ownership and employment status of women. Out of the total female employers, 29.3 percent have landed in Acre and 70.7 have in Cent. And out of the unemployed women, 10 percent of respondents are no land ownership and 18 have landed in Acre. The majority of the 82 percent of unemployed women have landed in Acre. The chi-square is used to check the association between land ownership and employment status. The result of the 'pvalue is greater than 0.05 and there is no significant association between land ownership and the employment status of women. In my study area, most of the families got their land by inheritance and there is no association between land ownership and the employment status of women.

Table 5.17
Distribution of Samples based on Number of Vehicles and Type of House

| No. of vehicles | Employed | Unemployed | Total | Chi-square value |
| :---: | :---: | :---: | :---: | :---: |
| 0 | 0(0) | 21(100) | 21(100\%) | Chi-square value : <br> 33.710 <br> (p-value 0.001) <br> There is significant association |
| 1 | 41(13.9) | 254(86.1) | 295(100) |  |
| 2 | 47(33.6) | 93(6.4) | 140(100) |  |
| 3 | 0 | 4(100) | 4(100) |  |
| 4 | 0 | 13(100) | 13(100) |  |
| Total | 88 | 385 | 473 |  |
| Type of house | Employed | Unemployed | Total | Chi- square value |
| Tile | 6(7.6) | 73(92.4) | 79 | Chi-square value : <br> 10.198 <br> (p-value 0.006) <br> There is significant association |
| Single floor | 29(17.2) | 140(82.8) | 169 |  |
| Double floor | 53(23.6) | 172(76.4) | 225 |  |
| Total | 88(18.6) | 385(81.4) | 473 |  |

Source: Field Survey

Table 5.17 shows the number of vehicles and types of houses for employed and unemployed women. Out of the total respondents, 33.6 percent of employed and 6.4
percent of unemployed women have more than one vehicle in their own families. Out of the total samples, 13.9 percent of employed women have their family-owned vehicles and 86.1 percent of unemployed also have anyone vehicle (car or bike, or others). The chi-square test proved that there is a significant relationship between the number of vehicles and employment status.

By analyzing the type of houses, 17.2 percent of employed women have single floor houses and 23.6 percent have double floor houses. Out of the total employed women, 82.8 percent have the single floor and 76.4 percent have double floor houses. The chi-square test shows that the ' p -value is less than 0.05 and there is a significant association between the type of houses and the employment status of women.

### 5.4 Female Education and its Role in Female Employment

Theories of human capital and Neo-classical economists state that education increases the productivity and skill of the labour force and improves female opportunities in the labour market (Smith and Ward 1985). In most developed nations, an increase in education brings more opportunities for women in the labour market (Gornik and Shafer 2012). But in the case of underdeveloped and developing countries, the situation is entirely different. King (1990) explained that in lowincome countries education is associated with declining women's labour force participation and decreases in the proportion of women in paid activities. Das and Desai (2003), reported that there is a negative relationship between women's education and employment, in India illiterate women are employed more than literate women.

This section analyses the role of women's education qualification, education status, and mode of education in employment and finds out the association between women's education and employment status.

### 5.5 Female Employment and Female Education Qualification

The employment and unemployment status of women are classified based on their educational qualifications. The minimum qualification considered as the group of women those who qualified S.S.LC. And other classifications are Plus Two, Graduation, Post-Graduation, Technical and Vocational education, and others. Others include those who completed any other courses like TTC, Paramedical, or others.

## Table 5.18

Distribution of Samples based on Education Qualifications

| Education <br> Qualification | Employment | Unemployment | Total |
| :--- | :---: | :---: | :---: |
| S.S.L.C | $2(2.1)$ | $93(97.9)$ | $95(100.0)$ |
| Plus Two | $5(4.4)$ | $109(95.6)$ | $114(100.0)$ |
| Graduation | $16(15.1)$ | $90(84.9)$ | $106(100.0)$ |
| Post-Graduation | $31(44.9)$ | $38(55.1)$ | $69(100.0)$ |
| Technical/Vocational | $17(34.0)$ | $3(66.0)$ | $50(100.0)$ |
| Other | $17(43.6)$ | $22(56.4)$ | $39(100.0)$ |
| Total | $88(18.6)$ | $385(81.4)$ | $473(100.0)$ |
| Chi-Square Value | Chi-square value $: 88.634($ p-value 0.001$)$ |  |  |
| Source: Field Survey | There is significant association |  |  |

Table 5.18 is the tabulation of employed and unemployed women and their educational qualifications. From the samples, only 2.1 percent are employed women from the group of women who completed S.S.LC and among this group 97.39 percent are unemployed. When coming to the group of Plus Two, only 4.4 percent are employed and 95.9 percent of them were unemployed. Of the group of graduated women, 15.1 percent are employed and 84.9 percent are unemployed. Among the total samples 44.9 percent of the women are employed from a group of women who completed Post- Graduation and 55.1 percent are unemployed. The percentages of employed from the group of women who qualified for vocational or technical education are 34 percent and 66 percent of them are unemployed. The total
percentage of employers from those who completed other courses is 43.6 percent and 56.4 percent of them were unemployed. The numbers of samples are highest from the group of Plus Two and graduates. The highest employers are from the group of women who qualified Post-Graduation (44.9) and from the group of others (43.6). The highest unemployed women are from the group of women who Qualified only S.SL.C and Plus Two (97.9 and 95.6).

The chi-square is used to test the association between education qualification and employment status. The result of the test is that the ' P -value is less than 0.05 and there is an association between women's employment status and their education. The analysis shows that when the number of unemployed is less than the group of women who have good qualifications the unemployment is highest in the groups of women who have only low education qualifications.

### 5.6 Female Employment and Female Education Status

Female education status can be divided into professional degree holders, nonprofessional degree holders, and those categories outside of these two groups. This section also tried to find out the association between female education status and their employment status.

Table 5.19
Distribution of samples on the basis of Education Status

| Education Status | Employed | Unemployed | Total |
| :--- | :---: | :---: | :---: |
| Professional | $53(34.9)$ | $98(65.4)$ | $152(100.0)$ |
| Non- Professional | $29(11.2)$ | $231(88.8)$ | $260(100.0)$ |
| Others | $6(6.1)$ | $55(48.8)$ | $61(100.0)$ |
| Total | $88(18.6)$ | $385(81.4)$ | $473(100)$ |
| Chi- Square value | Chi-square value $: 39.179$ (p-value 0.001) |  |  |
| Source: Field Survey |  |  |  |
| There is significant association |  |  |  |

Table 5.19 shows female education status and employment participation. The total percentage of employers from the group of women who have professional education
is more than to compare the group of women who have non-professional education. Of the group of professionals, 34.9 percent are employed and 65.4 percent are unemployed. The percentages of employers non-professionals are 11.2 percent and 88.8 percent are unemployed. The highest numbers of respondents are from the group of non-professionals (260). Out of the total samples, 61 respondents are from the group of others, and out of the 6.1 percent are employed and 48.8 percent are unemployed.

The association between education status and employment status can be tested by using the chi-square test and the result of the test is that there is a significant association between education status and female employment. Most of the females in Kerala are choosing non-professional education and it is one of the most probable reasons for the highest educated unemployment. In our area also the majority of the females are choosing non-professional education.

### 5.7 Female Employment and Types of Female Education

Here analyse the female employment status among different types of educated females, type of female education can be divided based on women who studied under the GOVT. sector, Self-financing sector, Private aided sector, Private unaided sector, and other modes of education. And also check the association between type of education and employment status.

Table 5.20
Distribution of Samples on the basis of mode of Employment

| Mode of Education | Employment | Unemployment | Total |
| :--- | :--- | :--- | :--- |
| Govt. | $59(16.2)$ | $305(83.8)$ | $364(100.0)$ |
| Self-financing | $22(34.9)$ | $41(65.1)$ | $63(100.0)$ |
| Private aided | $6(14.6)$ | $35(85.4)$ | $41(100.0)$ |
| Private unaided | $1(25.0)$ | $3(75.0)$ | $4(100.0)$ |
| Other | $(0) 0$ | $1(100.0)$ | $1(100.0)$ |
| Total | $88(18.6)$ | $385(81.4)$ | $473(100)$ |
| Chi-Square Value | Chi-square value $: 13.218($ p-value 0.010$)$ |  |  |
| Source: Field Survey | There is significant association |  |  |

Table 5.20 shows the mode of education and employment status. Out of the total employers, 16.2 percent are studied under GOVT. mode of education (GOVT. schools and other education institutions). The highest percentages of employers are those who studied under the self-financing scheme (34.9). That means most of the employers from professional groups are studied in the self-financing mode of education. But when comparing the number of samples studied on different modes of education, the highest numbers of employed and unemployed women are from those studied on GOVT. mode of education. Out of the total samples, 14.6 percent of employed women are studied on private aided and 25 percent are from private unaided.

When analyzing unemployed females, the highest percentage is from private aided mode (85.4) and 83.8 percent are from GOVT. mode of education. The lowest percent of unemployed women are from the self-financing mode of education (65.1). The total samples from private unaided are very small and out of the, 75 percent are unemployed women.

The chi-square test is used to check the association between mode of education and employment status of women. The result of the test is the ' P -value is 0.010 and it is less than 0.05 and there is an association between the type of education and employment status of women.

## ASSOCIATION BETWEEN EDUCATIONAL LOANS AND EDUCATIONAL ASSISTANCE FROM GOVT. AND FEMALE EMPLOYMENT STATUS

The variables like education loans and any financial assistance received from the government in the form of fellowship or scholarship or others also influence the female decision of employment and this section tries to analyse the association between female employment and these two variables.

Table 5.21
Distribution of Samples on
the basis of Financial Assistance and Educational Loan

| Financial <br> Assistance | Employed | Unemployed | Total | Chi-Square Value |
| :--- | :--- | :--- | :--- | :--- |
| No | $71(16.3)$ | $365(83.7)$ | $436(100.0)$ | Chi-square value : <br> 19.815 (p-value <br> $0.001)$ |
| Yes | $17(15.0)$ | $20(77.2)$ | $37(92.2)$ | $473(100)$ |
| Total | $88(18.6)$ | $385(81.4)$ | There is significant <br> association |  |
| Education <br> loan | Employed | Unemployed | Total | Chi-Square Value |
| No | $61(14.5)$ | $360(85.5)$ | $421(100.0)$ | Chi-square value : <br> Yes |
| $27(51.9)$ | $25(48.1)$ | $52(100.0)$ | 42.828(p-value 0.001$)$ <br> There is significant <br> association |  |
| Total | $88(18.6)$ | $385(81.4)$ | $473(100)$ |  |

Source: Field Survey

Table 5.21 analyses the two variables as education loans and financial assistance received by the respondents and their employment status. And also check the association between these two variables and the female's employment status. Out of the total respondents, 15 percent of the employed women received financial assistance from the government and 16.3 percent are not received any financial assistance from the government for their education. Out of the unemployed women, 83.7 percent are not received any financial assistance from the government and 77.2 (20) percent of them are receiving financial assistance from the government. Out of the total samples (473) 436 respondents have not received any financial assistance from the government for their education and only 37 received government support for their education.

Checking the association between financial assistance from the government and employment status by using the chi-square test and the ' p -value is 0.001 and less than 0.05 and there is a significant association between the employment status of respondents and financial assistance of their education. Most of the employed women are received government assistance for their education.

The same table was also used to analyse the education loan and employment status of the respondents. Out of the total employed women, 51.9 percent received education loans and 14.5 percent are not taking any loans for their education. Out of the total unemployed women, 85.5 percent are not received education loans and 48.1 percent are received education loans. Out of the total samples (473), the majority of the respondents 421 are not taken any loans and only 52 are taken loans.

Chi-square is also used to check the association between education loans and employment status. The ' P -value is 0.001 and there is a significant association between education loans and employment status. The numbers of employers are highest among those who took education loans because their repayment is their financial burden and they searched for any job to repay it.

### 5.8 Conclusion

The chapter analysed the socio-economic characteristics and their role on female employment status in the selected study area Malappuram and Kannur. The data are taken from a total of 473 female respondents and out of the 88 are employed and 385 are unemployed. Their socio-economic and individual characteristics are depicted by using frequency distribution tables and only a few of them are by using diagrams. The entire chapter is analysed by using cross-tabulation, chi-square, and students $t$-test. The first section analysed the socio-economic characteristics and their association between female employment status and the second session explained the role of education and female employment status. The socio-economic factors such as caste, income, number of vehicles, and type of house show an association between female employment status, and other variables such as region,
religion, expenditure, land ownership, house ownership, and APL/BPL status are not associated with female employment status in our selected study area. By analyzing the role of education and female employment most of the variables like mode of education, education qualification, the status of education, educational loan, and financial assistance of family are related to female employment status.

# CHAPTER VI <br> DETERMINANTS AND FACTORS INFLUENCING FEMALE LABOUR FORCE PARTICIPATION 

CONTENTS<br>6.1 Introduction<br>6.2 Determinants of Female Labour Force participation<br>6.3 Core Factors Determining Female Employment Status<br>6.4 Major Determinants of Female Employment Status<br>6.5 Conclusion

### 6.1 Introduction

Female employment is important for the enhancement and socio-economic development of a country. These promote gender equality and increase the utilization of human capital. Hosney (2015) there are different factors influencing female labour force participation such as women's age, marital status, and fertility behavior are played a significant role in their decision of labour force participation. Cheema et al. (2021) analysed the determinants of female labour force participation and also point out that the most important variables determining female labour force participation are females' age, education, household head profession, ownership of land by females, female proportion in the household, poverty, wage, etc. Age is one of the basic factors that affect female labour force participation and it improves their skill and experiences in the labour market. Hafeez and Ahmad (2002) state that various socio-economic factors affect the labour force participation decisions of educated married women. And he empirically identified the factors that influence female labour force participation. Such variables are the education level of husband and wife, women's age, household structure, family size, asset ownership, the area of residence, etc.

In this chapter, we try to explain the various factors and determinants of educated female employment participation, and the selected variables are identified from the literature review.

### 6.2 Determinants and factors of Female Labour Force participation

There are different factors like socio-economic characteristics, education qualifications of respondents, and other variables that affect the female decision regarding labour force participation. The socio-economic characteristics of respondents and their educational qualifications are explained in the previous chapter. In this chapter, we analyse the other determinants and factors that influence female decisions of employment participation such as the age of the respondents, parents' education qualifications, husband education qualifications, occupation status of parents and husbands, marital status of the respondents, number of children,
marriage age, years spend for education before marriage and after marriage, maternity, husband and family support and hours spend for household activities.

Age
Age is defined as the period that a person has lived or a thing has existed. Age is the duration of life and it is an important determinant of female workforce participation. Humpert and Pfeifer (2013) explained that women's employment participation is less at their younger age and it continued until they reached their middle ages and it improves after they reached their middle ages. Women's age and their employment participation are closely associated. Table 6.1 shows the women's employment status at their different ages. The age group is categorized as $18-29,30-39,40-49$, and $50-59$. The selected samples are between the age group of 18 -and 59 . The minimum age is taken as 18 years and the maximum age of the respondents is 59 years.

## Table 6.1

Age wise Female Employment Status

| Age of the Respondent | Employed | Unemployed | Total |  |
| :--- | :---: | :---: | :---: | :---: |
| $18-29$ | $24(27.3)$ | $124(32.2)$ | $148(31.3)$ |  |
| $30-39$ | $42(47.7)$ | $188(48.8)$ | $230(48.6)$ |  |
| $40-49$ | $18(20.5)$ | $69(17.9)$ | $87(18.4)$ |  |
| $50-69$ | $4(4.5)$ | $4(1.0)$ | $8(1.7)$ |  |
| Total | $88(100.0)$ | $385(100.0)$ | $473(100.0)$ |  |
| Chi-Square Result | p-value : 0.110 |  |  |  |
|  | Inference: There is no significant association |  |  |  |

Source: Field Survey
From the table, the total sample of respondents is between the age group of 18-29 is 31.3 percent. And among them 27.3 percent are employed 32.2 percent are unemployed. The unemployed women from this age group are more than the employed women. Because all the previous literature states that women spend their younger ages on education, marriage, and taking care of the responsibilities of kids.

The percentage of employment participation among the younger age group is less than their middle ages. The total percentage of samples between the age group of 30and 39 is 48.6 percent. Out of this 47.7 percent are employed and 48.8 percent are unemployed. The majority of total samples are between this age group and the percentage of employed and unemployed between these groups is higher than in the other age groups. From the age group of 40-49 total percentage of respondents are 18.7 percent and out of this 20.5 percent are employed and 17.9 percent are unemployed. From this age group, the percentage of employed women is more than the percentage of unemployed women. The most probable reason behind this is that most women are entering the labour market at their middle ages than their younger ages. The total percentage of respondents from the age group of $50-59$ is only 1.7 percent. Because at the time data collection only found a few women in this age group is passed S.S.L.C (minimum qualification of education as considered). Out of these total respondents, 4.5 percent are employed and 1.0 percent are unemployed. The percentage of employed is more than the percentage of unemployed and when comparing the age group and employment percentage, the percentage of employed women to comparing unemployed women increases when the age increases.

The Chi-Square test is used to find the association between employment status and age group and the result of the test shows the ' P -value is more than 0.05 and there is no association between age and employment status. The most probable reason behind this is that in the youngest age group the percentage of unemployed women is more than the percentage of employed and in the middle ages the employed more than the unemployed but the percentage of employed and unemployed are almost equal. Because both of the selected districts show the highest educated women unemployment.

Table 6.2
Mean Age of Employed and Unemployed Women

| Age | Employment status | N | Mean | Std. <br> Deviation | t | $\begin{gathered} \mathrm{p}- \\ \text { value } \end{gathered}$ | Inference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employed | 88 | 34.46 | 6.55 | 1.3 | 0.194 | There is <br> no significant difference |
|  | Unemployed | 385 | 33.44 | 6.63 |  |  |  |

## Source: Field Survey

Table 6.2 shows the mean age and standard deviation of employed and unemployed women. The average mean age of employed women is 34.46 and unemployed women is 33.44 . There are only the slightest differences in the mean age of both categories and the standard deviation of employed women is 6.55 and unemployed women are 6.63. Almost equal mean and standard deviation of both groups and the ' p -value is 0.194 and the result is there is no significant difference between the two groups of women and their ages. The most probable reason behind this is that in our study area most of the samples are below the age of forty's. During the data collection identified in this study area, the women aged above forty's are not qualified for SSLC. Their education status is below this and it is one of the reasons behind the lack of association between age and women's workforce participation in our study areas.

## Marital Status

Marital status can be defined as one's situation whether one is single, married, separated, or widowed. Klaauw(1996) states that there is a close relationship between women's employment and their marital status. Marriage can reduce women's earnings and participation in the labour market and females' entry into the labour market is closely related to their husband's earnings. And he found that a husband's wage effect on wife's labour supply. Table 6.4 shows the female's employment status and their marital status. The marital status of the employed and unemployed women can be categorized into single women, married women, divorced or separated women, and widows.

Table 6.3
Marital Status and Female employment Status

| Marital status | Employed | Unemployed | Total |
| :--- | :---: | :---: | :---: |
| Single | $9(33.3)$ | $18(66.7)$ | $27(100.0)$ |
| Married | $72(17.4)$ | $341(82.6)$ | $413(100.0)$ |
| Divorced/Separated | $6(23.1)$ | $20(76.9)$ | $26(100.0)$ |
| Widow | $1(14.3)$ | $6(85.7)$ | $7(100.0)$ |
| Total | $88(18.6)$ | $385(81.4)$ | $473(100.0)$ |
| Chi-Square Result | p-value $: 0.022$ |  |  |
|  | Inference: There is |  |  |
| Source: Field Survificant association |  |  |  |

Table 6.3 shows the marital status of employed and unemployed women. The percentage of employed among single ( 33.3 percent) is more than the percent of married women (17.4\%). The unemployment among married women is higher than that number of single women ( $82.6 \%$ ). The unemployment among single women is 66.7 percent and the majority of them are students. The total percentage of employed among divorced or separated women is 23.1 percent and the percent of unemployed women is 76.9 percent. There are only total samples of widows are 7 and among them 14.3 percent are employed and 85.7 percent are unemployed.

The Chi-Square test is used to check the association between marital status and employment status of women. And the result shows there is a significant association between marital status and employment status. Most of the literature by Klaaw, (1996); Roy and Mukhergee (2013) find out the relationship between marital status and female workforce participation rates.

## Age at Marriage

Age at marriage is an important determinant of women's education and employment participation. Early marriage can negatively affect women's employment participation and formal education (Field and Ambrus 2008). Early marriage results in early motherhood which increases the women's work at home and it reduces their
productivity in the labour market (Wang and Wang 2017). But in our study area, there is no association between marriage age and female employment participation. Most of the employed and unemployed women were married before the age of their twenties. We can say that it was the most probable reason behind the lowest female participation in Malabar. As a result of social and cultural impacts, most females are married before reaching employment. Table 6.4 shows women's employment status and their age at marriage. Age at marriage is categorized as women those married below their 18 years, $18-20,20-22,22-24,24-26,26-28,28-30$, and above those who married in 30 .

## Table 6.4

Age at Marriage and Female Employment Status

| Age at Marriage | Employed | Unemployed | Total |
| :--- | :---: | :---: | :---: |
| Below 18 | $10(11.4)$ | $82(23.3)$ | $92(19.5)$ |
| $18-20$ | $27(30.7)$ | $193(50.1)$ | $220(46.5)$ |
| $21-23$ | $36(40.9)$ | $90(23.4)$ | $126(26.6)$ |
| $24-26$ | $15(17)$ | $19(4.9)$ | $34(7.2)$ |
| $27-29$ | $0(0)$ | $1(0.3)$ | $1(1.2)$ |
| Total | $88(100.0)$ | $385(100.0)$ | $473(100.0)$ |
| Chi-Square Result | p-value $: 0.110$ |  |  |
| Source: Field Survey | Inference: There is no significant association |  |  |

The above table analysed the age at marriage of employed and unemployed women. Out of the total samples, 19.5 percent of women are married below the age of 18 years. And out of the 11.4 percent of employed women are married at the age of below 18 and 23.3 percent of unemployed women are also married at the age of below 18. The number of unemployed is more than the number of employed. Of the total samples, 46.5 percent are married between the age group of $18-20$, and 50.1 percent are unemployed and 30.7 percent are employed. 26.6 percent of total women are married between the age group of 21-23 and among them 40.9 percent are employed and 23.4 percent are unemployed. The total percentage of employed is
more than the percentage of unemployed. Out of the total respondents 7.2 percent are employed between the age group of 24-26 and out of the 17 percent are employed and 4.9 percent are unemployed. From the total samples, only 1.2 percent are married at the age of 30 and out of them only 0.3 percent are employed and there is no unemployed woman.

By the analysis of cross-tabulation, it is evident that the majority of employed women are married at the age of 21 to 26 and the majority of unemployed women are married at the age of 18 to 20 . The Chi-square test is used to analyse the association between marriage age and employment status. The result of the test is that the p -value is more than 0.05 and there is no significant association between women's age of marriage and their employment status in this study area. Because the peculiarity of Malabar is more of the women are married at a lower age and the unemployment among females is very highest to comparing other parts of Kerala. In this study area, there is no association between employment status and female marriage age. The t-test is used to analyse the mean age of employed and unemployed women in these study areas and the result of the test is shown in the below table.

Table 6.5
Average Marriage age of Employed and Unemployed Women

| Married age | Employment <br> status | $\mathbf{N}$ | Mean | Std. <br> Deviation | $\mathbf{t}$ | p- <br> value | Inference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employed | 88 | 19.33 | 6.861 |  |  | There is no <br> significant |
|  | Unemployed | 385 | 18.69 | 4.492 | 0.408 | sifference <br> diflen |  |

Source: Field Survey

The above table shows the mean age at marriage, standard deviation, and employment status of women. The mean marriage age of employed women is 19.33 and the standard deviation is 6.86 . The mean age of unemployed women is 18.69 and the standard deviation is 4.49 and the result of the test is that there is no significant association between the mean age of employed and unemployed women.

The most probable reason behind this is that in our study, the impact of social norms and cultural characteristics the majority of females are married at an early age.

## Years spend on education before and after Marriage

When analyzing the age at marriage, it is very important to analyse the years spend on education before and after marriage and women's employment status. Years spend on education before and after marriage means the period women spend on education before they married and sometimes or some women also got an opportunity to study after marriage. These two are important factors to determine female entry into the labour market. Tables 6.6 and 6.7 are shows the years spend on education before and after marriage and the employment status of women also. The minimum years of schooling are taken as the $10^{\text {th }}$ standard and the maximum is for those who studied 19 years and above before their marriage.

Table 6.6
Female Employment Status and years spend on Education before Marriage

| Years Spend for Education Before |
| :--- | :---: | :---: | :---: |
| Marriage. |$\quad$ Employed Unemployed $\quad$ Total

Source: Field Survey
The table shows the years spend on education before marriage and the employment status of women. From this table, 44 percent of total respondents studied before their marriage is only $10^{\text {th }}$ to $12^{\text {th }}$ standard. And out of them the percent of employed is very few only 9.1 percent and the majority 51.9 percent are unemployed. Out of the total samples, 28.5 percent are spending 13 to 15 years on their education before
marriage and out of the 34.1 percent are employed and 27.3 percent are unemployed. And among the total respondents 26.6 percent are studied 16-18 years before their marriage and out of the 56.8 percent are employed and 19.7 percent are unemployed. From this analysis, it is understood that the number of employed spend more years studying before their marriage and the unemployed women spend less period for study before their marriage. That means there is a positive association between years spends for study before marriage and women's employment status.

The chi-square is used to analyse the association between years spent on education before marriage and female employment status and the result of the test is that there is an association between years spent on education and female employment status. The $t$-test is used to analyse the mean difference in years spent on education by employed and unemployed women and the result of the test is the following.

Table 6.7
Mean years spend on the education of Employed and Unemployed Women

|  | Employment <br> Status | N | Mean | Std. <br> Yeviation of | LH | p- <br> value | Inference |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| schooling <br> before <br> marriage | Employed | 88 | 15.70 | 1.88 |  |  | There <br> Unemployed |
|  | 385 | 13.00 | 2.855 | 10.89 | $<0.001$ | exists a <br> significant <br> difference |  |

## Source: Field Survey

The average years of spend employed by women for their education before their marriage is 15.70 and the standard deviation are 1.88. The average year of unemployed women spend on their education before their marriage is 13 years and the standard deviation is 2.85 . The result shows that there is a significant difference in average years spent by employed and unemployed women on their education and employed women spend more years on their education than unemployed women.

Table 6.8 shows the years spent by employed and unemployed women on their education after their marriage. When analyzing the age at marriage the result shows that both employed and unemployed are married at lower ages and some of the
women also studied after their marriage and the below table shows the years spend on education by employed and unemployed women after their marriage. The Chisquare test is also used to analyse the association between the years spent by women on their education after marriage and their employment status. And further used ttest is to analyse the average years spent by employed and unemployed women on their education after their marriage and to find out the significant mean difference between them.

## Table 6.8

Years spend for education after marriage and Employment Status

| Years spend for education <br> after marriage | Employed | Unemployed | Total |
| :--- | :---: | :---: | :---: |
| Nil | $54(61.4)$ | $282(73.2)$ | $336(71.0)$ |
| $1-2$ | $20(22.7)$ | $78(20.3)$ | $98(20.7)$ |
| $3-4$ | $4(4.5)$ | $9(2.3)$ | $13(2.7)$ |
| 5 and above | $10(11.4)$ | $16(4.2)$ | $26(5.5)$ |
| Total | $88(100.0)$ | $385(100.0)$ | $473(100.0)$ |
| Chi-Square Result | p-value $: 0.022$ <br>  |  |  |
|  | Inference: There exists significant association |  |  |

Source: Field Survey
The above table shows the years of spending on education after the marriage and employment status of women. From total samples, 71 percent of respondents are not studied after their marriage, and out of the 61.4 percent are employed and 73.2 percent are unemployed. Of the total respondents, 20.7 percent are studied one to two years after their marriage, and out of the 22.7 percent are employed and 20.3 percent are unemployed. The 2.7 percent of total respondents are studied three to four years after their marriage and out of the 4.5 percent are employed and 2.3 percent are unemployed. The total percentage of respondents studied 5 and more than 5 years after their marriage is 5.5 percent and among them 11.4 percent are employed and 4.2 percent are unemployed. That means the period spend on education after and before marriage can influence women's employment participation and the employed women spend more period on their education. The
result of the Chi-Square test is 0.022 and it is less than 0.05 and there is an association between female employment status and the years spent on education after their marriage.

Table 6.9
Average years spend on
Education after Marriage by Employed and Unemployed Women

|  | Employment <br> status | $\mathbf{N}$ | Mean | Std. <br> Deviation | $\mathbf{t}$ | p- <br> value | Inference |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Years of <br> schooling <br> after | Employed | 88 | 9.625 | 28.44891 |  |  | There is |
| marriage |  |  |  |  |  |  |  | Unemployed 1385

Source: Field Survey

Table 6.9 shows the mean differences in years spent on education after marriage between employed and unemployed women. The mean of employed women is 9.62 and the standard deviation is 28.44 . The mean of years of education by unemployed women is 4.47 and the standard deviation is 19.72 . The result of the test shows that there are no significant differences between the years of schooling after marriage and employment status among unemployed and employed women.

## Number of Children

Marriage brings down women's labour force participation rate and having kids brings it down further (ILO 2020 March). The presence of children keeps women from entering the labour market and the number of children is also determined by female economic participation. Table 6.10 shows the female employment status and number of children

## Table 6.10

Number of children and Employment Status

| Number of <br> children | Employed | Unemployed | Total |
| :--- | :---: | :---: | :---: |
| Nil and (NA) | $16(18.2)$ | $49(12.7)$ | $65(13.7)$ |
| 1 | $27(30.7)$ | $89(23.1)$ | $116(25.5)$ |
| 2 | $31(35.2)$ | $166(43.1)$ | $197(41.6)$ |
| 3 | $13(14.8)$ | $67(17.4)$ | $80(16.9)$ |
| 4 | $1(1.1)$ | $12(3.1)$ | $13(2.7)$ |
| 5 and above | $0(0)$ | $2(0.5)$ | $2(0.4)$ |
| Total | $88(100.0)$ | $385(100.0)$ | $473(100.0)$ |
| Chi-Square | p-value 0.042 |  |  |
| Result | There exists significant association |  |  |

Source: Field Survey

From table 6.10 out of the total samples, 13.7 percent of women have no children (out of the 27 women are single or unmarried). The 18.2 percent are employed and 12.7 percent are unemployed. The total sample of 25.5 percent have only one child and out of the 30.7 percent are employed and 23.1 percent are unemployed. Out of the total samples, 41.6 percent have two children and out of 35.2 percent are employed and 43.1 percent are unemployed. Of the total samples, 16.9 percent of women have three children and out of the 14.8 percent are employed and 17.4 percent are unemployed. Out of the total samples, 2.7 percent have four children more than five and out of them, there is no one employed.

The analysis shows that the majority of employed women are having children two or less two but in the case of unemployed women majority of women have children two or three or more three. The chi-square checked the association between the number of children and female employment status and the result of the test shows that there is a significant association between the number of children and female employment status. Troske and Voicu (2009) also identified from their study those women with high education qualifications work more before the birth of their first child. But children have larger shows a negative effect on their labour market
involvement. The same idea is also pointed out by Mincer, (1962); Becker, (1965); Willis, (1973). Thus the number of children is the most important determinant of women's entry into the labour market.

## Parent's Education

Parent's education can positively affect children's education and career because parents' education results in positive parenting and they always prefer their children's good future. Tables 6.1 .0 and 6.1 .1 show the association between women's employment status and their parent's education. Table 6.1 .0 shows the mother's educational qualification and the female employment status and table 6.1.1 show the father's education qualification and female employment status.

Table 6.11
Distribution of Employment Status of Women and their Mother's Education

| Mother <br> Education | Employed | Unemployed | Total |
| :--- | :---: | :---: | :---: |
| Primary and <br> below | $21(23.9)$ | $123(31.9)$ | $144(30.4)$ |
| UP | $40(45.5)$ | $183(17.5)$ | $223(47.1)$ |
| Secondary | $17(19.3)$ | $69(17.9)$ | $86(18.2)$ |
| Senior <br> secondary | $8(9.1)$ | $6(1.6)$ | $14(3.0)$ |
| Graduation and <br> above | $2(2.3)$ | $4(1.0)$ | $6(1.3)$ |
| Total | $88(100.0)$ | $385(100.0)$ | $473(100.0)$ |

Chi-Square Chi-square value : 16.270 (p-value 0.003)
Result There is significant association
Source: Field Survey
A mother's education status can influence their daughter's education and employment. From this table, 30.4 percent of women answered that their mothers have only primary education or are under the category of nil (not studied at all). The 23.9 percent are employed and 31.9 percent are unemployed. The unemployed is more than the employed. Out of the total respondents, 47.1 percent of women
replied that their mothers had completed upper primary education and out of the 45.5 percent are employed and 17.5 percent are unemployed. Out of the total samples, 18.2 percent of females answered that their mothers have secondary education, and the majority are employed (19.3 percent) and 17.9 percent are unemployed. Out of the total respondents, 3 percent of women answered that their mothers had completed senior secondary education and among them 9.1 percent are employed and 6.1 percent are unemployed. Out of the total women, 1.3 females replied that their mothers have graduated or above graduation. And among them 2.3 percent are employed and 1.3 percent are unemployed.

The analysis shows that the mother's education and daughter's employment are related and the majority of employed women replied that their mothers also have good educational qualifications compared to the education status of mothers of unemployed women. The Chi-Square test is used to check the association between a mother's education and the daughter's employment status. The result of the test shows that there is a significant association between mothers' education qualifications and their daughter's employment status ( p -value is less than 0.05 ).

## Table 6.12

Distribution of Female Employment Status based on their Father's Education

| Father education | Employed | Unemployed | Total |
| :--- | :---: | :---: | :---: |
| Primary and below | $19(21.6)$ | $112(29.1)$ | $131(27.7)$ |
| UP | $35(39.8)$ | $195(50.6)$ | $230(48.6)$ |
| Secondary | $19(21.6)$ | $67(17.4)$ | $86(18.2)$ |
| Senior secondary | $8(9.1)$ | $7(1.8)$ | $15(3.2)$ |
| Graduation and <br> above | $7(0.8)$ | $4(1.0)$ | $11(2.3)$ |
| Total | $88(100.0)$ | $385(100.0)$ | $473(100.0)$ |

Chi-Square Result Chi-square value : 30.565 (p-value 0.001 )
There is significant association
Source: Field Survey

The table shows fathers' education qualifications and the employment status of their daughters. Out of the total samples, 27.7 percent replied that their fathers have only primary education or below primary education. And among them 29.1 percent are employed and 21.6 percent are unemployed. Out of the total samples, 48.6 women answers that their fathers have upper primary education. And out of the 50.6 percent are unemployed and 39.8 percent are employed. Out of the total samples, 18.2 percent answered that their fathers have secondary education out of the 17.4 percent are unemployed and 21.6 percent are employed. From the samples, 3.2 percent of women answered that their fathers are completed senior secondary education and among them more percent are employed ( 0.8 ) and 1.8 percent are unemployed. Of the total samples of 2.3 percent, their fathers are graduated or above it and among them 0.8 percent are employed and 1.0 percent are unemployed.

From the table, it is clear that there is an association between women's employment status and their father's education. Most of the employed women replied that their fathers also have a good education and it influences their employment and education. The Chi-Square test is used to analyse the association between a father's education qualification and the daughter's employment status. The result of the test is that there exists a significant association between a father's education and the daughter's employment status the p-value is 0.001 and it is less than 0.05 .

## Parents Occupation

Parents' employment also determines their daughter's education and employment status. In most cases, children's careers can influence their parent's occupation status and some children followed their parent's occupations. Tables 6.13 and 6.14 show the parent's occupation and their daughter's employment status. Table 6.13 shows the mother's occupation status and their daughter's employment status and table 6.14 shows the father's occupation status and their daughter's occupation status.

Table 6.13
Female Employment Status and Mother Occupation

| Mother <br> Occupation | Employed | Unemployed | Total |
| :--- | :---: | :---: | :---: |
| Nil | $76(86.4)$ | $342(88.8)$ | $418(88.4)$ |
| Coolie | $5(5.7)$ | $18(4.7)$ | $23(4.9)$ |
| Pvt. sector | $0(0.0)$ | $10(2.6)$ | $10(2.1)$ |
| Govt. Sector | $7(8.0)$ | $5(3.9)$ | $22(4.7)$ |
| Total | $88(100.0)$ | $385(100.0)$ | $473(100.0)$ |
| Chi-Square Result | Chi-square value $: 5.021$ (p-value 0.170$)$ <br> There is no significant association |  |  |
|  |  |  |  |

Source: Field Survey

Table 6.13 is cross-tabulated mothers' occupation and employment status of the total respondents. From the total samples, 88.4 percent of women's mothers do have not any occupation, they are housewives. Out of the, 88.8 percent are employed and 86.4 percent are unemployed. Total samples of 4.9 percent samples mothers are coolie employees and among them 5.7 percent are employed and 14.7 percent are unemployed. Out of the total respondents, 2.1 percent of women's mothers are working in the private sector and among these are no employed women only 2.6 unemployed women. The 4.8 percent of respondent's mothers are Government Employees and among them 8 percent are employed and 3.9 percent are unemployed.

The chi-square test shows the association between the mother's occupation and the daughter's employment status. The result of the test shows that there is no significant association between a mother's occupation and the daughter's employment status. The main reason behind this is that almost 89 percent of respondent's answered that their mothers are housewives. And among them, both employed and unemployed are almost equal and they are at more than 85 percent.

Table 6.14
Female Employment Status and Father Occupation

| Father Occupation | Employed | Unemployed | Total |
| :--- | :---: | :---: | :---: |
| Nil | $7(8.0)$ | $3(0.8)$ | $10(2.1)$ |
| Coolie | $48(54.5)$ | $315(81.8)$ | $363(76.7)$ |
| Pvt. sector | $2(2.3)$ | $17(4.4)$ | $19(4.0)$ |
| Govt. Sector | $20(22.7)$ | $26(6.8)$ | $46(9.7)$ |
| Self-financing <br> sector | $9(10.2)$ | $20(5.2)$ | $29(6.1)$ |
| Self-employment | $2(2.3)$ | $4(1.0)$ | $6(1.3)$ |
| Total | $88(100.0)$ | $385(100.0)$ | $473(100.0)$ |
| Chi-Square Result | Chi-square value $: 47.816($ p-value 0.001$)$ <br> There is significant association |  |  |
|  |  |  |  |

Source: Field Survey

Table 6.14 shows the occupation status of fathers of employed and unemployed women. From the table, 2.1 percent of women's fathers do have not any job and out of them, both employed and unemployed women are 8.0 percent. Out of the total respondent 76.7 percent, women's fathers are coolie employees and out of 54.5 percent are employed and 81.8 percent are unemployed. The 4.0 percent of women's fathers are working in the private sector and among them 2.3 percent are employed and 4.4 percent are unemployed. A total of 9.7 respondents' fathers are Government employees and out of the 22.7 percent are employed and 6.8 percent are unemployed. A total of 6.1 percent of females fathers are worked in the selffinancing sector and out of the 10.2 percent are employed women and 5.2 percent are unemployed women.

The chi-square test is used to check the association between the father's occupation and their daughter's employment status and the result of the test is that there is a significant association between the father's occupation and their daughter's employment status.

## Husband Education and Occupation

Husband education and occupation is also a determinant of female entry into the labour market. Echstein and Kenneth (1989) examined the relationship between husbands' income and their wife's employment status. They found that young children and husband income substantially reduce the female labour force participation. Tables 6.15 and 6.16 are to analyse the association between husbands' education and employment and their wife's employment status.

Table 6.15
Female employment Status and Husband Education

| Husband <br> Education | Employed | Unemployed | Total |
| :--- | :---: | :---: | :---: |
| NA | $9(10.2)$ | $17(4.4)$ | $26(5.5)$ |
| Nil | $0(0.0)$ | $1(0.3)$ | $1(0.2)$ |
| Primary | $0(0.0)$ | $2(0.5)$ | $2(0.4)$ |
| UP | $0(0.0)$ | $4(1.0)$ | $4(0.8)$ |
| Secondary | $9(10.2)$ | $122(31.7)$ | $131(27.7)$ |
| Higher secondary | $12(13.6)$ | $91(23.6)$ | $103(21.8)$ |
| Graduation | $36(40.9)$ | $97(25.2)$ | $133(28.1)$ |
| PG and above | $22(25.0)$ | $51(13.2)$ | $73(15.4)$ |
| Total | $88(100.0)$ | $385(100.0)$ | $473(100.0)$ |
| Chi-Square Value | Chi-square value $: 13.218($ p-value 0.010$)$ |  |  |

Source: Field Survey

Table 6.15 explained employed and unemployed women and their husband's education status. By comparing the education qualifications of husbands among both the groups of employed and unemployed, in the case of employed women majority of their husbands which means 40.9 percent are graduates. But in the case of unemployed women, 31.7 percent (the highest percentage compared to other groups
of education) completed their secondary education. That means in the case of employed women majority of their husbands are from the group of graduation and above. That means out of the total employed women (88) more than 50 percent of their husbands are (58) qualified for graduation and above. But in the case of unemployed women highest of their husbands are from the group of secondary and higher secondary education. The Chi-Square test is used to analyse the association between a husband's education status and wives employment status and the result of the test shows that there is an association between the employment status of women and their husband's education.

## Table 6.16

Female Employment Status and Husband Occupation

| Husband <br> Occupation | Employed | Unemployed | Total |
| :--- | :---: | :---: | :---: |
| NA | $9(10.2)$ | $17(4.4)$ | $26(5.5)$ |
| Coolie | $7(8.0)$ | $101(26.2)$ | $108(22.8)$ |
| PVT. Sector | $16(18.2)$ | $65(16.9)$ | $81(17.1)$ |
| Govt. Sector | $14(15.9)$ | $32(8.3)$ | $46(9.7)$ |
| Self-financing <br> sector | $0(0.0)$ | $1(0.3)$ | $1(0.2)$ |
| Self-employment | $20(22.7)$ | $88(22.9)$ | $108(22.8)$ |
| Abroad | $22(25.0)$ | $81(21.0)$ | $103(21.8)$ |
| Total | $88(100.0)$ | $385(100.0)$ | $473(100.0)$ |
| Chi-Square Result | Chi-square value $: 19.950(p-$ value 0.003$)$ |  |  |
|  | There is significant association |  |  |
| Source: Field Survey |  |  |  |

From the tables 5.5 percent of respondents are unmarried or single; in their case, this variable is not applicable. Out of the total females, 22.8 percent of female husbands are collie employees and among them 8 percent are employed and 26.2 percent are unemployed. The 17.1 percent of females husbands are worked in the private sector and among them, 18.2 are employed women and 16.9 percent are unemployed women. The percentage of employed women is more than the percentage of unemployed women. From the total samples, 9.7 percent of women's husbands are Government employees and out of the 15.9 percent of women are employed and 8.3
percent of females are unemployed. Only 0.2 percent of women's husbands are worked in the self-financing sector and among them, there are no employed women. Total samples of 22.8 percent of females husbands are self-employed workers and out of the 22.7 percent are employed and 22.9 percent are unemployed. The total sample of 21.8 percent of women's husbands are worked in abroad and out of the 25 percent are employed and 21 percent are unemployed.

The chi-square test is used to analyse the association between women's employment status and their husband's occupation status and the result of the test shows that there exists an association between women's employment status and husbands' occupation status. Most of the employed women's husbands also have a good education and better employment.

## Maternity

Maternity can be defined as a period during pregnancy and shortly after childbirth. Maternity and childbirth can affect female employment and their working life. Many of the women quit their job because of maternity and childbirth. It increases their family time and it gives more stress to them because it is very difficult to manage both at the same time. Table 6.17 shows the female employment status and the role of maternity in their life.

Table 6.17

## Female Employment Status and Maternity

| Maternity | Employed | Unemployed | Total |
| :--- | :---: | :---: | :---: |
| No | $69(78.40)$ | $343(89.09)$ | $412(87.10)$ |
| Yes | $10(11.4)$ | $25(6.5)$ | $35(7.4)$ |
| NA | $9(10.2)$ | $17(4.41)$ | $26(5.5)$ |
| Total | $88(100.0)$ | $385(100.0)$ | $473(100.0)$ |
| Chi-Square Result | Chi-square value $: 15.424($ p-value 0.001$)$ |  |  |
|  | There is significant association |  |  |

Source: Field Survey
Table 6.1.7 shows the influence of maternity or pregnancy and the employment status of women. Of the total samples, 5.5 percent are in the group of not applicable.

Out of the total respondents, 87.10 answered that maternity or pregnancy does not affect their decision of employment, 89.09 percent of women are not worked before after their maternity period and 78.40 employed women also answered that maternity or pregnancy does not affect their employment. They are worked before and after their maternity period. Of the total respondents, 7.4 answered that pregnancy or maternity affected their employment status and out of the 6.5 percent of unemployed women are quit their job because of this reason and 11.4 percent of employed women also took a gap from their employment because of this reason and their start their job after a break because of pregnancy or maternity.

So there is an association between women's employment status and pregnancy or maternity. The result of the chi-square test also shows an association between female employment status and their maternity or pregnancy period.

## Husband and Family Support for Employment

In the Indian scenario, family played a very good role in deciding on female education and employment status. Our culture and norms insisted women take responsibility for domestic work and male members are working outside of the family. Family support for women needs to enter the job market and contribute financial stability of the family. Table 6.18 shows the family support for female employment.

Table 6.18
Family Support and Women Employment Status

| Family Support <br> Employment | Employed | Unemployed | Total |
| :--- | :--- | :--- | :--- |
| Always | $73(82.98)$ | $150(39.0)$ | $223(47.14)$ |
| Sometimes | $4(4.5)$ | $74(19.2)$ | $78(16.5)$ |
| Never | $2(2.3)$ | $144(37.4)$ | $146(30.9)$ |
| NA | $9(10.22)$ | $17(4.41)$ | $26(5.5)$ |
| Total | $88(100.0)$ | $385(100.0)$ | $473(100.0)$ |
| Chi-Square <br> Result | Chi-square value $: 71.760($ p-value 0.001$)$ <br> There is significant association |  |  |

Source: Field Survey

Table 6.18 shows the result of the husband and his family members' support for women's education and employment status. From the total samples, 47.14 women replied that their husband's family always supports their employment and education. Out of the 82.98 percent are employed and 39 percent are unemployed. The percentage of employed is more than the percentage of unemployed. Out of the total samples, they are not sure that their husband and family support their employment and they answered that sometimes may be supported. Among them 19.2 percent are employed and 4.4 percent are unemployed. The females of 30.9 percent replied that their husband and family never support their employment. Among them, 37.4 percent are unemployed because they never tried employment. After all, their husband and their family never support them. The 2.3 percent of employed women are also among them and they are employed against the decision of their husband and his family it also affected their family life and they have faced issues in their family.

The chi-square test is used to analyse the employment status and the husband's family support employment. The result of the test shows that there is a significant association between family support and female employment status.

## Hours spend on House Hold activities

Women spend more time on household activities and it limits their choice of participating in the labour market. In the case of employed women, their work inside and outside of the house makes a dual burden on them. Singh and Pattnaik (2020) explain that women's domestic work can keep them out of economic activities. Ferrant, Maria, and Nowacka (2014), women spend more time on unpaid domestic work than men. They spend an important part of their day meeting the expectations of their domestic and reproductive roles. The job outside the home makes an extra burden on them. Table 6.19 shows the time spent by employed and unemployed women on household activities.

Table 6.19
Hours of Working Time among Employed and Unemployed Women

| HRS of working time | Employed | Unemployed | Total |
| :--- | :---: | :---: | :---: |
| Less than 5 hrs. | $0(0.0)$ | $9(100.0)$ | $9(100.0)$ |
| $5-7$ | $1(0.9)$ | $108(99.1)$ | $109(100.0)$ |
| $8-10$ | $38(12.4)$ | $286(87.6)$ | $306(100.0)$ |
| $11-12$ | $44(100.0)$ | $0(0.00)$ | $44(100.0)$ |
| More than 12 hrs. | $5(100.0)$ | $0(0.00)$ | $5(100.0)$ |
| Total | $88(18.6)$ | $385(81.4)$ | $473(100.0)$ |
| Chi-Square Result | p-value $: 0.001$ |  |  |
|  | Inference $:$ There exists significant association |  |  |
| Source: Field Survey |  |  |  |

Table 6.19 explained the hours spent by employed and unemployed women on their domestic and outside work. Because in our society most of the domestic work is done by her selves. Most women spend almost half of their day on domestic work. The table analyses the hours spent by employed and unemployed women. When comparing the unemployed women, the employed women spend more time on work because they do domestic work plus the work outside the home together. That means most working women face the problem of dual responsibilities and it makes an extra burden on them. Most of the time, they struggle to handle both duties together.

The Chi-Square test is used to check the association between work time and employment status. The result of the test shows there is a significant association between employment status and hours of working time of the women.

Table 6.20
Average Working Time of Employed and Unemployed Women

| $\begin{array}{c}\text { HRS of } \\ \text { working } \\ \text { time }\end{array}$ | $\begin{array}{c}\text { Employment } \\ \text { status }\end{array}$ | N | Mean | $\begin{array}{c}\text { Std. } \\ \text { Deviation }\end{array}$ | p-value | Inference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employed | 88 | 11.022 | 1.5084 |  | $<0.001$ | \(\left.\begin{array}{c}There exist <br>

significant <br>
difference\end{array}\right]\).

Source: Field Survey

Table 6.20 shows the result of the $t$-test used to measure the average working time of employed and unemployed women. The average time for employed women in a day for their both duties (domestic and market work) is 11.022 and the unemployed women spend a day for their domestic activities is 7.56 . That shows the extra burden of employed women to handle both responsibilities. The unemployed women also contribute more time for domestic unpaid services and it cannot account for as paid employment. This shows the importance of women's work in both inside and outside work. The p -value of the test shows there is a significant difference between the average working time of employed and unemployed women.

### 6.4 Core Factors Determining Female Employments Status-Factor Analysis

Factor Analysis was applied to identify the most important factors that affect the female employment status. The nine most important variables are selected for factor analysis for the reduction of the most important variables from it. The most important selected variables are the educational qualifications of the respondents, education status, years spent on education before marriage, and years spent on education after marriage, mother education, father education, husband education, father occupation, and education loan.

## Test of Adequacy of Samples

The Kaiser-Meyer-Olkin (KMO) is the measure of sampling adequacy, which varies between 0 and 1 . The values closer to one are better and the value of 0.6 is the suggested minimum.

## KMO

Normally the range for KMO is $0<\mathrm{KMO}<1$. If $\mathrm{KMO}>0.5$, the sample is adequate. Here the value of KMO is 0.716 which indicates that the sample is adequate and the research may proceed with further analysis.

## Bartlett's Test of Sphericity

Taking a $95 \%$ level of significance, $\alpha=0.05$ the $P$-value (sig) of $0.000<0.05$, therefore the Factor Analysis is valid.
.Table 6.21

## Correlation Matrix

## Correlation Matrix

| Variables <br> Correlation | F1 | F2 | F3 | F4 | F5 | F6 | F7 | F8 | f9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| V1 | 1.000 | -.683 | .751 | .103 | .427 | .457 | .293 | .307 | .335 |
| V2 | -.683 | 1.000 | -.550 | -.037 | -.284 | -.308 | -.200 | -.214 | -.315 |
| V3 | .751 | -.550 | 1.000 | -.063 | .370 | .381 | .397 | .282 | .272 |
| V4 | .103 | -.037 | -.063 | 1.000 | .024 | .029 | -.683 | .014 | .165 |
| V5 | .427 | -.284 | .370 | .024 | 1.000 | .841 | .264 | .389 | .146 |
| V6 | .457 | -.308 | .381 | .029 | .841 | 1.000 | .272 | .438 | .167 |
| V7 | .293 | -.200 | .397 | -.683 | .264 | .272 | 1.000 | .191 | .005 |
| V8 | .307 | -.214 | .282 | .014 | .389 | .438 | .191 | 1.000 | .207 |
| V9 | .335 | -.315 | .272 | .165 | .146 | .167 | .005 | .207 | 1.000 |


|  | Factors |  | Variables |
| :--- | :--- | :---: | :--- |
| F1 | Education qualifications of <br> respondents | V1 | Education qualifications of <br> respondents |
| F2 | Education Status | V2 | Education Status |
| F3 | Years spend on education before <br> marriage | V3 | Years spend on education before <br> marriage |
| F4 | Years spend on education after <br> marriage | V4 | Years spend on education after <br> marriage |
| F5 | Mother education | V5 | Mother education |
| F6 | Father education | V6 | Father education |
| F7 | Husband education | V7 | Husband education |
| F8 | Father occupation | V8 | Father occupation |
| F9 | Education loan | V9 | Education loan |

Table 6.21 shows the correlation matrix and V1, V2, V3, V4, V5, V6, V7, V8, and V9 represent the variables F1, F2, F3, F4, F5, F6, F7, F8. And F9 are the factors (both are mentioning the table). When the data is appropriate for the factor analysis, it is possible to create a correlation matrix by calculating the correlations between each pair of variables. In this matrix, two groups of variables with high intercorrelations are represented. In SPSS the inter-correlation can be checked by using Bartlett's Test of Sphericity. After having obtained the correlation matrix only it is ensured the data is used for principle component analysis.
.Table 6.22
KMO Measure of Adequacy

| KMO and Bartlett's Test |  |  |
| :--- | :--- | :---: |
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | 716 |  |
| Bartlett's Test of Sphericity. | Approx. Chi-Square | 2070.336 |
|  | df | 36 |
|  | Sig. | .000 |

The Kaiser-Meyer-Olkin (KMO) and Bartlett's Test measure of sampling adequacy were used to examine the appropriateness of Factor Analysis. The approximate ChiSquare is 2070.336 with 36 degrees of freedom, which is significant at a 0.05 level of significance. The KMO statistic of 0.716 is also large (greater than 0.50 ). Hence Factor Analysis is considered an appropriate technique for the analysis

Table: 6.23

## Total Variance Explained

| Component | Initial Eigenvalues |  |  | Extraction Sums of Squared Loadings |  |  | Rotation Sums of Squared Loadings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | $\%$ of Variance | $\begin{gathered} \text { Cumulative } \\ \% \end{gathered}$ | Total | \% of Variance | $\begin{gathered} \text { Cumulative } \\ \% \end{gathered}$ | Total | \% of Variance | $\begin{gathered} \text { Cumulative } \\ \% \end{gathered}$ |
| 1 | 3.579 | 39.765 | 39.765 | 3.579 | 39.765 | 39.765 | 2.398 | 26.645 | 26.645 |
| 2 | 1.684 | 18.707 | 58.473 | 1.684 | 18.707 | 58.473 | 2.125 | 23.614 | 50.259 |
| 3 | 1.256 | 13.952 | 72.425 | 1.256 | 13.952 | 72.425 | 1.713 | 19.038 | 69.297 |
| 4 | . 811 | 9.010 | 81.435 | . 811 | 9.010 | 81.435 | 1.092 | 12.138 | 81.435 |
| 5 | . 649 | 7.206 | 88.641 |  |  |  |  |  |  |
| 6 | . 446 | 4.960 | 93.601 |  |  |  |  |  |  |
| 7 | . 237 | 2.630 | 96.230 |  |  |  |  |  |  |
| 8 | . 184 | 2.047 | 98.277 |  |  |  |  |  |  |
| 9 | . 155 | 1.723 | 100.000 |  |  |  |  |  |  |

$\qquad$

Figure 6.1

## Scree Plot Diagram



In multivariate analysis, a scree plot is a line of plot of the eigenvalues of factors or principal components in an analysis. Here the scree plot graph shows the eigenvalues against each factor.

## Identification of Core Factors

The correlation between the variables and extracted factors is tabulated in the rotated factor matrix. The factor column shows the rotated factors extracted from out of the total factors. And these are the most important factors related to the female employment status from the total variables.

Table: 6.24
Rotated Component Matrix

| Variables | Component |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ |
| Education qualification of respondent | .871 | .279 | .006 | .142 |
| Education status | -.832 | -.092 | .005 | -.142 |
| Years spend for education before marriage | .813 | .216 | .197 | .114 |
| Years spend for education after marriage | .081 | .073 | -.934 | .077 |
| Mother education | .243 | .895 | .030 | -.007 |
| Father education | .257 | .900 | .034 | .041 |
| Husband education | .259 | .194 | .878 | .016 |
| Father occupation | .023 | .581 | .119 | .555 |
| Education loan | .292 | -.021 | -.118 | .851 |
| Exacy |  |  |  |  |

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

The rotated component matrix identified the core factors that determined the female employment status. The first three variables such as education qualification of the respondent, education status, and years spent for education before marriage are core variables that determine the female employment status because their values are large and greater than 0.5 . The selected three core variables are only used for further analysis.

### 6.5 Major Determinants of Female Employment Status-Logistic Regression Model

From the result of factor analysis and chi-square, the most important variables are selected for logistic regression. The result of the test can be summarized in tables 6.2.3 and 6.2.4

Table: 6.25: Model-1 (Logit)

| Variables | Coefficient | Standard <br> error | Wald Chi- <br> square | P- <br> Value |
| :--- | :---: | :---: | :---: | :---: |
| Education loan | -.737 | .913 | .651 | .420 |
| Years spend for education <br> before marriage | -.224 | .203 | 1.214 | .270 |
| NO. of children | .022 | .342 | .004 | .950 |
| Caste | -1.236 | .697 | 3.149 | .076 |
| Education qualification of <br> respondent | -1.345 | .358 | 14.117 | .000 |
| Type of education | .360 | .439 | .674 | .412 |
| Marital status | -.797 | 1.307 | .372 | .542 |
| Husband education | -.375 | .300 | 1.564 | .211 |
| Husband and family help <br> education | -.072 | .025 | 8.338 | .004 |
| HRS spend for work | -2.594 | .402 | 41.592 | .000 |
| Monthly Income | -.232 | .272 | .725 | .394 |
| Constant | 39.805 | 6.572 | 36.689 | .000 |

Table: 6.26 Model 2 (Probit)

| Variables | Coefficient | Standard <br> error | Wald Chi- <br> square | P- <br> Value |
| :--- | :---: | :---: | :---: | :---: |
| (Intercept) | -17.877 | 2.9163 | 37.578 | .000 |
| NO. of children | -.042 | .1778 | .055 | .814 |
| Marital status | .340 | .6263 | .295 | .587 |
| Education qualification of <br> respondent | .428 | .1849 | 5.360 | .021 |
| Education status | -.667 | .3859 | 2.989 | .084 |
| Education loan | .028 | .4705 | .004 | .952 |
| Years of schooling before <br> marriage | .138 | .0945 | 2.143 | .143 |
| Caste | .694 | .3485 | 3.961 | .047 |
| Type of education | -.149 | .2359 | .400 | .527 |
| Husband education | .179 | .1527 | 1.372 | .241 |
| Husband and family help <br> education | .037 | .0117 | 10.055 | .002 |
| HRS spend for work | 1.229 | .1528 | 64.650 | .000 |
| Monthly Income | .188 | .1427 | 1.728 | .189 |

## Model Summery

Number of Observations: 473

R Square: 0.884

Hosmer and Lemeshow Test: sig. 0.000 (Chi-Square 152.372\& d.f $=8$ )

The goodness of fit of the model is verified by the Hosmer-Lemeshow test, the value of the Chi-square is 152.372 and the P -value is 0.000 and statistically significant. The value of R square also shows that the selected variables are valid for the logistic regression model.

Both of the tables show the result of the logistic regression model (logit and probit). There are no differences in the qualitative nature of results across the two models, and interpreting the result of the tables by only probit model in detail for the sake of shortness. The result of the test shows that there are four most important determinants of female employment status; they are education qualifications of the respondents, husband and his family support, hours of working time, and caste.

We find that there is a probability of employment increases as female education qualifications increase. The simple and meaningful interpretation of this result is that the highest female employment participation is from the group of women those who are highly educated. The highest unemployment is among the group with lower educational qualifications. There is also a relationship between female education status and their employment participation. The highest female labour force participation from the group of women professionally qualified than comparing to the group of non-professional groups. The analysis of the secondary data also proved that there is a positive relationship between female education qualifications and their labour force participation level. The highest participation is among the group of professionals than the non-professional groups ( $3^{\text {rd }}$ and $4^{\text {th }}$ chapter analysis). The existing literature Lahoti and Swaminathan, (2013); Sebastian and Navaneetham, (2012); Mitra and Singh, (2006); Kodoth and Eapen, (2005); Eapen, (2004); K.R Devi, (2002); Latha, (1993) also conclude that the relationship between female education qualifications and their labour force participation rates are positive and the
unemployment is highest among those who are from the group of lowest education qualifications. The study of Kodoth and Eapen (2006) found that the highest percent of girl students in Kerala chose non-professional education and it is also one of the reasons for the lowest female employment status in Kerala.

Husband and his family support are also the most important determinant of employment participation of married women. The highest participation is from those who received the support of the husband and their family in choosing employment. Most women are unemployed because they are faced with restrictions from their husbands and family to enter the labour market and choose the convenient job for them. The co-efficient of husband and his families support shows a 5 percent level of significance. Burke and Weir (1976) conducted a study among employed and unemployed wives and their husbands to measure their level of satisfaction. And they found that the wives of employed are more satisfied than the wives of unemployed but the husbands of employed women are less satisfied than the husbands of unemployed women. That means that the satisfaction level of husbands depends upon their wife's employment status and some of the husbands are disliked their wives enter to the labour market. Our study area also found that some females keep away from the labour market because of the restrictions of their husbands and families.

There is also a relationship between female employment participation and their hours of working time in a day. In most families, women do all the household works themselves. Caring for elderly members and children also makes their burden extra. Most of the time employed women worked more than the unemployed and it makes extra stress on them. They enjoyed fewer hours of leisure time and most of the time both the burden of domestic and outside work insisted to they withdraw from the labour market. This study area also identified some women who withdraw from their job after their marriage, delivery, and for caring elderly members. Abraham (2013) also found that the main reason for the declining female workforce participation is the increasing unpaid domestic activities and women spend more time on household activities, the dual duties made an extra burden to them. In the theory of Marriage

Gary Becker also explained that after marriage women took all the responsibilities of the families and childcare because they have extra efficiency for it. Beneria (1985) also found that in all societies women worked more than men and but she was considered unpaid housewife. Salaff (1990) conclude that the young women married typically entered with household work and the women with young children only enter the labour market with high salaries because they had difficulty doing both inside and outside work together.

The other determinant of female labour force participation is the caste of the respondent. In our samples highest participation is from the general category and the lowest participation is from SC/ST. The samples from SC/ST are also very low because the number of educated among is very less than comparing the other castes. The secondary data results show that the labour force participation of women from SC and ST categories is higher than to compare to others and many of them worked in casual labour. But the labour force participation among educated female is entirely different from this and all the previous literature conclude that participation from them is very low. Our results also show a similar conclusion to the previous studies.

### 6.6 Conclusion

This section analysed the various determinants and factors influencing female entry into the labour market. The identified determinants from the literature are the age of the respondents, parents and husband's education qualifications, parents and husband's occupation status, marital status, number of children, marriage age, years spend on education before and after marriage, maternity, husband and his family support and hours spend for household activities. The chi-square test is used to check the association between these variables and female employment status. The result of the test shows that the factors such as marital status, years spend on education before and after marriage, several children, mothers' education, fathers' education, husband's education, father's occupation, husband's occupation, maternity, husband and family support, and hours spend for household activities are significantly associated with female employment status. The result of the 't-test
shows that there are no differences between the mean age of employed and unemployed women in this study area. Analyzing the mean marriage age also shows that there is no significant difference between the mean marriage age of employed and unemployed women. Both are married at below 20 years. But analyzing the average years of schooling before and after marriage, the employed women spend more years for education before and after their marriage compared to the unemployed women. Another noticing thing is that the employed women spend more hours a day on domestic and household work. The $t$ value shows that there is a significant difference between mean hours of spending among employed and unemployed women. The unemployed women enjoyed more leisure time compared to employed women. Domestic work makes an extra burden on women and it also denies them to enter the labour market.

The factor analysis and logistic regression were also used to identify the major determinants of female employment. The result of the factor analysis shows that the core factors influencing female employment are the educational qualifications of the respondents, education status, and years of their schooling before marriage. The result of the logistic regression shows that the most important determinants of the female employment status of women are their education qualifications, husband and family support, their caste, and the hours of working time. When there is a positive relationship between the education qualifications of the respondents and employment status. Employment participation among professionally qualified women is a major determinant of their employment status. In this study area, the husband and his family support also played a significant role to determine female employment status. Both the works domestic and outside the home also compel women to quit their employment and it so a determinant of female employment status.

## Chapter VII

## FEMALE ATTITUDE TOWARDS EMPLOYMENT AND REASONS FOR UNEMPLOYMENT

## CONTENTS

7.1 Introduction
7.2 Employed Women: A General Analysis
7.3 Discussion on Unemployed Women
7.4 Reasons for Unemployment
7.5 Case Study
7.6 Conclusion

### 7.1 Introduction

Female employment and their empowerment also depend upon their attitudes and their family's attitudes toward their employment. Most of the parents are sending their daughters to higher education as their primary consideration for marriage not for employment. Society conditioned the girl's as their primary duty is to become good wives, mothers, and housekeepers. And most of the girls selected their education based on their parent's interest rather than their interests and after their marriage, their further studies and their career are the choices of their husbands and their own families rather than their own choices. Most of the cases female decisions especially the decision of married women have been based on their husband's and their family's choices and only a few women are showing the courage to express their interest to choose their careers against the interest of others. In most cases, husbands are allowed women to work outside the home only considering their contributions to the family's income not considering their interests and the working women except a few are work more than the hours of unemployed women because they handle both the work inside the home and outside the home together and it gives them a dual burden.

The chapter is tried to analyse both cases of employed and unemployed women and for this purpose, some additional questions are asked both employed and unemployed women from the study area. Mainly the questions asked to employed women about the type of their employment, education match to employment, their leisure time, and which factors they considered for looking for employment. The data are also taken from unemployed women to know the reasons for unemployment and to identify which type of unemployment existed among them.

### 7.2 Employed Women: A General Analysis

Here conduct a detailed analysis among the employed women based on some selected questions to identify their employment status, type of employment, and their education helps them to find employment, etc.

## Occupation of the respondents

The occupation of the respondents is categorized into four they are women working in the private sector, Government sector, self-financing sector, and also under the category of self-employment.

Table 7.1
Occupation wise Distribution of the Samples

| Occupation | Frequency | Percent | Cumulative <br> Percent |
| :--- | :---: | :---: | :---: |
| Private sector | 44 | 50.0 | 50.0 |
| GOVT. sector | 31 | 35.2 | 85.2 |
| Self-financing | 4 | 4.5 | 89.8 |
| Self- employment | 9 | 10.2 | 100.0 |
| Total | 88 | 100.0 |  |

Source: field survey
From the table, it is clear that half of the employed women (50\%) worked in the private sector. And 35.2 percent of women are worked in the Government sector and 4.5 percent worked in the self-financing sector. Only a few which means 10.2 percent are self-employed women. This is clear that most of the respondents in our study area worked in the private sector and only a few are in the self-financing sector. But women who worked in the private sector shared that, they only have a less salary and they are faced many problems like overwork, stress from managers, and lack of increment and other allowances. Some of them tried for better jobs and prepared for other competitive examinations. The self-employed women are also very less and they faced the problems like lack of investment, family support and competition from other large scale sectors, etc.

## Education helps them to find employment

When analyzing educated employment it is very important to analyse whether the educational qualifications of the respondents help them to find employment and how their education helps them to find employment.

Figure 7.1
Education helps to find Employment


Source: Field survey
Figure 7.1 explains that most of the respondents which mean almost 85 percent of the respondents are replied that their education qualifications help them to find employment and only 15 percent of the respondents answered that their education qualifications did not help them to find a job and their employment is not based on their qualifications. But the majority replied that educational qualifications help to find a suitable job and the labour market is highly competitive. It is very tough to find jobs for those who are no qualifications or experience.

## Job-based on qualifications

It is an important problem faced by the people especially the educated, most of the time they are not doing employment based on their qualifications, and under these circumstances majority are very depressed and are not satisfied with their present employment. This phenomenon is known as underemployment in economics and in this situation, the worker does not utilize his skill level or experiences due to his overqualification or over education. In Kerala, it is a serious issue and most of the people are unemployed due to the oversupply of educated youth. It is very familiar among women, and most of the time they are insisted to do such a type of job because of their circumstances.

Figure 7.2
Job based on qualification


Figure 7.2 shows the percentage of employed women who worked based on their qualifications and those who are not employed on the level of their qualifications. From the figure, 60 percent of women are worked based on their qualifications and 40 percent of women are worked not based on their qualifications. They are included under the category of underemployed persons. These 40 percents are also very depressed and dissatisfied; some of them tried better jobs or suitable jobs to their qualifications.

## The sector of the Job

The sectors employed by women are categorized into three primary, secondary, and tertiary sectors based on their type of employment.

Table 7.2
Sector wise Distribution of the Employment

| Sector | Frequency | Percentage |
| :--- | :---: | :---: |
| Primary | 4 | 4.5 |
| Secondary | 5 | 5.7 |
| Tertiary | 79 | 89.8 |
| Total | 88 | 100 |
| Source: Field Survey |  |  |

Table 7.2 shows the sectorial wise classifications of employed and unemployed women. From the table, it is evident that most of the respondents, 89.8 percent among them worked in the primary sector. Only a few of them which means 4.5 percent are worked in the secondary sector and 5.7 percent were worked in the tertiary sector. That means most of the women are working and give preference to the service sector over the other sectors in our scenario, there are no sufficient vacancies in the service sector and this is one of the most probable reasons for unemployment. The data is also clearly evident that only a few of the women worked in the primary and secondary sectors. One of the most probable reasons behind this is also the backwardness of these two sectors in our state. But all kinds of literature point out that during the time of eighties and nineties, both the primary and industrial sectors in Kerala is very active and these two are the major contributors to its state income. During that period many women especially the rural women worked in these two sectors in the cottage and small-scale industries. But as a result of the migration family income improved and poverty was reduced as result there was witnessed a disappearance of these sectors from the Kerala economy (Prakash, 1998)

## Factors considering for employment

There are factors considered by women to choose employment such as convenient of traveling, financial benefit, type of work, working time, leisure and holidays and others like the safety of the job, freedom from employers and ease to work, etc. the following table shows the factors considered by the employed women by choosing a job.

Table 7.3
Major Factors considering female Employment

| Factors | Frequency | Percent |
| :--- | :---: | :---: |
| Convenient to travel | 10 | 11.36 |
| Financial benefit | 30 | 34.09 |
| Type of work | 28 | 31.81 |
| Working time | 9 | 10.22 |
| Leisure and holidays | 5 | 5.7 |
| Others | 6 | 6.82 |
| Total | 88 | 100 |

Source: Field Survey

From the above table, it is evident that most females are looking for a salary and type of job by choosing employment. Few of them were 11.36 percent looking for convenience to travel and 10.22 percent also looking for working time. The most probable reason behind this is that comparing the male workers the female workers are faced with the problem of low mobility and also most of them are not willing to take the night duties because of their circumstances. Only a few are looking for leisure time and holidays for choosing employment. ILO (2021) reported that a women's preference is one of the key factors in determining whether she will seek out and engage in paid employment.

## Leisure Time

Working women also play multiple roles like child-rearing, parents, teachers, caretakers of the elderly family members, and they also do the household activities like cleaning, cocking, washing, etc. which gives much stress on them especially the employed women with young children.

Figure 7.3
Leisure Time


Figure 7.3 shows the dual responsibility of the employed women and 70 percent of them replied that they have not got any leisure time after domestic and outside work and which gives them much stress and also affected their psychological condition and they are only spending 5 hours or less than five hours for sleeping at a day. Only

30 percent of women replied that they got leisure time and getting enough time for other extra activities. Bisen and Bisen (2019) analysed the dual role of working women and they found that the dual role of working women caused health issues among them and at the same time it affects their working capacity and poor job performance. Lack of leisure and work creates physical and mental pressure on the working women. But our study also found that in our study area the working women are not getting enough time for leisure and personal time. It also caused the problem of overstress, family issues, mental and physical problems, etc. among them, and poor performance in their jobs places also.

## Family and husbands help with household activities

Most of the employed women in our society face the problem of dual responsibility, and always they are doing both the work individually. Only a few of them got help from their husband or family members for household work.

Figure 7.4
Family Support


Figure 7.4 clear that only 39 percent of women received support from husbands or other family members to do household activities. More than 60 percent of employed women do all the household activities independently and it gives an extra burden on
them and also affected their psychological and physical health. Singh and Pattnaik (2020) analysed the unpaid domestic work in India and they found that the unpaid domestic work keeps women away from paid employment, and the women with lower qualifications engaged more time in unpaid domestic work. In India, women are insisted to engage in unpaid domestic activities because of the three factors such as social and religious systems prevailing in the state, lack of choices or failure of the labour market, and the low opportunity cost of unpaid work in the market. Thus the women handled all the domestic work and they believed themselves as it is their main responsibility to take all the family responsibility. In this situation, the employed women always worked more hours than the unemployed women and it caused an extra burden and stress on them. Sometimes it insisted on they quit their employment and become a full-time homemaker.

## Age Started Employment

Age is the most important determinant of female employment and it is very important to analyse at which age they enter the labour market and to find out the average age of starting employment. Most of the existing kinds of literature are, such as Humpert and Pfeifer, (2013); Winkler, (2016); ILO, (2010), etc. found that age is the one most important determinant of females' entry into the labour market and their studies point out the highest entry of women to the labour market at their younger ages and also after their middle ages. The following table shows the females' entry age into the labour market in our study area.

Table 7.4
Women age at start Employment

| Age | Frequency | Percent |
| :--- | :---: | :---: |
| $20-22$ | 5 | 5.7 |
| $23-25$ | 28 | 31.8 |
| $26-28$ | 40 | 45.5 |
| $29-30$ | 14 | 15.9 |
| 30 and above | 1 | 1.1 |
| Total | 88 | 100.0 |

Source: Field Survey

From the table, it is clear that most of the employed women are started their career after the age of 25 ( 40 percent). The 31.8 percent among them also started employment between the age of 23 to 25 and the 15.9 percent started their employment at the age of 29 to 30 . It is clear that in our study area women who have the aged less than 25 spend on education and they enter the labour market only after completing their education. The other factor is also noticed from our field survey that the most of the females in our area are married between the ages of 18 to 25 . Marriage, pregnancy, and childbirth also influenced the women's decided to enter the labour market. Many of the women from the employed groups entered the labour market after their marriage and maternity period. From my field survey, I noticed that women spend their younger age on education and marriage. Economic participation is their least preference. Their parents also believed that education and marriage are the most preferred option and employment is their least prefences.

Table: 7.5

## Mean Age Started Employment, Average Days of Employed and Average Number of Holidays

| Descriptive Statistics |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | N | Minimum | Maximum | Mean | Std. Deviation |
| Age Start <br> Employment | 88 | 20.00 | 33.00 | 26.0909 | 2.54448 |
| Days Employed | 88 | 20.00 | 30.00 | 25.9091 | 3.00052 |
| Holidays | 88 | .00 | 10.00 | 4.1818 | 2.68904 |

Source: Field Survey

The descriptive statistics show the average age started employment for employed women is 26. (From the samples the minimum age for starting employment is 20 and the maximum is 33 ). In this study area, the women who entered the labour market after the age of thirty's are the very less (educated group. The average number of days employed by female employers in a month is 25 (the minimum number of days is 20 and the maximum is 30 days per month). The women working in the private sector are working more than 26 days a month with less salary. The number of average holidays they got in a month is 4 (the minimum is 0 and the maximum is 10 ). Some of them only got less than four days in a month as holidays.

Another thing is noticing that some women also work their holidays for extra income especially women from backward families. But in the government sector, women got more holidays than in the private sector and they also enjoyed some extra freedom compared to those who worked in the private sector.

### 7.3 Discussion on Unemployed Women

This section tries to make a detailed analysis of unemployed women and their attitudes towards employment-based on some additional questions asked among them such as their interest in employment, how many of them searched for new jobs, how many of them try to competitive examinations, how many of them wish to work in future etc. these type of questions helps to identify their attitudes towards employment and the main reasons of unemployment.

## Percentage of Women's tries to Competitive Examinations

This section analyses the percentage of women who try any competitive examinations and the percentage of women qualified or waiting for any jobs. In our scenario, most of the women were completed their higher education and always searching for better employment (white-collar jobs). The various pieces of literature studied and identified that in Kerala, students are always choosing the conventional type of education (Arts and Science colleges) and always trying for the job in the public sector. Thousands of young's are anticipating and trying for such a whitecollar job in the public sector and there is a lack of sufficient opportunities there as the main cause of the highest unemployment in Kerala. In this section, the researcher tried to analyse such a type of unemployment.

Table 7.6
Distribution of Samples Participating Competitive Examination

| Samples | Frequency | Percent |
| :--- | :---: | :---: |
| Always | 119 | 30.9 |
| Some times | 162 | 42.1 |
| Never | 104 | 27.0 |
| Total | 385 | 100.0 |

Source: Field Survey

From the table, 30.9 percent of unemployed women replied that they are always trying competitive examinations such as PSC, Bank tests, etc. and 42.1 percent replied that they are sometimes trying this type of examination. This gives a complete picture of their attitude towards white-collar jobs. From the data, it is clear that in our study area more than fifty percent of unemployed women are trying for a job in the public sector and they also anticipated such a type of employment. The other factor noticed that some of them were never ready to do work in private or other self-financing sectors. They only wish to work in the public sector and otherwise, they are ready to become unemployed. The other 27 percent replied that they are never trying to any examinations and they are never written any competitive examinations. These groups are not interested to enter the labour market because of their personal choices.

Figure 7.8
Qualified Competitive Examinations


Source: Field Survey
Figure 7.8 shows the percentage of women qualified for competitive examinations and waiting for their appointment and the percentage of those who are not qualified. From the figure, 5 percent of women replied they are qualified for competitive examination (Kerala PSC list) and them waiting for their appointment letter. Their unemployment is only temporary nature and we can expect that they enter the job
market in the coming years. But 95 percent do not have any expectations and some of them always trying for better employment and some of them are never ready enter to the job market.

Figure: 7.9
Registerd Employment Exchange


Source: Field Survey
Figure 7.9 explained the percentages of women who registered their qualifications in their employment exchange. Out of the total unemployed women, 72 percent replied that they are not registered in employment exchange or they are never trying to renew their employment card. The majority of among were not known about its importance and some of them only registered their basic qualifications (S.S.LC). And not registered their further qualifications. There are only 28 percent are registered in employment exchanges and renew their employment registration card. Some of them also got temporary employment from employment exchanges during some particular periods.

## MGNREGA

Mahatma Gandi National Rural Employment Guarantee Act (2009) played a very significant role in the employment and empowerment of rural women. When
analyzing the women (educated) participation in MGNREGA, it is very less than their share of participation and only women with lower education qualifications (SSLC and Plus 2) participated in MGNREGA in our study area.

Figure 7.10

## MGNREGA



Source: Field Survey

Figure 7.10 shows the percentage of women who participated in MGNREGA programs and those who did not participate in MGNREGA programs. Of the total unemployed women, 85 percent have not participated in MGNREGA programs and only 15 percent participate in such programs. The most important reason for this is that the samples are from the group of educated and the majority of them preferred white-collar jobs. Of the participants, 15 percent of women are from financially backward families and also those who with lower educational qualifications.

Analyzing the educated unemployment it is important to analyse the unemployed women those who completed their education because from the group there are different types of women such as those who completed education before two or three years and who are search jobs and wish to work in future and other categories are those who completed education more than 10 or 20 years and they do not wish to enter the labour market anymore. The following table analyses the categories of women and also tries to analyse the average

Table 7.7
Years of Women Completed Education

| Years completed education | Frequency | Percent |
| :--- | :---: | :---: |
| $0-5$ | 75 | 19.5 |
| $5-10$ | 98 | 25.5 |
| $10-15$ | 60 | 15.6 |
| $15-20$ | 58 | 15.1 |
| $20-25$ | 56 | 14.5 |
| $25-30$ | 27 | 7.0 |
| $30-35$ | 10 | 2.6 |
| Above 35 | 1 | .3 |
| Total | 385 | 100.0 |

Source: Field Survey

Descriptive Statistics: Average Years Completed Education

| N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | :--- | :--- | :--- | :--- |
| 385 | .00 | 36.00 | 13.9065 | 8.49826 |

Table 7.7 analyses the years of completed education by the unemployed women and their mean year of completing their education. From the table, the highest percentage 25.5 percent of women are in the group of 5 to 10 years who completed their education. The second-highest percentage is 19 percent among the group of 0 to 5 years, the maximum from the groups is 36 years and the average year of completed education is almost 14 years. The women from the younger generation are anticipating employment participation in the coming years and some of them preparing for competitive examinations. The women having small children are expecting to enter the labour market their kids are starting their schooling.

From the field survey, it is identified that some of the unemployed women are worked before their marriage or maternity, or during pregnancy period and they quit their job due to these reasons. The following figure explained such types of women as those who quit their job because of marriage or pregnancy or maternity.

Figure: $\mathbf{7 . 1 1}$
Percentage of Unemployed They Quit Job


Source: Field Survey

From the figure, 21.6 percent of women answered that they quit their job because of the reason of marriage, pregnancy, or maternity. Some are employed before their marriage and after the marriage husbands and their families insisted on them quitting their old employment and some quit employment because of their interests. Some are employed before their pregnancy period and they quit employment because of pregnancy and childbirth. They are anticipating entering the labour market in the coming years. Some women told that they faced a lot of difficulties in handling both employment and household work and due to these reasons they decided to quit their employment. The responsibilities of small kids and elderly family members also are the reasons women quit their old employment. Some are shared lower salaries in the private sector and the workloads are the other reason they decided to quit their employment. The 78.4 percent answered they are unemployed because of other reasons.

By analyzing the unemployed women, it is also important to analyse the women who earn extra income by home tailoring, home tuition, and other related activities. From the total samples, some females make pocket money from doing such
activities and they are also satisfied with that income because such activities are given extra income to them and they also handled all household activities individually at the same time.

The following figure, 7.12 shows the women who earn money by doing tailoring, home tuition, and other economic activities from their homes. Out of the total samples, 60 percent of women replied that they are not doing any activities to earn income from their homes. But 8 percent of women worked from their home like tailoring, animal husbandry, and home tuition and also earn income and the other 23 percent of women replied that they sometimes earn income through these activities. But these activities are not accounted for as paid employment and they are considered under the group of unemployed.

Figure: 7.12

## Other Income Activities



Source: Field Survey
To examine the unemployed female's attitudes toward employment also need to analyse whether they are ready to do employment which means they wish to work in the future; they interested to do employment (work outside the home) and their reasons for unemployment. The following sections analysed women's attitudes
towards employment by conducting some detailed interview schedules among them. The below table shows the percentage of women who have searching for employment and those who are not searching for employment.

Table: 7.8
Search of Job

| Distribution | Frequency | Percent |
| :--- | :---: | :---: |
| Always | 143 | 37.1 |
| Sometimes | 43 | 11.2 |
| Never | 199 | 51.7 |
| Total | 385 | 100.0 |
| Soure Fild Sur |  |  |

Source: Field Survey
From table 7.8, 37.1 percent of women replied that they are searching for jobs always but cannot find a suitable job for them. That means they are ready to do employment but there are no suitable vacancies for them. The 11.2 percent of women replied that they searched for jobs sometimes not always. They are ready to do jobs, but they are not regularly searched for employment. But the majority means more than half of the percent of women replied that they never searched for a job. This measures the attitude of females towards employment. That means more than half of the women have never searched for any job but among them, some are ready to do employment. But 37.1 percent of women are seriously looking for suitable jobs to them but they are failed to find out suitable jobs. Lack of sufficient vacancies and anticipation of white-collar jobs are the major reasons for their unemployment. The other factor also identified from the field survey is the negative attitudes toward self-employment. The majority of the women are not interested in self-employment because they are not ready to take risks and uncertainty. The family also not supported women's self-employment or small entrepreneurship. Some of them shared that the lack of funds and investment are the other factors behind their lack of interest in self-employment. The field survey also noticed that majority of women have shared that there are no properties or owned land to them. Family properties are under the ownership of their husbands or other family members.

From their answer, a further question also asked them to know their interest in employment and to identify which type of unemployment is to be seen among the women in this study area.

Figure: 7.13
Interest towards Employment


Source: Field Survey

Figure 7.13 shows females' interest in paid employment, from the table 47.5 percent of females replied that they are always interested to do paid employment but some of them they do not know how they can find employment and how can they find employment based on their qualifications. Because of their lack of knowledge, they never search for employment but they are interested to do paid employment. The 13 percent of women responded that sometimes they are ready to do employment but they are not sure. Because of their circumstances (without the support of family they are not ready to do employment). But 39.5 percent of women answered that they are not interested in employment and they are not ready to participate in the labour market. This is a type of voluntary unemployment.

The further question also asked them if they are ready to do employment in the future because some of the respondents are having small kids and also some of them are pregnant or in their maternity period.

Figure: 7.14

## Work in future



Source: Field Survey

From the table, 43.1 percent of women replied that they wish to work in the future after their children are grown up or when their family supports them in employment. Some of them replied that their husbands are abroad and they are wishing to work there with their husbands when their children are starting school or after their maternity period. Of the total women, 17.4 percent are not sure if they are employed in the future. They are wished to work but they are not sure about their employment in the future. But the 39.5 percent of women are not ready to wish in the future. Because they never wish to do employment and they are the same group of women replied never interested to do employment.

### 7.4 Reasons for Unemployment

There are different reasons behind the lowest female employment participation and the most important factor to high unemployment among women is the attitudes of their families and society (Planning Commission of India 2002). Women's always doing many types of activities simultaneously like cocking, cleaning, washing, etc., and these responsibilities are always insisted upon by women in our society and keep them away from the labour market. The other factor is that it is very difficult
for to women find a job because they are less mobile and most of them looking many factors to choosing employment like conveniences of traveling, working time, nearest to their home town, etc. In the case of married, they also face restrictions from their husbands and their families to enter the labour market. There are other reasons like pregnancy, maternity, number of small kids, etc. also women are away from the labour market. This section analyses the reasons for unemployment among women in a detailed analysis.

Table 7.9
Major Reasons for Unemployment

| Reasons | Frequency | Percent |
| :--- | :---: | :---: |
| Family responsibility | 46 | 12 |
| Small Children | 40 | 10.3 |
| Pregnancy or Maternity | 28 | 7.2 |
| Restrictions from husband | 17 | 4.4 |
| Restrictions from family | 12 | 3.1 |
| Difficult to obtain job | 30 | 7.9 |
| Lack of Interest | 152 | 39.5 |
| Other Reasons | 60 | 15.6 |
| Total | 385 | 100 |

Source: Field Survey
From the above table, 12 percent of women replied that they are not entered to labour market due to the reasons of family responsibilities and they didn't get any time after household responsibilities. Other 7.2 percent keep away from the labour market because of pregnancy and maternity. They are wishing to join the labour market after their maternity period. The responsibility of small kids also keeps 10.3 percent of women away from the labour market. Restrictions from the husband and his family are also a reason to keep away from the labour market. 4.4 percent of women replied that they face restrictions from their husbands and another 3.1 percent said that they faced restrictions from the family of their husbands to enter the labour market. But 39.5 percent of women replied that they are not interested to
enter the labour market because of several reasons and some of them not said their actual reasons with the presence of their husbands and their family members. Most of the time women also face difficulties to obtain suitable jobs for them, 7.9 percent of women replied that they never find a suitable job for them. These are the major reasons for unemployment and the other 15.6 percent of women replied that the other reasons for unemployment like the inconvenience of traveling, responsibility of elderly family members, health issues, etc.

Figure: $\mathbf{7 . 1 5}$

## Reasons of Unemployment



Source: Field Survey

The above figure also mentions the major reasons for unemployment in the study area. The following sections try to explain some of the case studies identified from the selected region to show the women's attitudes towards employment, the situation that forces them to enter the labour market, and the reasons for unemployment.

### 7.5 Case Studies

The following are some of the case studies identified from the time of the field's survey:

## Case 1

Case study of a female from an economically backward family and she was compelled to take all the responsibilities of the family and work outside after her husband's accident.

A 35 years old woman from Kannur, she completed plus two and not studied further because she married at the age of 18 . She worked as cleaning staff in the nearest private hospital. She had two children the elder one studied in the seventh standard and the youngest one in the fifth standard. Before 3 years back she was a housewife and her husband took all the responsibilities of the family. But 5 years back he met an accident from his worksite and now he was completely bedridden. They struggled a lot and both of them are from economically backward families. In the initial stage, their neighbors and family members helped them, and finally, she decided to work. But she was only plus two and she didn't get a better job based on her qualifications. Finally, she got a job in the nearest hospital and she handles both the responsibility of domestic and economic work at the same time. She worked 6 days a week at the time of 9.00 am to 5.00 pm . It is very difficult for to her handle the household activities, take care of her husband, and do hospital duties at the same time. But her situation insisted to she enter the labour market and take both the responsibilities together and it makes an extra burden to her.

## Case 2

Case study of a woman who worked before her marriage and but after her marriage she compelled to quit the job due to her husband and his family does not like her work outside the home.

Another case identified from Malappuram Municipality is a 30 -year-old lady who worked as a nurse in a private hospital before her marriage. But after the marriage, she insisted to quit her job because her husband and family don't like to see worked in the hospital field (taking night duty). They were a very conservative family and now she became a full-time housewife and takes all the responsibilities for her children and family. She never is willing to work again because her family does not
allow her to do work outside the family. She is not a single example three women's also shared similar experiences and they also quit their job after their marriage.

## Case 3

A case study of a woman who entered the labour market after her divorce.

Another case also from Malappuram Municipality, a 45-year-old woman married at the age of 16 , and at the time of marriage, she just passed S.S.LC. She had two children both college students. Before 10 years back she separated from her husband and after her divorce, she worked as a sweeper in the nearest Bank. She was very smart and also studied plus two by higher secondary equivalency course. Now she was taking all the responsibility for the family and she can handle her family budget and the studies of her children. But sometimes she felt very hard to take all the responsibilities and she also faces all the difficulties of a single parent. Here the divorce and separation force to her take all the responsibilities and enter the job market.

## Case 4

A case study of a woman who withdraws from a high salaried job because of her pregnancy and maternity.

Another case identified from the rural area of Malappuram was a 29 years old lady, and who is engineering graduated and also completed a Diploma in engineering. She married at the age of 21 and she also continues her study after her marriage and two years she worked in the IT sector. But after her first pregnancy, she resigned from her job and decided to search and join another job after her maternity period. But due to the child's caring and domestic responsibility to the family, she didn't join further and after 1 year she was again pregnant and delivered her second kid. And now she was handling all the responsibility of the family and kids because her husband is working abroad and he has a good salary and he handles the financial needs of the family. Now she was very disappointed and depressed to think about her career. But she was helpless because she didn't get any free time to think about
herself and her in-laws are facing their old age sickness and she cannot able to search for a job and rejoin again.

## Case 5

A case study of a woman, she compelled to quit her job due to her husband migrated to Gulf.

It is a case study identified by Malappuram Punjayath, she was a 32 years old lady. She qualified for a Degree and B.Ed. also, she quit her job 8 years back due to her husband got a job in Dubai and migrated there. They have three children and after his migration all the responsibilities of family and children she handled herself. This situation insisted she quit her job, she worked as a teacher in the nearest private school and at that time also prepared for PSC and other competitive examinations. But now she became a full-time housewife and she told me that her husband has a good salary abroad and their family income and financial conditions improved before. They decided to settle in Dubai after a few years and she never looked for employment. But she wishes to work in the future but she is not sure about it.

These case studies are only a few examples explaining how the situations insisted women enter the labour market and also at the same time withdraw from the labour market.

### 7.6 Conclusion

This section summarized both the cases of employed and unemployed women and their perspectives on paid employment also. By analyzing the employed women it is found that most of them are worked in the private sector and the majority among them are replied that their educational qualifications are helped them to choose employment and they selected their job based on their qualifications. The tertiary sector played a very significant role in Kerala and it is the major employmentproviding sector in Kerala. In the study area also the majority of females are worked in the service sector. The analysis among the employed women also showed that most of them consider financial benefits and types of jobs that mean suitable jobs for
selecting their employment. The other facts are that employed women always worked more than the hours of unemployed women and most of them are overstressed because of their multiple responsibilities.

The analysis of educated unemployed groups shows that only a few of them were searching for jobs and most of them are not interested to do employment because of several reasons like pregnancy, maternity, responsibilities of small kids and elderly family members, etc. but a few among them were earn money from their home by choosing the extra income activities. The women actively participating in MGNREGA programs are also very less, only a few women from economically backward and above the age of 35 only participated in MGNREGA. This chapter also added some case studies of women narrating their stories and the reasons they quit their employment and chose the employment also.

## Chapter VIII

# FINDINGS, SUGGESTIONS, AND CONCLUSION 

## CONTENTS

8.1 Introduction
8.2 Major Findings of the Study
8.3 Conclusion
8.4 Suggestions and Recommendations
8.5 Indication of Future Research

### 8.1 Introduction

Women played a significant role in the economic growth and development of a nation. They are constituted half of the global population and their role cannot be neglected in the economy. In Kerala, the number of the female population is much higher than the male population. But their economic participation is less than half of the male participants. Kerala achieved a number one position in female education, enrolment, and literacy. But their economic participation especially the educated female participation in Kerala is very less. Almost 75 percent of the educated females are outside the labour market and when coming to the Malabar region, this difference is much higher than in the other parts of Kerala.

As a result of gulf migration Malabar changed geographically, culturally, socially, and economically. It improved the per capita income of this region and as a result there witnessed social change, especially in educational sectors. But it does not happen in female economic participation. Female labour participation is considered very less still today and the impact of cultural and social norms in the society of this region is one of the main causes of this lowest female economic participation. The number of studies denotes that as an impact of migration (after the 1980s) the poverty of this region is reduced, economic background and per capita income of the families improved. As a result number of females who worked as casual and manual labourers are withdrawn from the labour market. That means migration positively influenced all the fields like reduction of poverty, improved family income, consumption, education attainment, etc. But it has not improved the female's economic participation especially the educated female participation in this area is very less compared to other parts of Kerala. The study is carried out in two districts of Malabar, Malappuram, and Kannur. Both of these districts show the lowest educated female labour force participation (by analyzing both primary and secondary data).

This chapter summarizes the findings, suggestions, recommendatios and conclusions made by the researcher from the study of this region, and the findings are presented based on selected heads. The researcher also made suggestions to the Government,
societies, families, and the group of women themselves to uplift their employees and empower them through financial independence. The study is also given directions for future research.

### 8.2 Major Findings of the Study

The findings are based on the analysis of primary data collected from the group of educated females belonging to the age category of 18 to 60 . A well-structured interview schedule was prepared for the analysis and a detailed survey was conducted based on this schedule. The surveys are carried out in two districts Malappuram and Kannur (Malabar). The responses of the samples are examined and analysed using different statistical tools in the previous chapters. The major findings based on the analysis can be summarized in the following heads.

### 8.2.1 Female Employment Status among Different Socio-Economic Groups

The employment status among the educated females in different socio-economic groups can be analysed after studying the socio-economic background of employed and unemployed women. Major findings are the following:

- The numbers of unemployed women in both districts are much higher than the employed women. The total percent of employed women is only 18.6 , but the percent of unemployed women is 81.4 and which is much higher than the percent of employed women. There is no significant association between the female employment statuses in both districts. Both districts show the lowest female participation rates.
- The district-wise rural and urban comparison of female employment shows that the percentage of unemployment in both rural and urban are very high and there is no significant association between the rural and urban female unemployment rates.
- The study is only focused on two religious groups Hindus and Muslims, the religious-wise comparison shows that the percentage of female employment in the Hindu religion is higher than the Muslims. But there are only the
smallest differences and both the religious groups show the lowest female participation rates. There is no significant association between female employment status and religion in this study area.
- The caste-wise analysis of employed and unemployed women shows that the percent of employed among the general category is higher than by comparing OBC and $\mathrm{SC} / \mathrm{ST}$. The second highest female participation from the OBC category and SC/ST category showed the lowest female participation rates. There is a significant association between the female employment statuses among different castes.
- There exist an association between family income and female employment status. The average family income of employed women is much higher than that of unemployed women. The highest female employment participation is from the highest income group. And there is also a positive relationship between family income and female employment participation. The employed women also contribute to their family income and when income rises employment participation also rises.
- The average family consumption expenditure of employed and unemployed women is not much different and there is no association between the family expenditure and female employment status. Both the family of employed and unemployed women spends almost equally.
- Most of the respondents are from the APL category and only a small percent belong to the BPL category. And there are no significant associations between female employment participation among the APL and BPL category. But when we make a comparison, most of the employed females are from APL families.
- In this study area also most of the respondents have their own houses. And a small percentage of respondents are from rented houses. There is no association between house ownership and women's employment status.
- There is an association between female employment status and types of houses. Most of the employed respondents have double-floor houses.
- By analyzing the land ownership and female employment status, there is no significant association between land ownership and female employment status. Most of the respondents got land ownership by inheritance.
- There is an association between female employment status and the number of vehicles in their families. Most families of employed women have their own vehicles and among them, many of them have more than one vehicle (fourwheeler and two-wheelers).


### 8.2.2 Female Education and its Role in Employment

The role of education on employment status can be analysed based on a survey conducted among the group of females those who have S.S.L.C and above. The major findings of the study are the following:

- From the total samples, the highest numbers of females are from the group of Plus Two holders. The second-highest percent of unemployment (95.6) is also from the group of Plus Two holders. The first highest percentage of unemployed is from the group of S.S.L.C (97.9).
- The highest percentage of employed is from those who have Post-Graduation and above (44.9). The second-highest percentage of employed women is from the group technical or vocational group education (34).
- There is an association between education qualification and female employment status. The highest female participation is from those who have the higher qualifications and the lowest employment participation is from those who have the lowest qualifications.
- Analyzing the employment status and education status, the highest numbers of females are from having non-professional education. The unemployment level is also much higher than comparing the females from the group of
professional education. But the number of females who have professional education is very less. But the percentage of employment among the professional group (34.9) is much higher than the non-professional groups (11.2). There is an association between education status and employment status.
- By analyzing the mode of education and female employment status, there exist significant associations. The majority of the respondents have studied the government mode of education and only a few respondents are from other modes such as self-financing, private aided, private unaided, and others.
- There is also a significant association between education loans and female employment. Of those who are having taken education loans, most of them were employed. And also has a significant association between the government's financial assistance for education and female employment participation. The highest percentage of participation is from those who received financial assistance from the government.


### 8.2.2 Major Determinants and Factors of Female Labour Force Participation

- The majority of the employed women are within the age group of 30-39 $(47.7 \%)$. The highest number of unemployed is also from this age group (3039) and there is no significant association between the ages of the respondents and their employment status. The average age of the employed and unemployed women is also almost the same and there is no significant difference between the ages of employed and unemployed women.
- By analyzing the marital status, the highest percentage of employed women are from the group of single and divorced or separated. The highest percentage of unemployed women is the group of married and widows. There is also a significant association between marital status and female employment participation.
- When analyzing the age of marriage, most of the respondents in the study area married at the age of 18 to 20 . The highest percentage of employed women are married at the age of 21-23 and the highest percentage of unemployed are married at the age of 18-20. When calculating the mean marriage age, there is no significant difference between the average marriage age of employed and unemployed women.
- There is a significant difference between the mean years employed and unemployed women spend for education before their marriage. Most employed women spend more years on education before their marriage and there is an association between years spent on education and female employment participation.
- The women who studied after their marriage were also associated with their employment participation. The number of females studied after their marriage is only a small percent and their employment participation is much higher than comparing those who do not study after their marriage.
- When analyzing the number of children among both employed and unemployed women, there is an association between the number of children and female employment participation. Most of the employed women have only one or two or three children.
- Parents' education can be positively influenced female labour force participation and there is an association between parents' education and female labour force participation rates. The education qualifications of the parents of employed women are much higher than the educational qualifications of unemployed women.
- The occupation status of parents of respondents also played a significant role in female employment participation. But in this study area, most of the mothers of respondents had no occupation. There is no association between a mother's occupation and women's employment participation. But there exists
a positive association between fathers' occupation and women's labour force participation.
- A husband's education and his occupation can be positively associated with wives employment status. Most of the employed women's husbands are highly educated compared to the husbands of unemployed women. The husband's occupation status is also associated with the wives' employment participation.
- Maternity and pregnancy are also associated with female employment participation. Most of the employed women faced stress and mental pressure during their maternity stage. And some of them quit their employment because of pregnancy and maternity.
- The employed women have supporting husbands and family by comparing the unemployed women. The large numbers of unemployed are women who never get family or husbands' support for entering the labour markets or searching the suitable employment.
- The employed women always work more than the hours of unemployed women. There exist significant differences between the average working hours of employed and unemployed women. The average working hours of employed women are 11.022 and the average working hours of unemployed women are 7.56 . The unemployed women always faced the dual burden of domestic and outside work.
- Factor analysis is used to identify the core factors related to female employment participation. The selected nine variables such as education qualification of the respondents, education status, years spend on education before marriage, years of spending on education after marriage, mother education, father education, husband education, father occupation, and education loan. The result of the analysis shows that the education qualification of the respondents, education status, and years spend on
education before marriage are the core variables that determine educated female employment participation.
- Logistic regression was also used to identify the major determinants of female employment status by taking the most important ten variables identified from the factor analysis and the chi-square result. The result of the test shows there are four variables such as education qualifications, caste, husband and his family support, and hours of working time are the most important determinants of female employment status, and these factors are positively related to the female labour force participation levels.


### 8.2.3 Female Employment Status and Reasons for Unemployment

The reasons for unemployment are identified by conducting an additional interview schedule among the unemployed women in this study area.

- The study found that the majority of employed women worked in the service sector and 50 percent of them worked in the private sector.
- The majority of the employed women replied that their education helps them to find employment and most of them are worked based on their qualifications.
- The important factors considered for choosing employment are financial benefits ( 34.09 percent) and the nature of the job. Some of them considered the convenience of traveling and working time also to choose their employment.
- 70 percent of employees do not get any leisure time because of domestic and outside work. Because most of them were doing all the household activities individually and only 39 percent of employed women shared their domestic work with the help of their husband and their families.
- The study reveals that the majority of the employed women started their employment at the age of 23-26. The average age of employed women
who started their employment is the age of 26. By analyzing the average working days of employed women is 26 days per month and the average number of holidays is 4 days per month.
- By the analysis of unemployed women, it is evident that almost 30.9 percent of them were always trying different competitive examinations for employment. And 5 percent of them were qualified examinations and waiting for the further procedures of their appointment.
- Only a small percent were registered in employment exchange and a large percent of unemployed females were less aware of it.
- By analyzing the female participation of MGNREGA, only a small percent (15) participated in these programs and most of them were from economically backward families and their education qualifications also less comparing to those who are not participated in this scheme.
- The calculation of average years completed education reveals that the majority of the unemployed women had almost 14 years passed by completing their education.
- 21.6 percent of unemployed women have quit their employment because of marriage, pregnancy, and maternity. Only a small percent quit their old employment for searching better jobs. 8 percent of them earn income by working from home like tailoring, home tuition, animal husbandry, etc.
- The study also found that 47.5 percent of women are interested to do employment and they are searching for employment. But 39.5 percent of women are from them never interested to enter the labour market because of personal reasons.
- There are several reasons behind the lowest female labour force participation such as family responsibility, number of small children, pregnancy and maternity, lack of interest, restrictions from husband and
his family, etc. The females with small children or unemployed due to pregnancy and maternity replied that they are sometimes entering the labour market in the future. Some of the women were also interested to enter the labour market but they faced restrictions from their husbands and their family. The other problem is that many women faced it is very difficult to find a suitable job for them.


### 8.3 Conclusion

Educated female unemployment is one of the serious issues in Kerala more than half of the total female population are outside the labour market and the majority of them are with good academic records. The study is carried out in the Malabar area to identify the problem of disparities in education and employment among the female population. It also examined the various factors, determinants, and reasons behind the lowest female labour force participation rates. The sociocultural and economic characteristics of this region also influenced the female's decision to enter the labour market. The variables identified from the previous literature are analysed in this study area and concluded that the female decision to enter the labour market is related to several factors such as the socio-economic background of the family, husband's education and occupations, parents' education and occupations, marital status, maternity, etc. played a significant role of their decision regarding the entry of labour market.

The role of education and education status is significant and there is a positive tradeoff between their education qualifications and their employment status. Lack of professional and skilled education is also a cause of the lowest female workforce participation. Both the primary and secondary analysis of this study proved that there is high employment participation from the group of highly educated women and the participation is highest among professionally qualified women.

The social and cultural factors also influenced females' attitudes towards their preference for employment. In this study area, voluntary unemployment is more
than involuntary unemployment. Some of the women are never interested to participate in the labour market. Underemployment is also a serious issue among women and many of the women worked below their education qualifications. Women also faced a problem of lack of suitable opportunities in the labour market and it is also a reason for the highest unemployment rates among them.

### 8.4 Suggestions and Recommendations

Educated unemployment is a serious issue faced by the state of Kerala and it is very high among educated women. The suggestions and policy recommendations of the study are the following:

- Professional and skilled or vocational education among females helps to increase their economic participation and job opportunities. The government should promote such a type of education among them.
- Financial support for education and employment also increased their labour participation. The government should take much attention to increasing `educational financial support for female students and make it easy for the procedure of educational loans for them.
- Self-employment programs also bring female employment opportunities, to introduce more self-employment programs and schemes for women would improve their economic participation.
- To take much attention to the employment and education of SC/ST girls and women and introduce vocational and job-oriented education among them and give awareness to them about the importance of higher education and employment participation.
- Parents and society gave first preference to girls' education and employment and to make them financially independent before their marriage.
- The burden of domestic and outside work is also very common among employed women. The family should share the work among all members and
give more support to employed women. It reduces their stress and health issues and it also results to improve their work efficiency and attracting more women enter into the labour market.
- Early marriage, maternity, and pregnancy also caused lower female economic participation. Increasing marriage age and maternal support would improve their labour participation.
- The government should make attention to bringing more child care centers, daycares, and play schools. It helps to increase mothers' labour force participation.
- To conduct more awareness programs for the importance of women's employment and empowerment.


### 8.5 Indication of Future Research

The present study is only focused on educated labour force participation among the females and there is a scope of further study including the educated men labour force participation also. Because in Kerala both men's and women's unemployment rates are very high, especially among the group of educated. When taking both the male and female labour force, it is very helpful to identify the gender gap between male and female employment participation. There is also a further scope to study to analyse the gender discrimination faced by women in the labour markets and to discuss their problems by combining economics and gender perspectives. The state of Kerala is standing number one position in the case of female literacy, education, sex ratio, and all other social indicators. But still, women face lots of discrimination from the labour markets. The other thing is that the employed women also face too much stress and burden of unpaid domestic and paid outside work. There is also recommended a further study to analyse the dual responsibility and stress handled by the working women.

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## APPENDIX

## APPENDIX

## ST.JOSEPH'S COLLEGE (AUTONOMOUS) DEVGIRI, CALICUT <br> INTERVIEW SCHEDULE

DISPARITIES OF EDUCATION AND EMPLOYMENT AMONG WOMEN IN MALABAR

## SECTION 1

## General Information

## Employed Women

Details of the Region of the Respondent:
Schedule Number:

| 1. District | 1. Malappuram 2. Kannur |
| :--- | :--- |
| 2. Panchayath/ Municipality | 1. Malappuram Panchayath 2. Kannur Panchayath <br> 3. Malappuram Municipality 4. Kannur <br> Municipality |
| Locality |  |
| Ward |  |
| House Number |  |
| Head of the Family |  |

## Details of the Respondent

| Name : |  |  |  |
| :--- | :--- | :--- | :--- |
| 3. Religion | 1. Hindu 2. Muslim |  |  |
| 4. Caste | 1. General 2. OBC 3. SC | 4. ST | 5. Other |
| 5. Age |  |  |  |
| 6. Marital Status | 1. Single <br> 2. Married <br> 3. Divorced <br> 4. Widow |  |  |
| 7. Number of children |  |  |  |


| Parents education | 8. Mother | 9. Father |
| :---: | :---: | :---: |
|  | 1. Nil <br> 2. Primary <br> 3. Upper primary <br> 4. Secondary <br> 5. Senior secondary <br> 6. Graduation <br> 7. Post-graduation <br> 8. others | 1. Nil <br> 2. Primary <br> 3. Upper primary <br> 4. Secondary <br> 5. Senior secondary <br> 6. Graduation <br> 7. Post-graduation <br> 8. others |
| 10. Husband education qualification | 1. Nil <br> 2. Primary <br> 3. Upper primary <br> 4. Secondary <br> 5. Senior secondary <br> 6. Graduation <br> 7. Post-graduation <br> 8. others |  |
| Parents Occupation | 11. Mother <br> 1. Nil <br> 2. Coolie <br> 3. Pvt. Sector <br> 4. GOVT. sector <br> 5. Self-financing sector <br> 6. Self- employment <br> 7. Other <br> 8. Details | 12. Father Occupation <br> 1. Nil <br> 2. Coolie <br> 3. Pvt. Sector <br> 4. GOVT. sector <br> 5. Self-financing sector <br> 6. Selfemployment <br> 7. Other <br> 8. Details |
| 13. Husband occupation | 1. Coolie <br> 2. Pvt. Sector <br> 3. GOVT. sector <br> 4. Self-financing sector <br> 5. self-employment <br> 6. Abroad <br> 7. Details |  |
| 14. Employment status of the respondent | 1. Employed <br> 2. Unemployed |  |

## Details of education of the Respondent

| 15. Education qualification of the respondent | 1. SSLC <br> 2. Plus Two <br> 3. Graduation <br> 4. Post-graduation <br> 5. Technical or Vocational education <br> 6. other |
| :---: | :---: |
| 16. Education status | 1. professional <br> 2. non-professional <br> 3. other |
| 17. Type of education | 1. GOVT <br> 2. Self-financing <br> 3. Private Aided <br> 4. Private unaided <br> 5. Unknown <br> 6. Others |

Details of Financial Background of the Respondent

| 18. Whether your family comes <br> under APL/BPL | 1. APL | 2. BPL |
| :--- | :--- | :--- |
| 19. House | 1. Ownership 2. Rent |  |
| 20. Number of vehicles | 1. Tile 2. Single floor 3. Double <br> floor |  |
| 21. Size of house | 1.Acre 2.cent |  |
| 22. Land ownership |  |  |
| 23. Monthly expenditure |  |  |
| 24. Monthly income |  |  |

## Section B

25. Did you complete your education?
1) Completed
2. Not completed
3. Continue
4. Did you have any financial assistance from the government for your education? If yes please mention it.
1) Yes
2. No
3. Did you take any education loans?
1) Yes 2. No
28. Which age did you got married
29. Years of schooling before marriage--------
30. Years of schooling after your marriage------------
31. Did your husband and his family help you to complete your education?
32. Always
33. Sometimes 3. Never
34. Did you study after your maternity?
35. Yes 2.No
36. Your family supports you to find employment.
1) Always
2) Sometimes
3) Never
34. Are you a member of Kudumbasree or other social organizations?
1) Yes
2) No
35. . How many hours did you work a day?
36. What is your occupation?
37. Coolie
38. Pvt. Sector
39. GOVT. sector
40. Self-financing sector
41. self- employment
42. Other
43. Your education helps you to find employment?
1) Yes
2) No
38. Do you have a job based on your qualification?
1) Yes
2) No
39. Which type of job have you got?
1) Government
2) Private
3) Self-financing
4) Self-employment
5) Other
40. Which sector are you employed in?
1) Primary
2) Secondary sector
3) Service sector
41. At which age do you start employment?
42. Which factors do you consider looking for employment?
1) Financial benefits
2) Convenience to travel
3) Working time
4) Others
43. How many days are you employed in a month?
44. How many holidays do you have in a month?
45. Do you have any leisure time?
1) Yes
2) No
46. Does your family support you in household activities?
1) Yes 2) No

# ST.JOSEPH'S COLLEGE (AUTONOMOUS) DEVGIRI, CALICUT 

INTERVIEW SCHEDULE

## DISPARITIES OF EDUCATION AND EMPLOYMENT AMONG WOMEN IN MALABAR

## SECTION 2

## General Information

Unemployed Women
Details of the Region of the Respondent:
Schedule Number:

|  | 1. District | 1. Malappuram 2. Kannur |
| :--- | :--- | :--- |
|  | 2. Panchayath / <br> Municipality | 1. Malappuram Panchayath 2. Kannur <br> Panchayathyath 3. Malappuram Municipality 4. <br> Kannur Municipality |
|  | Locality |  |
|  | Ward |  |
|  | House Number |  |
|  | Head of the Family |  |

## Details of the Respondent

| Name |  |  |  |
| :--- | :--- | :--- | :--- |
| 3. Religion/community | 1. Hindu 2. Muslim |  |  |
| 4. Caste | 1. General <br> 5. Other | 2. OBC 3. SC | 4. ST |
| 5. Age | 1. Single <br> 2. Married |  |  |
| 6. Marital Status | 3. Divorced <br> 4. Widow |  |  |
| 7. Number of children |  |  |  |



## Details of education of the Respondent

| 15. Education qualification of the respondent | 1. SSLC <br> 2. Plus Two <br> 3. Graduation <br> 4. Post-graduation <br> 5. Technical or Vocational education <br> 6. others |
| :---: | :---: |
| 16. Education status | 1. professional <br> 2. non-professional <br> 3. other |
| 17. Type of education | 1. GOVT <br> 2. Self-financing <br> 3. Private Aided <br> 4. Private unaided <br> 5. Unknown |

## Details of Financial Background of the Respondent

| 18. Whether your family comes <br> under APL/BPL | APL | BPL |
| :--- | :--- | :--- |
| 19. House | 2. Ownership 2. Rent 3. other <br> (details) |  |
| 20. Number of vehicles | 22. Tile 2. Single floor 3. Double <br> floor |  |
| 21. Size of house | 1.Acre 2.cent |  |
| 22. Land ownership |  |  |
| 23. Monthly expenditure |  |  |
| 24. Monthly income |  |  |

Section B
25. Did you complete your education?

1) Completed
2. Not completed
3. Continue
4. Did you have any financial assistance from the government for your education? If yes please mention it.
1) Yes
2. No
3. Did you take an education loan?
1) Yes
2. No
3. Which age did you got married-------------
4. Years of schooling before marriage--------
5. Years of schooling after your marriage------------
6. Your husband and his family help you to complete your education?
7. Always
8. Sometimes 3. Never
9. Did you study after your maternity?
10. Yes 2. No
11. Your family supports you to find employment.
1) Always
2) Sometimes
3) Never
34. Are you a member of Kudumbasree or other social organizations?
1) Yes
2) No
35. How many hours do you work a day?
36. You are interested to do employment.
1) Always( 2) sometimes (3) never
37. What the reasons are if you are not employed?
1) Family responsibility
2) Pregnancy or maternity
3) Responsibility of children
4) No support from family
5) Others
38. You search for any job.
1) Always
2) sometimes
3) never
39. You preparing for PSC or other competitive examination.
1) Always 2) sometimes
2) never
40. How many years had you completed your education?
41. Are you interested to work in the future?
1) Always 2) sometimes 3 ) never
42. Are you a member of MGNREGA?
1) Yes
2) No
43. Did you register employment exchange?
1) Yes
2) no
44. Did you have any PSC or other employment lists?
1) Yes
2) no
45. Do you have any jobs like tailoring or animal husbandry or others?
1) Always 2) sometimes
2) never
46. Are you satisfied present income or your earnings?
a) Always b) sometimes
c) never
47. Did you work before your marriage or pregnancy or any time?
1) Yes
2) No
