EDUCATED UNEMPLOYMENT AND WOMEN IN KERALA

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In Kerala, being submitted as part of the requirements of the M.Phil Programme in Applied Economics of the Jawaharlal Nehru University, was carried out entirely by myself and has not formed part of any other Programme and not submitted to any other Institution/University for the award of any Degree or Programme of Study.

June 30, 2005

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Certified that this study is the bona fide work of Alice Sebastian, carried out under my supervision at the Centre for Development Studies.

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ABSTRACT OF THE DISSERTATION EDUCATED UNEMPLOYMENT AND WOMEN IN KERALA

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The study situates women's education and employment in the specific case of Kerala. In the context of female work participation, it has been generally hypothesized that economic growth and education increases female work force participation rates. In Kerala, where economic growth is higher than all India and where women are relatively more educated, experience the lowest female work participation and highest unemployment among the major States in India, especially among the educated. In the light of this contradiction, the study attempts to identify the factors that cause unemployment among the educated women in the State. The study tries to investigate how unemployment is related to educational achievements of women, conditioning on individual, household and demographic characteristics.

Analysis of macro level data on employment and unemployment shows that wide divergence exists between male and female participation in economic activities. In Kerala, while the male work participation rates improved in the last two decades, female work participation rates declined and form only half of male work participation rate. This is contrary to the general trend observed in other Indian States. Changes in the sectoral distribution of female work force in Kerala clearly shows that structural transformation of women's economic activity have indeed taken place in the State with primary sector loosing its importance and tertiary sector taking up its place.

Using the CDS Employment/unemployment survey 2003 data, the study finds that 74 percent of educated women are unemployed in the sample. Women are found to be more educated than men across all educational categories expect diploma and secondary education. But this is not translated into gainful employment opportunities for them.

The study uses multivariate logistic regression analysis to determine the factors that influence female work participation. The study uses both individual characteristics – level of education, age, marital status, religion, place of residence – and household characteristics – economic status, husband's education and employment – to examine the likelihood of women being in the work force. The results show that education, age, marital status, place of residence, economic status and husband's employment turned out to be significant in determining women's entry into the work force. Within education, diploma and professional education shows maximum odds ratio where women with diploma and professional education have six and eighteen times more probability respectively to be employed compared to women with higher secondary or secondary education. It shows importance of skill-oriented education rather than general education in improving the employability of women.

Age and marital status turned out to be the major factors determining the employment status of educated women. It has been found that work participation is higher for women in higher age groups. Odds ratio of marital status shows that single women have two times more probability to work than married women. The relationship between economic status and work participation shows that, women from low economic status are more likely to work than those from high economic status. Further, it has been found that women whose husbands are employed at medium or low status of work are less likely to enter into the labour market. Also there is considerable spatial variation in women's employment.

The study shows that individual and household characteristics can go a long way in explaining women's entry into labour market. Education alone does not enable women to acquire gender equity in economic participation. Women's education has not played the transformative role so generally expected of it. Low levels of female employment and persistence of a gendered work structure have limited women's claims to independent sources income.

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Chapter 1

Introduction

1.1 Background

The process of transformation of underdeveloped economies characterised by a production structure that used to be for subsistence involves several key changes that includes, among other things, substantial changes in the participation of women in the economic activities. In this context it is generally hypothesized that the rate of economic growth and level of education have a significant positive impact on female labour force participation rates (Durand 1965, Psacharopoulos & Tzannatos 1991). It has been suggested that over a longer period, the pattern of labour force participation among women shows a U-shaped curve, first decreasing with urbanisation (as women stop working on family farms and on other household production activities) and then rising again once the demographic transition is completed (Sadie 1965, Shultz 1991, Goldin 1995, Horton 1996). Also female labour force participation can accelerate growth in key economic sectors by increasing labour productivity and supply to meet the increased demand for labour in an expanding economy (Goldin 1986, World Bank 1991).

Participation of women in the labour force has increased worldwide during the past few decades. In developed countries it increased from around 38 percent in 1970's to around 45 percent in 1990's and in developing countries it increased from around 20 percent to around 30 percent (World Employment Report 1998-99). Since the pioneering works of Mincer (1962) and Cain (1966), the analysis of female labour force participation has been the subject of intensive research in recent years. Since most women are actually employed in some kind of productive/reproductive work, whether or not this is recognised and quantified by statistics, the issues relating to female employment are qualitatively different from those of male employment. This makes the study of work participation by women a more complex matter than is often recognised.

¹ Note: Mincer (1962) and Cain (1966) extended neoclassical economic analysis to include household variables. Applying the concept of income and substitution effect, Mincer and Cain proposed a theory of labour supply that applies especially to married women. They argued that the decision whether the wife should enter the paid labour force or not could involve not only the income and substitution effects of market work versus leisure but also the income and substitution effect of market versus unpaid housework.

Work defines the conditions of human life in many ways. It may be the case that this is even more true for women than for men, because the responsibility for social reproduction - which largely devolves upon women in most societies - ensures that the vast majority of women are inevitably involved in some kind of productive and/or reproductive activity. The relationship between women and work has thus become the focus of much research (Boserup 1970, Dixon 1978, Mencher 1988). The main focus of this research is on the invisibility of women's work (Beneria 1981, Anker et al 1987, Krishnaraj 1990) and the gender division of labour (Mencher 1993, Beneria 1979). The importance of women's work generally receives marginal treatment simply because so much of the work regularly performed by women is "invisible" in terms of market criteria or even in terms of socially dominant perceptions of what constitutes "work". This leads to the social underestimation of women's productive contribution. As a result, inadequate attention is devoted to the conditions of women's work and their implications for the general material conditions and well being of women. The gender division of labour which gives primacy to women's domestic role in terms of housework and child care and defines men as the bread winners, is closely linked with other forms of discrimination against women in the non-domestic sphere, critical within which is education and employment.

1.2 Case for Women's Employment

Participation of women in economic activities outside home has an important bearing on gender relations within the household. The inter-relationship among economic power, gender, and household variables started to receive the attention of researchers from the early 1980s only and that too mainly from sociologists. Dwyer and Bruce (1988) and Blumberg (1991) points out that the main factor that affects intrahousehold gender relations is relative incomes of males and females. Women's economic power (defined as control of key economic resources such as income, property, and other means of production) relative to that of men is posited as the most important dependent variable affecting gender relations at the household level. There exist at least three important gender-based distortions in resource allocation (i) discrimination against women in access to resources and services, (ii) unpaid work that women are obliged to undertake in social reproduction and family maintenance, and (iii) unequal exchange

within households in terms of patterns of work and income distribution, reflecting conflict as well as co-operation (Elson and Mc Gee, 1995).

The social influences of women's work are also quite extensive. Work opportunities outside home reduce the economic dependence of women on men and in turn, increase her economic command within the family. Women's work outside the household would alter the concept of male bread winner and would reduce considerably the societal biases regarding the roles of women that are primarily responsible for underestimation of women's work. Women's earning give them access to and control over an independent income, which would make their economic contribution to the household visible and high (Basu 1996). This in turn improves their access to and control over household resources and would offer them a better bargaining power (Dixon 1978). This bargaining power can strengthen their participation in and the ability to influence household decision-making, which are crucial to women's autonomy in the household.

1.3 Impact of Education on Women's Employment

Education is the most important instrument for human resource development. Education of women, therefore, occupies top priority amongst various measures taken to improve the status of women in India. It is considered to be the most effective weapon for implementing social change (King and Hill 1993, Subbarao and Raney 1995). In recent years, the focus of planning has shifted from equipping women for their traditional roles as housewives and mothers to recognising their worth as producers, making a major contribution to family and national income.

Education is regarded as a key variable that affects the labour force participation of women. It is often held that education improves the employment opportunities of women and raises their earning potential (Schultz 1993). The relationship between education and female labour force participation has formed the topic of extensive studies in different parts of the world. Smock (1981), Standing (1978) and in India Duraisamy (1988), Nirmala (1992) and Mathur (1994) Geeta Gandhi Kingdon and Jeemol Unni (1998) have examined the relationship between education and female labour force participation rates. Majority of these studies have reported that educational attainment is positively related to female labour force participation. Apart from the substantial non-market gains of female education, it is thought that many of the benefits of women's

education accrue via its role in enhancing women's propensity to work in the labour market (Kingdon 1998).

1.4 Situating Kerala

Kerala has drawn considerable attention in recent years for its paradoxical pattern of growth with high social development indicators on a weak economic base, often referred to as the 'Kerala model of development' (Raj 1994). The dramatic decline in fertility since the seventies and the process of demographic transition in the state have been at the forefront of this experience (UN 1975). Attempts to understand the determinants of fertility decline in Kerala, as also in other regions of the developing world, yielded a strong negative association between female literacy and fertility rates. 'Women', during this time (the '70s), were emerging as a recognised constituency in the development effort and this relationship helped in strengthening the conceptual links between women's issues and economic development (Kabeer 1999). Literacy, together with non-domestic employment, which gave women access to independent sources of income, came to be regarded as important indicators of women's 'status', which affected fertility and mortality outcomes (Mason 1985). Since Kerala women have on average, been among the most literate compared to women in other states of India (though the same could not be said of female work-participation rates), much was written about the 'high status' of women in Kerala and their central role, historically, in social development (Jeffery 1992).

Kerala, which ranks first among the Indian States in terms of Human Development Index (HDI) and Gender Development Index (GDI), presents, however, a poor picture in terms of female work participation. Work participation among women in Kerala is only 22.9 percent (NSS 99-00), which is one of the lowest in India. This is paradoxical since the development experience of the State is universally acclaimed as a 'model' for poor States to follow for transforming the living conditions of their people, through 'enlightened' policies of promotion of health care and education. But, the most tragic failure of development in the State is the acute unemployment of both men and women. Reckoned in terms of all the three measures of unemployment – usual status, current weekly status, and current daily status - used by NSS, Kerala has the highest incidence of unemployment both for males and females and in rural as well as urban areas. The overall unemployment rate in Kerala is 11.4, with a wide gender gap of 21.5

percent for women and 7.4 percent for men. Educated unemployment in the State is even more severe with women registering an unemployment rate of 35.5 percent and men with 9.3 percent (NSSO, 1999-00). This indicates that improvement in literacy and education has in no way improved the employment situation in the State.

Table 1.1 GDI* & HDI ** for Selected Indian States

States	HDI	GDI	FWPR	
ANDHRA PRADESH	0.416 (10)	0.371 (8)	34.9	
Assam	0.386 (14)	0.347. (10)	20.8	
Bihar	0.367 (15)	0.306 (14)	18.8	
Gujarat	0.479 (6)	0.437 (3)	28.0	
Uttar Pradesh	0.388 (13)	0.293 (15)	16.3	
Haryana	0.509 (5)	0.370 (9)	27.3	
Karnataka	0.478 (7)	0.417 (5)	31.9	
Kerala	0.638 (1)	0.565 (1)	15.3	
Madhya Pradesh	0.394 (12)	0.312 (2)	33.1	
Maharashtra	0.523 (4)	0.429 (2)	32.6	
Orissa	0.404 (11)	0.329 (11)	24.6	
Punjab	0.537 (2)	0.424 (4)	18.7	
Rajasthan	0.424 (9)	0.309 (13)	33.5	
Tamil Nadu	0.531 (3)	0.402 (6)	31.3	
West Bengal	0.472 (8)	0.399 (7)	18.1	
India	0.472	0.388	25.7	

^{*} Gender-related Development Index; ** Human Development Index, Figures in brackets are ranks, FWPR Female Work Participation Source: National Human Development Report 2001. GDI is taken from A.K. Shivakumar, EPW, 6 April 1996.

Education is expected to improve the employment opportunities of woman and raises their earning potential. But the experience of Kerala seems to suggest an inverse relationship between education and female employment. There is a growing uneasiness with the rising visibility of gender based violence, mental ill health among women, and the rapid growth and spread of dowry and related crimes that went alongside with rising levels of education (Mukherjee, et al, 1999). Thus it is increasingly becoming clear that education alone does not enable women to challenge gender relations; much depends on engendering education to enable critical attitudes. Nor does work by itself ensure women's control over earnings or ability to take 'self interested' decisions. These emphasize the need to focus on the social context, defined by inequitous gender relations

through which women are positioned as a subordinate group, both inside and outside the family, with very little power to make decisions (Eapen & Kodoth 2002).

1.5 Significance of the Present Study

Several studies have been made in Kerala about the role of education in women's empowerment through its impact on reducing fertility and child morbidity and mortality (CDS 1975, Nair 1974, Bhat & Rajan 1990,). Female education has been statistically linked with these favourable social changes. Though Kerala has been so successful in reducing gender inequality at one level (for example, in reducing or eliminating female disadvantage in mortality rates), gender inequality survives at other levels like economic, social and political participation. Gender equality in schools and health care may not still eliminate female disadvantage in social and economic roles (Sen 2001). And in Kerala, educational attainment did not help in ending gender inequalities especially in work participation. Female work participation rates in Kerala have been among the lowest in India and declining. The 2001 Census ranks Kerala 32nd among the states & UT's with respect to female participation rate. A low female work participation rate indicates the existence of large proportion of unemployed women in the labour force. It is in this context that the study becomes significant.

The present study examines to what extent is education responsible for the differential labour market outcomes of women and men in Kerala. Education is expected to enhance the opportunities of economic expansion. But in Kerala women's high educational attainment has failed to better women's economic lot as is reflected in the low female work participation in the state. It has been argued that women in Kerala go for higher education even in the face of growing unemployment as education is viewed (as a desirable substitute for employment (Kumar 1992, CDS 1975). Kumar (1992) points out that in a situation of slow growth of desired employment opportunities, commensurate with the levels of education, women continue in the educational stream due to lack of suitable employment avenues. In fact, Todaro and Edwards (1970) maintain that worsening of employment situation leads to an increased demand for more education.

According to NSSO data the percentage of women in paid jobs in the state is slightly less than 23 percent. This is much less than the work participation rate of women

in other Indian states with far lower levels of literacy. For example States like Madhya Pradesh, Gujarat, Karnataka and Maharastra with around 50 percent of female literacy rate, report double the female work participation rate of Kerala. Figures from NSSO survey (1999-00) show that the proportion of jobless women in Kerala is ten times the national average. Besides, differences in the nature of work performed also bear evidence to gender inequality. Women are largely confined to a narrower range of occupations while men are differentiated into a wider range of occupations, which lowers the scope for upward mobility of women (Eapen & Kodath 2002). A range of economic, cultural and social factors are considered to be responsible for this phenomenon.

While the majority remains unemployed by fate (lack of employment opportunities) rather than choice, there are at least a few who opt to remain unemployed. The state has the largest proportion of women 'not in the labour force' (72.7 percent in rural areas and 74.6 in urban areas, NSS 55th round). This growing proportion of women moving into the activity 'not in the labour force' whether voluntary or not, reduces their mobility, tends to enhance women's dependence, making them economically vulnerable and hence weaken their bargaining position within the household and outside it (Eapen 2004).

The issue of educated unemployment among women in Kerala is an important dimension to be considered towards addressing the general issue of female labour force participation. In Kerala economic role of women continues to be marginalized in spite of advancement in social status. The study intends to unravel the reasons behind the paradox of low female employment and high social development.

1.6 Objectives of the Study

The study aims to bring out the factors that determine women's work participation in Kerala in the light of the high educational achievement. It seeks to establish the nature and causes of educated unemployment of women in Kerala. Micro level studies of the present type assume added significance in the context of trying to depict the role of household characteristics *vis-à-vis* women's education and employment.

The study intends to explore the interrelationships between socio-economic variables and its influence on women's decision to participate in labour force. The

multidisciplinary nature of the present issue makes an exhaustive study of it a difficult task. Therefore the scope of the study is limited to specific variables and the enquiry is restricted to supply side factors that affect employment of women. The specific objectives of the study are:

- 1. To examine the trends and patterns of employment and unemployment in India and Kerala
- 2. To study the nature and causes of educated unemployment among women in Kerala.

1.7 Methodology

The study is based mainly on the CDS survey on employment and unemployment, 2003 that is conducted in three districts of Kerala covering 3000 respondents. The CDS survey was conducted as a part of the preparation of Kerala Human Development Report. The study also makes use of various rounds of NSSO data on employment and unemployment and Census data on work participation.

The analysis is based on a synthesis of the insights in the economic theory of the household and the role of household characteristics on female labour force participation. Economists developed the general theory of choice that describes the decision on labour force participation as the choice between market and non-market activities. On the other hand, sociologists emphasise the role of family and social characteristics in determining women's economic participation. Thus, the choice to work is influenced by household conditions such as marital status, husband's employment and economic status of the household. The present study combines the core ideas of both.

The study will conduct an analysis on individual level data to examine the likelihood of women being in the labour force conditioning on household demographic characteristics, the level of education of the individual as well as social structure of the Indian society that is unique in several ways. It tries to capture both economic and social factors that influence women's labour force participation.

Analysis on women's labour force participation is conducted at two levels. First, to assess a comparative picture of women's employment status, women are broadly classified into two categories viz., employed and unemployed. Further classification into

self employed, employed for salary/wage and casual, regular and permanent are also done. Employed women's characteristics are then compared to that of unemployed women to arrive at possible set of variables that determines their labour force participation. At the second level, the study uses multivariate logistic regression analysis to determine the factors that affect women's labour force participation.

The study uses the following variables as determinants of female labour force participation: level of education, economic status, marital status, age, religion, place of residence and husband's employment and education. The study empirically tests the significance of these variables in determining women's labour force participation. It intends to bring out how these variables mediate or influence women's decision to enter labour market.

In this study, we want to investigate the extent to which education contributes to women's observed differences in employment level. It also tries to find out whether the type of education has any influence on women's employment. Apart from education, other factors that are expected to influence women's labour market outcomes are marital status, age, husband's employment and level of education. Age wise work participation rates and marital status will throw some light into the linkages between domestic responsibilities and labour market participation of women. In a society where male breadwinner concept is strong and full time domesticity is not considered as "unnatural" for women, husband's employment status and the type of their employment will have a decisive influence on women's labour force participation. Economic status is incorporated in the analysis of female labour force participation to explore the link between poverty and women's unemployment.

1.8 Limitations of the Study

The study is restricted to the supply side factors of the unemployment problem. The demand side factors are beyond the scope of this study. Also study is not able to include all the relevant variables affecting female labour force participation due to limitations of data source. Again, since data on the household income is not available, we have used household type to ascertain the economic status of the household. Study was not able to include all married women since information about husband's education and employment was not available for all of them. Analysis of the determinants of women's

employment is based on the data collected from three districts of Kerala, hence caution should be taken while generalising the findings.

1.9 Outline of the Study

The study consists of five chapters including the introduction. It gives the significance and objectives of the study. The second chapter reviews the various theoretical and empirical literature related to women's education and work. It evaluates various approaches in studying gender issues in economics. The third chapter makes a comparative study of trends in employment and unemployment in India and Kerala. This gives a broad idea of women's labour force participation and the emerging concerns about it. The fourth chapter deals with the problem of educated unemployment among women in Kerala. Using multivariate logistic regression analysis, this chapter tries to find out the determinants of women's employment in Kerala. Major findings of the above analysis and conclusions drawn from it are presented in the last chapter.

Chapter 2

Review of Literature

In this chapter we discuss some of the basic issues related to the conceptualization of women's education and employment. It examines various approaches in dealing with gender issues in economics. It also reviews different theoretical discourse in female labour force participation and gives empirical literature on the determinants of female work participation and the impact of education on women's employment.

2.1 Theory of Household Economics

Household economics is an extension of neo-classical theory, which is based on the assumption of rational choice, so that all human behaviour is explained as the attempt to maximize individual utilities in the face of economic scarcity (Robbins 1935). They believed that household is a single entity, which maximizes a joint welfare function, subject to the household production function. In this model, family labour time is also treated like any other factor of production, which can be flexibly allocated on the basis of its comparative costs in market and non-market activities. Thus, each family member specializes in those activities, which give them the highest relative returns. If women specialize in unpaid domestic chores within the household, it is because returns to their market activities are lower than those of men. Thus an increase in women's market earnings will lead to their increased participation in market work (Evans 1991).

The neoclassical paradigm focused mainly on male full-time labour in the capitalist manufacturing sectors and paid little attention to women labour. Thus, neoclassical economics failed to understand the issues of gender either in terms of conceptualization or in terms of methodology. However, in response to the growing importance of women in the labour market, it has extended analysis to women's problems also, since the seventies.

The general theory of choice in the neo-classical economics views the decision of a woman to participate in the labour force as a choice between work and leisure which is influenced by changes in wage rate (*Ibid.* 1991). A change in wage rate produces two

effects on labour supply. The 'substitution effect', produces more work because it raises the cost of leisure relative to work. The other, called 'income effect' produces less work because it increases purchasing power. Generally for men as well as for single women, income effect was supposed to outweigh substitution effect. As work within home does not constitute their major activity, their choice was narrowed down to either market work or leisure.

But this theory was criticised mainly for its limited application. The theory, for instance, was unable to explain the labour force participation of married women for whom domestic work is an important variable in the choice structure. Thus, it was emphasized that analysis of female labour force participation should take place within the context of the family or household.

Household economics, an extension of neo-classical economics, initiated by economists such as Jacob Mincer (1962), Garry S. Becker (1965), G. C. Cain (1966), and R. Gronau (1977) tried to explain female labour force participation in terms of household characteristics.

Mincer (1962) attempted to answer the question with the focus on the supply characteristics of married women. He argued that the decision whether the wife should enter the paid labour force or not could involve not only the income and substitution effects of market work versus leisure but also the income and substitution effect of market versus unpaid housework. Applying the concept of income and substitution effect, Mincer (1962) and Cain (1966) proposed a theory of labour supply that applies especially to married women. Within the context of the family, a rise in income has different effects on its members. For wives, housework is a major responsibility and thus an important substitute for time. Thus, in their case, substitution effect could be larger than for other adults. On the whole, female labour supply increases when the substitution effect is much greater than the income effect.

Becker (1965), Bowen and Finegan (1969), and Berk and Berk (1983) later elaborated on this basic theory of choice. All these theories rest upon the assumption that the household is a consuming as well as decision-making unit. In this household model, known as 'new household economics', there are three categories of consumables: market goods, (goods and services purchased for a price) home goods (goods and services

produced and consumed at home), and leisure (time not spent in market or home-work). In a collective decision-making process aimed at maximising the well being of the household, they face two constraints, time and financial resources. Participation of women in the labour force thus becomes an outcome of decision-making of the family regarding income and leisure.

By the late seventies researchers in the field of development began questioning the adequacy of focussing on women in isolation, a practice which seemed to be dominant in research. Many influential writings appeared in the Seventies on the distinction between biological sex and social gender (Edholm, et al, 1977; Lubin, 1975). The propagators of this school wanted to develop a theory of gender, which was integrated into and informed by the general analysis of the world economy.

The new theoretical approach illustrates an innovative and systematic way of thinking about 'gender' using economic tools of analysis. The insights gained from the way gender works at the microeconomic level are in turn linked to macro-economic policy concerns. The theoretical underpinning for this framework is provided by the 'sex-role theory' (Cornell, 1987), which treats households as systems in resource allocation.

The inter-relationship among economics, gender, and household variables has only recently begun to receive the attention of researchers, though the topic of intra-household economic relationship had received the attention of sociologists much earlier. Neo-classical economists following the Becker's model of 'new home economics' failed to consider what husband *versus* wife may control or do within the household. Accordingly, they treat the household as a unitary entity, for which a single production function is sufficient. Thus, according to the neo-classical paradigm, it does not matter who works and who brings in the income. But as early as 1960, the US sociologists had argued that what goes on within the family does matter. Feminist economists like Elson (1993) are less optimistic than neo-classical economists about the ability of the markets to provide gender equity.

2.2 Theory of Patriarchy

The feminist framework is strongly rooted in the theory of patriarchy. The central idea behind this approach is that the position of women in the labour market is governed

by patriarchy, or rather, male dominance. The main point of departure from traditional Marxism for this group was its refusal to accept that class was prior to gender and its insistence that men, as well as capital, benefited from women's relegation to unpaid subsistence work. To justify this position, Mies (1986) grafted the concept of patriarchy onto the mode of production framework, arguing that the contemporary position of women should be seen as the product of a far older system of male dominance over women, nature and later, the colonies.

It was successful not only in exposing the male bias of the existing theories, but in bringing out the primacy of the gender relations as well. Consequently, the feminist framework using the theory of patriarchy became central to the study of women and labour market in sociology, economics, and political economy models. By adding a gender dimension to the existing models, this approach resulted in evolving a dual system theory, one dealing with the labour market and the other dealing with the position of women in it. It assumed that patriarchy and the resultant male dominance were the products of capitalism with one conditioning the other. But patriarchy being a social system has its own social, cultural, and historical specificities, which make theorizing difficult.

During the same period domestic labour and sexual division of labour emerged as interrelated categories in a conceptual framework for dealing with women's oppression in the labour market. This framework stipulates that women are exploited by men in the labour market as an extension of their oppression at home. Based on the Marxian framework, like in the theory of patriarchy, it argues that women are exploited by men in the household as capitalists exploit labour. Housework is seen as the major source of exploitation, which extends further to the market resulting in the double exploitation of women.

2.3 Marxian Framework

The idea of the 'reserve army of labour' originally developed by Marx was later adopted by many authors within the socialist-feminist framework (Beechey 1987, Anthias, 1980). The disadvantaged position of women in the labour market identifies them with the reserve army of labour; being the most volatile fraction of the labour market, they are increasingly thrown out of employment as capitalist development

proceeds. Also Marxian framework is used to explain the theory of segmented labour market.

The domestic labour debate, which emerged in the seventies and the eighties, was in fact a synthesis of the theory of patriarchy and Marxism. Contrary to the traditional Marxian view about the unproductive nature of domestic labour, the debate emphasised that domestic labour involves production of simple use values for direct consumption especially the production and reproduction of the special commodity called labour power. The debate replaces capitalist production in the Marxian framework by household production. In the earlier model husband is the source of exploitation who exploits the wife through the mode of production called housework. But in the later version, the surplus labour of the housewife is passed to the capitalist through husband's labour who appropriates the surplus as profit by paying labour less than its marginal productivity.

2.4 Studies on Determinants of Female Labour force Participation

Several studies have been conducted in developed countries to identify the factors that determine female labour force participation (Morgan 1976, Paukert 1982, Jaumotte 2003). These studies have recognised the strong influence of household characteristics on the labour force participation of women.

A study in US by Morgan, Siragaldin, and Bacrwaldt (1976), which analysed the determinants of working wives, found that three variables, which were overwhelmingly important, were husband's income, wife's education and wife's age. While husband's income seems to have a negative relationship with wife's employment, wife's education and age positively influences their employment. Presser and Baldwin (1980) found that the presence of young children affected the married women's labour force participation adversely. Strong cultural values restrain women from labour force activities when they have small children; re-entry to work is difficult; and often women end up in low-paying jobs.

*5/

Treiman and Terrel (1975) and Mc Clendon (1976) found that the mother's educational and occupational characteristics were more powerful determinants of women's occupational status than father's. Mason and Palan's study (1981) shows that household's economic structure was also a major determinant of female labour force participation. Women from high economic status were found to be less likely to

participate in the work force than women from poor households. Lustig and Rendon (1979) found that high economic status of the household may promote wife's employment partly as a result of egalitarian attitude and higher educational attainment of wives.

Liba Paukert (1982) reported that large-scale entry of women into labour force in the industrialized countries has been the result of both economic – monetisation of household economy, rise in female wage and rapid development of the service sector – and non-economic – educational and demographic and social - factors.

Another study by Nam (1991) investigates the determinants of labour force participation of women living in male-headed households in Seoul, South Korea, at two points in time, 1970 and 1980. Analysis of data from the 1970 and 1980 Korean Population Census suggests that both women's educational level and the family economic status determine women's labor force participation in Seoul. Women with middle school education or above are more economically active than those with no education. Women from lower economic backgrounds are almost two to three times more likely to be employed than those in high-status families, controlling for age, number of children under six and marital status. However, this pattern is not found among women from the blue-collar wage-working families.

A recent study by Tansel (2001) provides econometric estimates of the determinants of female of female labour force participation across 67 provinces in Turkey for the years 1980, 1985 and 1990. The study specifically investigates the hypothesis of U shaped relationship that exists between female labour force participation and the level of economic development. The results seem to affirm the U shaped relationship. Further, the rate of economic growth and level of female education were both found to have a strong positive effect on female labour force participation. But unemployment had a considerable discouraging effect on women's labour force participation. Again, employment shares of agriculture and industry were found to have positive and negative impact respectively on women's employment.

Jaumotte (2003) examines the determinants of female labour force participation in OECD countries using panel data set covering 17 OECD countries over the period 1985-99. The paper focuses on the effects of market failures and policy distortions in

depressing female participation and the study confirms that policies also contribute to explaining the different performances of countries in terms of female labour force participation. It shows a positive impact on female participation of a more neutral tax treatment of wives, stronger tax incentives to share market work between spouses, childcare subsidies, paid maternity and parental leaves and more part time work opportunities. Other potential determinants of the rate of female participation include level of female education, the proportion of married women, the number of children, overall labour market conditions and cultural attitudes. But this study applies mainly to developed countries where such policy measures exist.

These studies throw light into the likely factors that influence female labour force participation. It shows that more than demand side factors, it is supply side factors that affect the supply of female labour force. The dominance of household factors in determining women's labour supply points out to the disadvantages position women have in the labour market. It points out to the fact that gender division of labour and unpaid housework that women have to perform weakens their position in the labour market.

2.4.1 Education and Female Labour Force Participation

Education is regarded as the key variable that affects the labour force participation of women (Psacharopoulos & Tzannatos 1991, Shultz 1990). The relationship between education and female labour force participation has formed the topic of extensive studies. These studies have not come out with a uniform conclusion on the impact of education on women's labour participation. Such variations arise mainly because of the differences in the socio economic characteristics of the women studied.

The effect of education on women's duration of work depends on the relative strength of two forces: the substitution effect and the income effect. First, education increases the potential earnings and therefore the cost of not working. This will increase the duration of work. Thus, it is a positive effect. Second, as a result of higher earnings, income target is achieved sooner. The part of higher income then could be allocated to consume more leisure and work less. The net effect of education depends on which force

dominates (Tansel 2001).

Empirical studies at the individual level show that in a number of countries, substitution effect is stronger than the income effect as a result educated females have higher labor force participation. Cross-country study by Psacharopoulos and Tzannatos (1991) find that education has a positive effect on female labor force participation. Empirical evidence on the effect of education on female labor force participaton in Turkey also shows a positive effect, which is larger at higher education levels. (Tansel, 1994). Some researchers suggested that the effect of educaton on female labor force participation depends on the stage of development of the country. Smith and Ward (1985) found that in the United States in 1900 the association between education and female participation was negative. Kottis (1990) found a similar result in Greece in 1971 and 1981.

Smock (1981) in a comparative study of five developing countries reported a curvilinear relationship between educational attainments and female labour force participation. Women with high school education had lower participation rates than women with lower or higher levels of education. However, the study concluded that education facilitates women's entry into the modern sector activities outside traditional agriculture or petty trade. Standing (1978) reported that in developing countries, education improves the competitive power of women in the labour market, provides them with more complete information regarding work opportunities, and expands their horizons in the search for better economic conditions.

It is believed that schooling generally has important effects on people's labour market outcomes such as labour force participation and earnings. The nature of the relationship between schooling and each of these outcomes has been studied. These studies examine whether the relationship between women's education and labour force participation is linear or whether there are certain threshold levels of education above which women are much more likely to be labour market workers. Such understanding would be useful in education and labour market policy making. Apart from the substantial non-market gains of female education, it is thought that many of the benefits of women's education accrue via its role in enhancing women's propensity to work in the labour market.

However, in the few empirical studies of women's labour force participation in India, there is no consistent evidence of a positive relationship between education of

females and their probability of labour force participation. For example, while Duraisamy (1988) and Nirmala *et al* (1992) find a negative relationship between women's education and their labour force participation in rural and urban India respectively, Mathur (1994) finds a U-shaped relationship. Analysing a household choice model, Duraisamy finds that a rise in the levels of education has a negative impact on female labour force participation in rural India as the nature of work available in rural areas are not commensurate with the educational qualification of women. Nirmala *et al*'s study chose 25 labour force participants and 100 non-labour force participants in urban Pondicherry for the urban labour force participation study. Apart from being non-random, the sample is likely to be too small to allow reliable inferences. Mathur (1994) uses district-level aggregated data from the 1971 census, rather than recent, individual-level data.

Two important studies in India that explored the links between females' educational achievement, labour force participation and earnings are:

Geeta Gandhi Kingdon's study (1995) in urban Uttar Pradesh inquiring the determinants and economic consequences of female education in India. She conducted a primary survey in 1000 households in Lucknow City investigating the causes of gender differences in educational attainment in urban India. It focuses on examining whether the economic returns to education are lower for females than males since lower expected returns may be a major explanation for girls' inferior educational attainment relative to boys.

The main findings of her study were:

Women and men have markedly different rates of participation in paid employment and a large gap in participation rate remains even after controlling for education and other characteristics. This appears not to be due to the burden of child-care. A likely explanation is people's deep-seated beliefs about women's gender-role in society (see Drèze and Sen 1995). Another explanation is that women face substantial labour market discrimination, which dampens their inclination for market work. The results of her study show that only education at the secondary level or above raises women's chances of being in paid work – perhaps because of significant positive returns

to these levels of education - a policy suggestion arising from this is that public policy should encourage girls to acquire education beyond the junior level.

The results of this study have shown that women's substantially lower hourly earnings than men are, to a large extent, the result of labour market discrimination against them. Such discrimination inhibits women's participation in the work force. The results also indicate that women have much lower returns to education than men, suggesting that they face poorer incentives to invest in education than males. This substantial gender asymmetry in the pay-offs of education is likely to be an important part of any explanation for Indian women's observed lower average educational attainment than men's.

This study shows that education affects women's labour force participation in an interesting way: women's chances of being in paid work first decrease with years of education - reaching a minimum point at junior (8 years of) education. But education above junior level increases women's chances of market work.

Kingdon gives three potential explanations of this interesting result:

- (i) Women who opt for high levels of education are a self-selected group, perhaps coming from progressive families where attitudes to women's work are favourable;
- (ii) High levels of education have a modernising influence and they change women's ambitions and work aspirations, perhaps lowering their reservation wage; and
- (iii) If rates of return to education rise with education level, then those with high levels of education will have stronger economic incentives to work than those with low or no education.

Another important study, which analyses women's education and labour market outcomes in India, is Unni and Kingdon's study (1998) using NSS household data of 1987-88.

The study tries to find out to what extent is education responsible for the differential labour market outcomes of women and men in urban India. In particular, it investigate the extent to which education contributes to women's observed lower labour force participation and earnings than men, and whether any contribution of education to the

gender wage differential is explained by men and women's differential educational endowments or by labour market discrimination.

The data analysis in this study suggests that women's education has a U-shaped relationship with wage work participation and that only schooling beyond the junior/middle level enhances their wage work participation. Education has a strong and statistically highly significant relationship with wages for both the sexes, with wages increasing with schooling at an increasing rate, *i.e.*, returns to education rising with education level. Women's returns to education are significantly higher than men's, each extra year of schooling raising women's wages (or productivity) by about 10percent and men's by about 8 percent.

Finally, the study suggest that women do suffer high levels of wage discrimination in the Indian urban labour market, but that education contributes little to this discrimination: the wage-disadvantage effect of women's lower years of education than men is entirely offset by the wage-advantage effect of women's higher returns to education than men's. The data also indicate that for both men and women, returns to education rise with education level, confirming the findings of other recent educational rate of return studies in India and elsewhere.

In Kerala's context a few studies has been conducted on education and labour force participation. E. T. Mathew (1997) has analysed unemployment in terms of preference for salaried employment. The study based on primary data pointed out that rapid expansion of higher education and the liberal supply of graduates in the State are the two important contributory factors for the large-scale unemployment problem in the State. Preference for salaried employment and aversion to manual work and self-employment among educated job seekers of Kerala is documented in this study. But the study does not go deep into the factors that shape preferences.

Devi (2002) has sought to explain the determinants of female labour force participation based on a primary survey in Thrissur district in Kerala. The study basically tries to identify the factors that determine labour force participation of women in the area. The study founds that family income, mother's employment, presence of relatives, marital status and place of residence influence women's work force participation. But the



Library

study is based on a thin sample and could not capture the influence of education as educated women formed only a minority in the sample.

Mazumdar (2005) in his study tries to identify the various determinants of women's work in Kerala. In the study, migration, reduction in paddy cultivation, growth in per capita income (mainly due to remittances), male workforce participation, sex ratio, and female literacy rate emerged as the variables having significant correlation with female workforce participation rate. The study argues that changes in cropping pattern that displaced large volume of women work force from agriculture, industrial stagnation, prosperity brought about by large scale migration had led to the intensification of female unemployment in the State.

In the correlation analysis carried out in the study, growth in per capita income exhibits a strong negative association with female work force participation, which suggests that based on the depressing effect of income, higher levels of per capita income also offsets female employment. Male work participation on the other hand, shows a high positive relationship with female work participation. The study has also looked into the impact of migration on female work participation. Migration turned out to be a significant variable negatively affecting women's employment. Study argues that higher amount of household income discourages the participation in economic activity by the female members of the household.

Study shows that Kerala will not be able to follow the U shaped curve of female work participation for some periods to come due to lack of employment opportunities in the modern sectors of the economy. The study observes that the development process in the State appears to be not sensitive and accommodative enough to ensure greater participation of women, in changed roles, in the economic activity. The study concludes that the reason behind the paradox of low female employment and high social development is the development process in the State, which has remained largely irresponsive to the transition in the quality of the women work force, as well as the overall occupational transformation in the State.

2.6 Conclusion

The above mentioned theoretical and empirical studies points out to the increasing recognition of women's role in development process. Studies identify many

factors that determine women's labour force participation like educational attainment, labour market discrimination, patriarchal system in the society etc. These studies show that unless gender roles are changed in the society, women will not be able to enter labour market. Some studies show a positive impact of education on female labour force participation rate but only after a threshold point, while some shows a negative relationship.

All these studies point out to the importance of family and household characteristics on women's labour market participation. It shows that traditional supply and demand analysis cannot explain the complex nature of women's employment. Non-economic variables considerably affect the decision of women to participate in paid work. Hence it is important to study these variables and find out how it affects women's labour force participation.

Chapter 3

A Comparative Study of Trends in Employment and Unemployment in India and Kerala

3.1 Introduction

The development experience of Kerala has received worldwide acclaim in recent years for its unique features. The State has a high quality of life coexisting with relatively low levels of income. Though Kerala ranks first among Indian states in gender development index and gender empowerment measure, when it comes to female work participation rate and unemployment rate, Kerala lags far behind.

Female work force participation rate has increased tremendously all over the world especially during the past three decades (World Employment Report 1998-1999). Fut in India and especially in Kerala no drastic change has taken place in women's participation. The only noticeable change is an increase in casualisation of the female labour force (Eapen 1994, Banerjee 1997, & Unni 1997). Several studies indicate that women in general occupy low-paid low-status jobs and, as a result, the gender disparity in earnings remains quite substantial.

In this chapter we will look into the trends and patterns of employment and unemployment of women in India and Kerala. This comparative study will help to bring out the relative position of women's employment in Kerala with respect to all India. State wise analysis of work participation and educated unemployment will also be carried out to reveal the gender bias and spatial bias that exists in the labour market.

3.2 Trends in female work participation rates in India and Kerala

Kerala had a higher rate of growth of population than all India till the early seventies resulting in a density of population that is close to three times the country average (HDR Kerala 2005). The growth of population has been accompanied by a sharp decline in the rate of participation in economic activity. While about 45 percent of the population was recorded in the Census of 1901 as being workers, this proportion shrank to less than 33 percent in 1951 and to about 29 percent by 1971. The decline is explained only marginally by change in the age structure of the population. The main contributory factors, it would appear, were lower rates of female participation in certain kinds of

economic activity and more generally, delayed entry into the labour force consequent in the spread of schooling and longer periods spend in education (Kumar 1992).

But recent data shows that, during the nineties Kerala maintained its work participation rate whereas this has declined in respect of all India average. As per the estimates of the NSS, both are now around 39 %.

Table 3.1: Work Participation Rates Kerala and all India (UPSS)

	1987-88	1993-94	1999-00	
	38.6	38.3	38.7	
Total	(41.1)	(41.8)	(39.5)	
Mala	51.2	54.3	55.4	
Male	(53.1)	(54.4)	(52.7)	
	26.5	22.9	22.9	
Female	(28.1)	(28.3)	(25.4)	

Source: NSSO Rounds on Employment and Unemployment

Note: figures in brackets refer to all India.

Employment situation in India and Kerala are different because of many reasons. The decline in work participation rate in India could be the result of declining employment elasticity of growth especially due to the shift to commercial crops in agriculture and decline in employment in many traditional industries. This tendency along with increasing share of students in the younger age group seems to have contributed to a decline in overall work participation rate in India (HDR Kerala 2005).

On the other hand, Kerala seems to have maintained its work participation rate since the onset of economic liberalisation while in all India the tendency is one of decline towards the Kerala rate. Human development has played an important role here. The increase in educational achievements has helped the people in the State to find employment opportunities in an increasingly diversified labour market. The increase in work participation rate of men in Kerala is the result of increased employment opportunities (*ibid. 2005*).

But the picture changes when it comes to female work participation rates in Kerala. While the male work participation rates improved in the last two decades, female work participation rates declined during the same period. Comparing it with the all India pattern, while male work participation rate in Kerala is higher than India (1999-00), the trend is reversed in the case of women. This is paradoxical given the fact that, women in

Kerala are believed to enjoy a higher status in terms of educational and health achievements compared to their counter parts elsewhere in the country. But this is not reflected in their work participation rates. The study attempts to explain the reasons behind this phenomenon.

In India, female work participation rate has been showing a declining trend till 1980's and started increasing slowly. Going by the decadal census data¹, female work participation in India shows a slow increase in the last three decades. It increased from 19.7 percent in 1981 to 22.3 percent in 1991 and 25.7 percent in 2001. While majority of the states shows an increase in female work participation rate, it is only Kerala, Maharashtra and Assam that shows a decline in women's employment. Some states like Haryana, Punjab, Rajasthan and West Bengal shows substantiate improvement in female work participation between 1991 and 2001. Table 3.1 shows that female work participation rate in Kerala has been among the lowest in India. Currently while over a quarter of the female population is recorded as economically active at the all India level, the proportion is about 15 percent in the state. Kerala's rank among Indian states in terms of female work participation has come down from 10 in 1991 to 16 in 2001. In relation to all India, the urban situation in Kerala seems favourable. About 13.6 percent of women in urban Kerala are employed compared to 11.6 percent at the all India level.

¹ Census divides workers into main workers and marginal workers. If a person has worked for more than six months in the preceding year, he/she is treated as a Main worker. Marginal worker on the other hand is a person who has worked for some time but not for the major part of the year. The NSSO categorises workers into Principal and Subsidiary corresponding to the Main and Marginal workers respectively in the Census. The information provided by the NSSO is much broader than that of the Census. The definition of work itself is broader in the NSSO estimates and includes all market as well as non-market activities (such as for self consumption) as work. The NSSO thus covers a wide spectrum of women's activities and naturally gives higher estimates of female work participation than the Census estimates.

Table 3.2: State-wise Ranking according to Female Work Participation Rate in India (1981, 1991 & 2001)

States	Female Work Participation & Rank (2001)	Female Work Participation & Rank (1991)	Female Work Participation & Rank (1981)	
Andhra Pradesh	34.9 (2)	34.3 (1)	34.2 (1)	
Bihar	18.8 (12)	14.9 (10)	13.5 (10)	
Chhatisgarh	40.0 (1)	-	-	
Gujarat	28.0 (8)	25.9 (7)	20.7 (7)	
Uttar Pradesh	16.3 (15)	12.3 (11)	8.1 (12)	
Haryana	27.3 (9)	10.8 (13)	12.5 (11)	
Jharkhand 26.4 (1		-	-	
Karnataka 31.9 (6)		29.4 (5)	25.3 (5)	
Kerala	15.3 (16)	15.9 (9)	16.5 (9)	
Madhya Pradesh	33.1 (4)	32.7 (3)	30.6 (3)	
Maharashtra	32.6 (5)	33.1 (2)	30.7 (2)	
Orissa	24.6 (11)	20.8 (8)	19.8 (8)	
Punjab	18.7 (13)	4.4 (14)	6.2 (13)	
Rajasthan	33.5 (3)	27.4 (6)	21.1 (6)	
Tamil Nadu	31.3 (7)	29.9 (4)	26.5 (4)	
West Bengal	18.1 (14)	11.3 (12)	8.1 (12)	
India	25.7	22.3	19.7	

Source: Census of India 1981, 1991 & 2001

3.3 Changes in the sectoral distribution of the female work force: India and Kerala

Higher labour mobility in Kerala has taken two forms: greater movement away from agriculture to other sectors of economic activity within the state and larger scale migration from the State to the rest of India as well as to other parts of the world. As a result, the share of the primary sector in the total work force has fallen perceptibly over the period, to a lower level in fact than in most economies at comparable levels of per capita income (CDS 1975). However, this has been accompanied by only a marginal increase in the share of the secondary sector. The tertiary sector has shown the most rapid growth.

The available secondary data on employment suggest that the pattern of female employment in Kerala is different from the all India pattern. The most significant aspect of female employment in Kerala is the low proportion of women employed in the primary sector. In 1993-94, primary sector accounted for 85.2 percent of female employment in rural areas at the all India level as against 51.4 percent in Kerala. During 93-94 to 99-00, the share of the primary sector in female employment in rural Kerala declined from 51.4 percent to 46.3 percent. But at the all-India level the decline has been marginal, from 85.2 percent to 84.5 percent. The proportion of women employed in the

secondary sector in Kerala is much higher than the corresponding all-India figures for women.

Tertiary sector has also registered continuous growth in female employment in the nineties. In 99-00, the tertiary sector accounted for almost 25 and 56 percent of total women employment in rural and urban sectors in Kerala; while at all India level it declined for rural women from 12 percent to 6.7 percent and increased for urban women to 56.2 percent. Thus all India figure shows wide spatial difference in the tertiary sector employment of women compared to Kerala. A high percentage of women in employment in the tertiary sector is characteristic of the industrialised countries of the west. But the Kerala economy is by and large industrially backward. It is the predominance of women in public administration (24 %) in Kerala that leads to such a pattern.

Table 3.3: Sectoral Composition of Work Force in Kerala and India

	1993-94			1999-00				
	RM	RF	UM	UF	RM	RF	UM	UF
Primary	54.3	51.4	21.4	21.6	43.4	46.3	7.4	7.9
sector	(74.4)	(85.2)	(10.0)	(20.0)	(71.8)	(84.5)	(7.4)	(15.0)
Secondary	17.8	27.5	27.3	33.5	22.9	28.9	33.3	36.0
sector	(10.6)	(8.6)	(31.8)	(28.8)	(12.0)	(8.9)	(32.1)	(28.9)
Tertiary	27.9	21.1	51.3	44.9	33.6	24.9	59.3	56.1
sector	(14.8)	(12.1)	. (58.1)	(51.0)	(16.1)	(6.7)	(60.6)	(56.2)

Source: NSSO Employment & Unemployment Surveys Figures in parenthesis refers to all India figures

The above table clearly shows that structural transformation of women's economic activity have indeed taken place in the State with primary sector loosing its importance and tertiary sector taking up its place.

3.4 Changes in the Nature of Female Work Force

Changes have occurred not only in the sectoral composition of women work force but in the nature of the work also. The most significant change in the female work force in India has been its casualisation in rural areas. Casual employment of women has shown a consistent upward trend from 31.4 percent in 1987-88 to 36.2 percent in 1999-00. The percentage of casual workers is higher for females than males both in urban and rural areas. This shows the less advantageous position of women in Indian labour market that they tend to concentrate in low paid casual work. In Kerala, the process of

casualisation does not show a clear trend. It showed an upward trend in the first half of 1990's and came down in late 1990's. Both in India and Kerala, <u>majority of women are</u> found to be self-employed, though the trend is coming down in recent years.

Table 3.4: Employment Status of Work force in India and Kerala

	Self Employment			Regul	Regular Employment			Casual Employment		
	1987-88	1993-94	1999-00	1987-88	1993-94	1999-00	1987-88	1993-94	1999-00	
Rural	44.6	40.8	8.1	12.2	12.3	13.0	43.2	46.9	48.9	
Male	(58.6)	(57.7)	(55.0)	(10.0)	(8.5)	(8.8)	(31.4)	(33.8)	(36.2)	
Rural	57.7	55.0	53.0	9.4	9.7	15.0	32.9	35.3	32.0	
Female	(60.8)	(58.6)	(57.3)	(3.7)	(2.7)	(3.1)	(35.5)	(38.7)	(39.6)	
Urban	41.0	37.5	37.4	32.6	26.8	28.0	26.4	35.7	34.6	
Male	(41.7)	(41.7)	(41.5)	(43.7)	(42.2)	(41.7)	(14.6)	(16.1)	(16.8)	
Urban	51,.5	45.8	50.9	30.9	26.6	31.9	17.6	27.6	17.2	
Female	(47.1)	(44.8)	(45.3)	(27.5)	(29.2)	(33.3)	(25.4)	(26.0)	(21.4)	

Source: NSSO Employment and Unemployment survey Note: Figures in parenthesis gives the all India figures

Regular employment shows a wide spatial difference between rural and urban areas. Urban women seem to be in an advantageous position than rural women in cornering regular jobs. While only around 3 percent of women workers are in regular/salaried employment in rural areas in India, in urban areas there has been a pronounced increase of women workers in regular employment from about 27.5 percent in 1987-88 to 33 percent by the late 1990's. Unlike at all India level, in Kerala percentage of women workers outnumbers men in regular employment both in rural and urban areas. This shows the definite job preference of working women in Kerala in favour of regular/salaried employment. Within an overall context of low work participation rates, higher levels of literacy in Kerala have certainly enabled women to procure a higher share of regular employment due to its much higher share in rural areas compared to all India.

3.5 Trends in Unemployment

Industrial backwardness of the State, together with the limited scope for absorption of more workers in agriculture and the considerable dependence on salaried employment has led to large-scale and growing unemployment in Kerala (CDS 1975). The incidence of overall unemployment in Kerala is well over four times the national average for the last twenty-five years or so. The single factor of high unemployment

alone takes away much of the sheen that Kerala may legitimately claim in respect of a number of achievements in the area of human and social development. This single measure perhaps conveys the intensity of the problem of unemployment in Kerala with high human development indicators and an impressive growth record for the last fifteen years following a near economic stagnation for the similar period (HDR Kerala 2005).

Table 3.5: Incidence of Unemployment: Unemployed as a percentage of Labourforce (UPS)

Year	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1977-78	13.6	29.2	19.2	16.2	39.5	23.5	14.0	30.6	19.8
	(2.2)	(5.5)	(3.8)	(6.5)	(17.8)	(11.9)	(3.1)	(8.0)	(5.5)
1983	10.6	17.0	12.6	11.9	25.6	15.6	10.8	18.4	13.1
	(2.1)	(1.4)	(1.8)	(5.9)	(6.9)	(6.4)	(3.0)	(2.7)	(2.9)
1987-88	12.5	25.0	16.6	14.2	34.0	19.6	12.8	26.3	17.1
	(2.8)	(3.5)	(3.1)	(6.1)	(8.5)	(7.2)	(3.6)	(4.7)	(4.2)
1993-94	7.2	15.8	9.4	7.6	24.4	12	7.3	18.2	10.1
	(2.0)	(1.4)	(1.8)	(4.5)	(8.2)	(5.2)	(2.6)	(2.5)	(2.6)
1999-00	7.6	19.7	10.9	6.9	26.4	12.5	7.4	21.5	11.4
	(2.1)	(1.5)	(1.9)	(4.8)	(7.1)	(5.2)	(2.8)	(2.4)	(2.7)

Source: NSSO Employment & Unemployment Surveys Note: Figures in parenthesis gives the all India figures

This overall incidence is however not distributed equitably as between men and women. In fact it shows a sharp unequal distribution with women experiencing three to four times higher incidence than men do. This sharp gender difference is in contrast to the very low spatial difference. In general, urban unemployment is higher than rural. Urban women are the most affected in both Kerala and India with rural men as the least affected in Kerala. Thus while gender bias is more pronounced in the case of Kerala, it is the spatial bias that is more pronounced at the all India level.

Kerala has the highest female unemployment rates in the country according to various rounds of NSSO surveys on employment and unemployment. In 1999-00, female unemployment rate in Kerala was 23 percent. In Kerala, 19.7 percent of women in rural areas and 26.4 percent of women in urban areas are unemployed, which is far higher than the all India rate of 1.5 percent and 7.1 percent respectively. States like Maharashtra, Rajasthan, Madhya Pradesh, Gujarat and Karnataka experience only negligible levels of unemployment of around .02 to .03 percentage.

Nagaraj (1999) has argued that high unemployment rates for women in states such as Kerala vis-a-vis relatively backward states- UP, MP and Rajasthan- are largely due to constraints in 'skill utilisation': work seekers may not be willing to accept employment at the wages being offered. Over time this can result in discouraging women from entering the labour force preferring to remain primarily as housewives.

Unemployment rates also shows considerable spatial difference where incidence of unemployment is high for rural women in Kerala while in all India, urban women experience a higher unemployment.

Table 3.6 State-wise Usual Status Unemployment Rate (per 1000) by Sex and Residence in India (1999-2000 & 1993-94)

		Unemployment Rate								
States	R	ural		Į.	Jrban					
	Male	Female	Total	Male	Female	Total				
Andhra Pradesh	12 (10)	7 (5)	10 (8)	42 (35)	42 (43)	42 (3)				
Assam	47 (62)	119 (143)	57 (73)	91 (62)	223 (289)	113 (97)				
Bihar	24 (23)	6 (8)	20 (20)	76 (71)	94 (112)	79 (76)				
Gujarat	8 (15)	3 (5)	9 (12)	21 (33)	26 (62)	22 (37)				
Karnataka	10 (13)	3 (6)	8 (11)	30 (34)	47 (75)	34 (43)				
Kerala	76 (72)	197 (158)	108 (94)	69 (76)	264 (244)	125 (120)				
Madhya Pradesh	7 (8)	2 (2)	6 (6)	43 (57)	16 (46)	38 (55)				
Maharashtra	24 (17)	11 (7)	18 (12)	61 (46)	78 (58)	64 (49)				
Orissa	31 (26)	16 (17)	27 (24)	72 (73)	67 (78)	71 (74)				
Punjab	23 (14)	62 (71)	26 (18)	31 (33)	35 (86)	32 (38)				
Rajasthan	8 (4)	2 (2)	6 (4)	27 (20)	37 (8)	29 (18)				
Tamil Nadu	30 (27)	12 (13)	23 (21)	39 (49)	58 (84)	44 (59)				
Uttar Pradesh	13 (12)	6 (4)	12 (11)	45 (36)	46 (16)	45 (34)				
West Bengal	34 (28)	38 (46)	35 (30)	77 (77)	111 (196)	82 (96)				
India	21 (20)	15 (14)	19 (18)	48 (45)	71 (82)	52 (52)				

Source: Employment and Unemployment in India, NSS Report No. 455, 55th Round (July 1999-June 2000). Figures in the parenthesis give the 1993-94 figures

3.6 Educated Unemployment

Kerala stands in marked contrast to the rest of India in respect of a number of features of the unemployed population. One such feature is the high rate of unemployment among the educated labor force. But the contrast itself is the result of the structure of education in Kerala being widely different from that in other parts of the country. Apart from the characteristic performance of the primary school system, Kerala is also distinguished from other states by the difference in the structure of education at the other end of the pyramid, namely, higher education. Enrollment in higher education for girls in Kerala (3.3 per thousand population) is higher than all India level (2.9 per

thousand population) while for boys (1.9), it is less than all India average of 4.8 per thousand (Institute of Applied Man Power Research, 2000-01). Also percentage of women enrollment in higher education to total enrollment in higher education in Kerala (55.9%) is far higher than the corresponding all India figure of 37.7 percent (Annual Report 2000-01, UGC). The rapid expansion of higher education in the State and the consequent steady increase in the supply of graduates swell the reservoir of educated unemployed in the State. There are distinct job preferences as between educated and uneducated person. Preference for salaried employment and aversion to self-employment among educated jobseekers in Kerala were documented in a few recent studies (Mathew 1997, Devi 1996).

A state wise analysis of educated unemployment shows that Kerala ranks second after Assam in rural areas and first in urban areas. Almost half of educated women in rural areas of Kerala are unemployed whereas this is less than 10 percent for majority of the states. Other states which face the same problem of Kerala, but in less intensity, are Orissa, West Bengal, Punjab and Andhra Pradesh, which have unemployment rate above 15 percent.

Table 3.7 State-wise Educated Unemployment Rate (per 1000) in India (UPS) in 1999-00

States		Rural		Urban			
States	Male	Female	Total	Male	Female	Total	
Andhra Pradesh	72	150	84	61	145	72	
Assam	185	583	234	121	316	156	
Bihar	71	69	71	124	294	134	
Gujarat	14	3	13	27	52	30	
Karnataka	43	73	46	48	94	56	
Kerala	(150)	(491)	253	(99)	(419)	212	
Madhya Pradesh	42	92	46	58	73	59	
Maharashtra	70	72	70	68	117	75	
Orissa	162	419	183	140	286	156	
Punjab	48	215	60	47	64	49	
Rajasthan	21	32	22	36	79	40	
Tamil Nadu	106	149	113	51	148	70	
Uttar Pradesh	37	71	39	71	172	79	
West Bengal	110	379	130	98	292	121	
India	68	204	82	66	163	79	

Source: NSS Report No. 458: Employment and Unemployment Situation in India, 1999-2000

Another feature of unemployment in Kerala is the very high incidence of unemployment among educated women. When educational level are factored, women found themselves at a great disadvantage in the early eighties irrespective of their level of education. The situation at the end of the 1990's changed somewhat wherein women with higher qualifications experienced lower unemployment compared to less educated men and women. But still the unemployment rate among educated women in Kerala is almost four times than that of educated men.

Educated unemployment has a differential impact on women in rural and urban centres. Educated women in rural areas register substantially high rate of unemployment than their counterparts in urban areas. But the trend is opposite in the case of general unemployment where urban women register a higher unemployment rate than rural women. This shows the difference in the nature of jobs available to and preferred by educated and uneducated women. The fact that educated women have distinct job preferences has been well documented in a few recent studies (Mathew 1997, Devi 2002). This job preference partially explains the high incidence of educated unemployment of women among rural areas. The kind of jobs available in rural areas may not suit the job preference of educated women and they opt to remain unemployed.

Table 3.8: Unemployment Rate for the Educated (UPSS)

	Kei	ala	India		
	1993-94	1999-00	1993-94	1999-00	
Rural male	15.6	11.2	6.5	5.6	
Rural female	32.3	36.7	15.0	14.6	
Urban male	11.2	7.4	6.0	6.2	
Urban female	34.9.	34.2	18.2	14.3	

Source: NSSO Employment & Unemployment survey

The above analysis shows that the problem of unemployment in Kerala is basically one of educated unemployment. As will be evident from the next table, for those below the primary level of education, chronic unemployment is almost negligible, i.e. less than two percent for the last two decades. While it is around five percent among those with middle school education, the rate is not high enough to be characterised as very serious or alarming. In this category, urban women have the highest incidence of unemployment.

The incidence of unemployment tended to rise with educational attainment till it reached a peak for those who had completed just secondary level of education with rates well above 30 percent throughout the last two decades with women registering the highest incidence. This phenomenon is explained in part by the widened scope for vertical mobility and the resulting increase in the number of matriculates. Girls are 50 percent of total students at the secondary level, 60 percent of the total students at the degree level and around 70 percent in the post-graduate level (SPB 2003) leading to a higher supply of educated girls in the job-market.

But what is equally relevant is that employment opportunities for the educated do not seem to have been expanding at a rate fast enough to catch up with the increase in the numbers of educated (CDS 1975). As a consequence, the stock of the educated unemployed as a percentage of the annual flow of the category has increased over time. As educational attainments increase further, the unemployment rate comes down to well over 15 percent until the late nineties. But unemployment was still highest for the educated as a whole. And women experience three times higher incidence of unemployment than this category of educated men.

Table: 3.9: Unemployment rate in Kerala according to educational attainments

			(198	33	1		1993	3-94			1999	9-00	
		Ru	ıral		pan	Ru		Urk	an	Ru	ıral		oan
11		M	F	М	\ F	М	F	M	F	М	F	М	F
	Below Primary	1.3 ,	8.5	6.7	8.4	6.2	(2.1)	0.3	1 1	1.2	1.3	0.10	0.30
	Middle School	16.9.	(38.6)	19.8	52.4	20.7	(17.3)	35.5	26	37	20.9	44	20.3
	Secondary School	26.6	(50.5)	15.1	40.5	36.2	45	29.9 /	34.1	31	37.5	33.2	36.9
	Graduate & above	10.5	43.4	11.3	25.6	19.9	(20)	10	22	9.8	24.9	5.4	21.6

Source: NSSO Employment and Unemployment survey

Though Kerala has succeeded in providing education to its masses, lack of employment opportunities prevents people from reaping economic benefits from their educational achievement. The educational system in Kerala enables even the poor to acquire levels of education up to matriculation. Those who reach this level but cannot go beyond have to wait for a long time before being employed and the pay they ultimately receive is not very high compared to the earnings of unskilled labour (CDS 1975). Persistence of large scale chronic unemployment clearly demonstrate the limited role that

education can play as a catalyst for promoting social and economic equality, in the absence of adequate growth of employment opportunities all around.

3.7 Conclusion

Macro level data on employment and unemployment shows that wide divergence exists between male and female participation in economic activities. Our analysis shows that Kerala is an outlier in many aspects of female employment. It is clear that structural transformation of women's economic activity have indeed taken place in the State with primary sector loosing its importance and tertiary sector taking up its place. Yet reduction of employment among women have taken place in the process. By any reckoning the incidence of unemployment among the educated women is very high in Kerala. In the light of these factors we will look into the factors that cause unemployment among educated women in Kerala.

Chapter 4 Determinants of Women's Employment

4.1 Introduction

In this chapter an attempt is made to examine the specific problem of educated unemployment among women in Kerala. In the earlier chapter we have seen that unemployment among educated women in Kerala is the highest in India and is increasing. In this context we will examine the patterns and determinants of women's employment in the State and unravel the various issues involved in it.

This chapter mainly draws the analysis from the Centre for Development Studies survey on employment/unemployment conducted in three districts (Thiruvanathapuram, Ernakulam and Kannur) of Kerala. The survey has been administered along with Kerala Migration Survey 2003. The CDS employment/unemployment survey covered only those having educational qualification of SSLC or more, and belongs to the age group of 15-59 years¹.

The three districts covered in the survey represent the south, central and northern parts of Kerala thus capturing the differences in economic and social characteristics of the State. Work participation among the educated in these three districts combined together is 47.8 percent with male work participation at 70.5 percent and female work participation rate at 25.6 percent. Ernakulam district has the highest work participation rate with 55.2 percent followed by Kannur (47.9 %) and Thiruvanathapuram (41%). In terms of female work participation also Ernakulam tops the list (32.6 %) followed by Thiruvanathapuram (22.9 %) and Kannur (19.4%).

The study attempts to identify the factors that influence female labour force participation in the three districts of Kerala.

4.2 Employment Status of Educated labour Force

Work participation rates of males and females differ all over the world. Generally male work participation rate is found to be higher than female work participation rate. As we have noted in the third chapter, wide gender gap exists in work participation between

¹ The details about the survey can be found in Navaneetham and Kannan, 2004

males and females in India. But when it comes to unemployment rate this gap almost disappears. The situation is different for educated unemployment. The gap in unemployment rate for the educated labour force is higher than the gap in general unemployment rate (Table 3.7). The same pattern is observed in the CDS survey as well.

Table 4.1: Employment Status by Sex

	Male	Female	Total
Employed for	729	342	1071
Salary/wage	(49.5)	(22.7)	(36.0)
Self Employed	308	43	351
	(21.0)	(2.9)	(11.8)
Unemployed	433	1119	1552
	(29.5)	(74.4)	(52.2)
Total	1470	1504	2974

Source: Navaneetham and Kannan, 2004

In the sample data collected from three districts in Kerala, the work participation rate among the educated shows wide divergence between males and females. Educated work participation rate among females (25.6 %) is less than half of males' (70.5%). Among the unemployed, we have included those who are not actively seeking for job, as they are available and willing to work. This study seeks to investigate the likely explanations for such divergence in work participation rate between the two sexes.

It was observed in the CDS survey that more than half of the labour force is unemployed and a major chunk of them (74.4%) are women. Such high rate of unemployment among educated women is a cause of concern not only from development point of view but also from gender equity point of view. Large-scale unemployment among educated women is a wastage of labour power and human capital investment made on them. Moreover it reduces their mobility, tends to enhance women's dependence, making them economically vulnerable and hence weaken their bargaining position within the household and outside it.

4.3 Level of Education and Nature of female Employment

The data clearly shows the close association between nature of the job and level of education of women in the three districts. Majority of the casual women workers is from

the lowest education category, i.e. secondary level. Among the graduates and above, only 4 to 5 percent belongs to casual workers.

Those who have education of graduation and above, are found more in permanent jobs. While self employed jobs are dominated by secondary educated women, permanent jobs are dominated by professional degree holders and regular jobs by graduates.

More than half of employed women (50.4%) are in permanent jobs and another one-third in regular jobs. Casual workers consist only 6.8 percent of total women workers. Thus, it can be said that the process of casualisation, which is observed for less educated women, has not affected the educated women work force in these three districts of Kerala.

Table 4.2 Type of Female Employment by Level of Education

Educational		Type of Female Employment						
Qualification	Casual	Regular	Permanent	Self Employed	Total			
Secondary	15.4	28.2	30.8	25.6	20.3			
Higher Secondary	6.5	39.1	39.1	15.2	11.9			
Diploma	3.6	34.5	58.2	3.6	14.3			
Graduation	5.8	36.0	47.7	1.5	22.3			
Post Graduation	-	29.6	59.3	11.1	7.0			
Professional	4.3	25.8	67.7	2.2	24.2			
Total	6.8	31.7	50.4	11.2	100			

Source: CDS Employment & Unemployment Survey, 2003

Thus the overall picture that emerges from the data is that education is an important factor that determines the nature of job of women; any policy for improving the quality of life of women through economic capacity creation must, therefore, start with improvement in their educational attainments.

4.4. Gender Segregation of Jobs

Gender segregation of jobs and its perpetuation over time to the disadvantage of women workers has been a widely discussed issue in women's studies. Social, cultural, historical and economic factors all play a role in determining the pattern of occupational segregation.

In a recent study covering over 40 countries, sex dominated occupations have been defined as those were workers of one sex constitute more than 80 percent of the work force (Anker 1998). It is also found that women workers are employed in a narrower range of occupations while men are differentiated into a wider range of occupations, which lowers the scope for upward mobility of women.

A similar pattern of sex segregation of occupations is found in the three districts of Kerala. Among the seven occupational groups identified for salaried/wage-employed women, more than half of women are found in professional, technical and related category. Another 31 percent are in clerical and related jobs. Together they account for 82 percent of salaried/wage-employed women in these three districts. This shows that women are employed in a narrower range of occupations.

Table 4.3: Occupational Group of Salaried/Wage Employed by Sex

Occupational Group	Male	Female	Total
Professional, Technical & Related	46.6	53.4	100
·	(20.7)	(50.6)	(30.3)
Administrative, Executive &	80.7	19.3	100
Managerial	(6.3)	(3.2)	(5.3)
Clerical & Related	59.7	40.3	100
	(21.5)	(31.0)	(24.6)
Sales	76.3	23.7	100
	(8.0)	(5.3)	(7.1)
Service	88.0	12.0	100
	(10.0)	(2.9)	(7.7)
Farmers, Fishermen, Hunters,	88.6	11.4	100
Loggers & Related	(5.3)	(1.5)	(4.1)
Production & related, Transport	91.5	8.5	100
Equipment Operators & Laborers	(28.1)	(5.6)	(20.9)
Total	68.1	31.9	·
	(100)	(100)	100

Source: CDS Employment & Unemployment Survey, 2003

On the other hand, men have diversified into a wide range of jobs; top three categories of male dominated occupations, namely, production & related, transport equipment operators, labourers and clerical & related and professional, technical & related, consists of 28%, 21.5% and 20.7% of men respectively. Thus men are not found crowed in any category of occupation.

In terms of sex domination of occupations, men form more than 80 percent of work force in administrative, executive & managerial jobs, in service sector, and production related, transport equipment operators & labourers. Only in one occupation females outnumber males in work force i.e. professional, technical & related area.

Total work force also tends to concentrate in three main occupations viz., professional, technical & related (30.3 %) and clerical & related (24.6) and production & related, transport equipment operators & labourers (20.9). These three categories constitute 75 percent of total work force.

4.5. Underemployment of the Educated

Underemployment, which is defined as employment below one's educational qualification and training, reveals the mismatch between educational level and employment. The data shows that men experience more underemployment (35 %) than women do (21.8%), across all educational categories except higher secondary. This is plausible in the given situation of high unemployment among women, where most of the women who do not find suitable employment prefer to remain unemployed. But on the other hand, men are forced to take up any job irrespective of their educational qualifications as they are regarded as the main breadwinners in the family.

Table 4.4 Underemployment by Educational Qualification

Educational	Percentage of Underemployed				
Qualification	Male	Female			
Secondary	39.2	30.8			
Higher Secondary	29.9	34.8			
Diploma	43.5	14.5			
Graduation	31.5	20.9			
Post Graduation	43.8	22.2			
Professional	18.7	12.9			
Total	35.9	21.8			

Source: Navaneetham and Kannan, 2004

Among women, underemployment is found more among secondary educated women, while in the case of men, it is more among the postgraduates. For both men and women, underemployment is found least among professional degree holders. This indicates that professional education helps people to find jobs commensurate with their training. It is to be noted that diploma holders among men report a high degree of underemployment (43.5%) compared to 14.5% underemployment of women in the same category.

4.6 Preference for Job Location

So far we have seen the employed women's educational level and the pattern and nature of their employment. Now we will look into the problem of unemployment among the educated women.

Job preference plays an important role in determining the extent of unemployment among the educated. Type of work and place of work influence the individual preferences for jobs and this preference can be different for men and women. On account of their commitment to domestic duties and responsibilities, women may prefer to work at convenient place.

The gender aspects of the relationship between preference and unemployment have been given in table 4.5. It shows that 94.2 percent of women prefer to work at a convenient place and the corresponding figure for males is 69 percent. It suggests that men have grater mobility in terms of job search while women's choices are restricted to household premises. Frank and Chasin (1996) observed that preference for jobs near home (in other words, the lack of mobility of women in Kerala) is one of the major reasons for female unemployment in the State. This makes it difficult for women to find an appropriate job commensurate with their qualification and force them to remain unemployed. When women seek employment only in a limited geographical location, their chances of getting a job of their preference reduces. This acts as a disincentive for women to enter labour market.

Table 4.5: Preference for Job Location by Sex

Preference	Female	Male	Total
At Convenient Place	94.2	69.0	86.1
Outside India	5.2	19.3	9.7
Others	0.6	11.8	4.2
Total	67.6	32.4	100

Source: Navaneetham and Kannan 2004

People of Kerala have an inclination to migrate to other countries in search of jobs. Kerala has the highest proportion of population working outside the country (Zachariah, 2002). Survey data also reflects this pattern of job search among the educated unemployed in the three districts. Almost 10 percent of the unemployed expressed their desire to work outside India. But there is considerable gender difference

in this pattern of preference. While nearly 25 percent of males expressed their willingness to migrate for jobs only 5.2 percent of females are ready to migrate outside India for jobs. Women's inability to migrate puts them in a disadvantageous position in the labour market. It denies them access to the increased number of jobs available abroad and hence limits their employment opportunities.

Job preference of unemployed women shows that higher educational qualifications are associated with stronger job preference. Accordingly, 63 percent of professional women expressed their preference for a job commensurate with their qualification, while the figure was only 20 percent for women who are Higher Secondary and below. The pattern of job preference also reveals that those who have skill-oriented education have more preference for jobs. Thus, half of diploma holders report their preference for jobs as per their qualifications while 32 percent of postgraduates have no preference at all.

Table 4.6: Pattern of Job Preference of Unemployed Women

	Job Preference						
Educational Level	No Preference	Any Permanent/ Temporary job	Job as per Qualification				
Secondary and higher Secondary	35.9	43.9	20.2				
Diploma	25.6	23.1	51.3				
Graduate	. 25.5	35.9	38.5				
Post Graduate	31.8	25.0	43.2				
Professional	14.3	22.9	62.9				
Total	31.9	39.2	28.9				

Source: CDS Employment/Unemployment Survey, 2003

Thus it becomes clear that lack of enough suitable employment opportunities along with aspiration for job of specific characteristics, has been fuelling the problem of unemployment among educated women in Kerala.

4.7 Voluntary Unemployment among the Educated Women

Among the unemployed, 10.7 percent are not actively seeking for job due to several reasons. Women form a considerable proportion of this voluntary unemployed people. They form 67.6 percent of total people who reported as 'not actively seeking employment'.

Table 4.7: Reasons for Not Seeking Job by Sex

	Female	Male	Total
Sick	0.4	14.7	1.9
Difficulty to get a Job	92.6	64.7	89.6
Not Interested	3.2	5.9	3.5
Others	3.9	14.7	5.0
Total	89.3	10.7	100

Source: CDS Employment/Unemployment Survey, 2003

'Difficulty to get a job' has been sited by 89 percent of unemployed, as the most important reason for not seeking a job. Data shows that women find it more difficult to get a job than men. Out of total women who reported as 'not actively seeking job', 92.6 percent of them sited 'difficulty to get a job' as the reason for not seeking employment while 64.7 percent of men sited the same reason. It shows that acute unemployment situation in the State discourages people from looking for a job. These will be the people who have searched for a job for a long time and gave it up. Lack of employment opportunities thus emerges as the main factor that causes voluntary unemployment among the educated labour force.

But it needs to be stressed here that strong job preference of the educated in terms of location and type of job might make it difficult for them to find a job. One third of the educated unemployed look for jobs commensurate with their educational qualification and 86 percent of them want a job at a convenient place. These conditions make it difficult to find a job. In the case of women, these job preferences become much more restrictive because of their commitment to domestic responsibilities. Thus it emerges that, what is difficult is not to find a job, but to find a job of one's preference. Several studies on educated unemployed have reported the existence of strong job preference among the educated as the main factor that causes educated unemployment (Mathew 1997, Mukherjee 1994). Findings of this study also lead us to the same conclusion.

In the next section we will focus on the factors that influence the labour market entry of women. Both individual level and household level characteristics are taken into consideration for explaining the observed difference in work participation of women.

4.8. Individual Factors Influencing Female Labour Force Participation

The study takes into account certain individual characteristics like educational achievement, age, place of residence and religion for analysing female work force participation. The study attempts to investigate how these factors influence women's employment.

4.8.1 Educational Level and Employment Status

The studies on education and female work participation have reported a U shaped relationship between the two variables (Goldin 1995). As we have seen in the third chapter, same pattern is visible in Kerala also. Educated women represents the upward rising part of the curve. As the table below shows, only 14 percent of women with secondary or higher secondary education are employed compared to 35 percent employment among postgraduates. We see a phenomenal increase in employment level as the level of education increases beyond graduation. This highlights the role of higher education in improving the job prospects of women. As the data shows, highest employment is registered among women with professional degree and diploma. The data indicates higher incidence of unemployment among women with general education. Even among the graduates and postgraduate women, 73 percent and 65 percent are unemployed shows the severity of educated unemployment among women. This shows the importance of job oriented education in improving the employability of women. The recent surge in demand for professional education should be viewed in this context.

On the contrary, among men, difference in educational qualification does not reflect much in their employment rate compared to that of women. Overall, the difference in unemployment rates between women and men are as high as 45 percent.

Table 4.8: Employment status by Educational Level and Sex

	Male		Female			
	Employed	Unemployed	Total	Employed	Unemployed	Total
Secondary	75.0	25.0	38.9	14.2	85.8	36.6
Higher Secondary	49.4	50.6	16.1	14.1	85.9	21.7
Diploma	72.7	27.3	15.7	54.5	45.5	6.7
Graduation	72.4	27.6	17.3	27.0	73.0	21.1
Post Graduation	76.2	23.8	4.3	35.1	64.9	5.1
Professional	80.5	19.5	7.7	71.0	29.0	8.7
Total	70.5	29.5	100	25.6	74.4	100

Source: Navaneetham and Kannan 2004

A better understanding of the nature of the relationship between female employment and education is provided by the data on type of employment by level of education in Table 4.2.

4.8.2 Age and Work Participation

Work participation varies by age group for both males and females. As the age level goes up, employment rate increases. This trend is visible irrespective of gender. Thus while the unemployment rate in the lowest age group, 15-19, is 97.5 percent for women, it comes down to 51.4 percent for the highest age group of 40-59. Thus it can be concluded that age and work participation are inversely related.

Table 4.9 Employment Status by Age and Sex

Age group	Emplo	oyed	Unemployed		Total	
	Female	male	Female	Male	female	male
15-19	2.5	14.0	97.5	86.0	7.9	6.3
20-24	16.5	36.9	83.6	63.0	20.6	18.2
25-29	21.5	70.4	78.5	29.6	24.7	17.2
30-34	27.9	82.5	72.1	17.5	15.0	16.7
35-39	25.7	88.1	74.4	11.9	12.7	13.1
40-59	48.6	89.7	51.4	10.3	19.0	28.4
Total	25.6	70.5	74.4	29.5	100	100

Source: Navaneetham and Kannan 2004

A drastic decline in unemployment rate among women is observed between the age groups of 35 - 39 and 40 - 59. While 74.4 percent of women between the age of 35-39 are unemployed, it comes down to 51.4 percent for 40-59 age group. Here life cycle seems to play an important role. After forty, women become relatively free of child care responsibilities as their children grow up. This encourages them to look for work outside their home. Thus it shows that domestication of women, i.e., restricting women to household duties and child care as their primary responsibility, is the main factor that prevents women from participating in paid work. This kind of gender division of labour which gives primacy to women's domestic role in terms of house work and child care and defines men as the bread winners, leads to discrimination against women in the non-domestic sphere, mainly in employment. When society keeps the burden of unpaid housework on women, it weakens their commitment to market work, which is reflected in the low female work participation rates, especially in the prime age group. Thus the solution lies in providing alternative arrangement for childcare and promoting equal

sharing of household responsibilities between both gender, which requires a change in gender relations within the society.

4.8.3 Place of Residence

Place of residence has a strong bearing on labour force participation of both men and women. Interestingly it has a differential impact on work participation of both sexes. While Thiruvanathapuram districts reports highest unemployment rate for men, women face highest unemployment in Kannur district. The factors that increase unemployment rate of men in Thiruvananthapuram and women in Kannur can be different. These three districts belong to three different parts of the State and hence local level factors like nature of work available and socio-economic conditions can influence such differences in unemployment levels.

Table 4.10: Employment Status by District and Sex

	Female Employment Status (percentage)					
	Thiruvanathapuram	Ernakulam	Kannur	Total		
Employed	22.9	32.6	19.4	25.6		
Unemployed	77.1	67.4	80.6	74.4		
Total	43.9	35.2	20.9	100		

Source: Navaneetham and Kannan, 2004

Ernakulam records highest work participation rate (55 %) among the three districts followed by Kannur (47.9%) and Thiruvanathapuram (41%). Female work participation is highest in Ernakulam (32.6%) followed by Thiruvanathapuram (22.9%) and Kannur (19.4%). Thus Ernakulam emerges as the district that offers largest employment opportunities to women. This can be because of the relatively better industrial and commercial development of Ernakulam compared to other two districts. Also Ernakulam records the highest proportion of urban population in Kerala. Increased urbanization and higher industrial development results in higher work participation. This brings out the crucial role of economic development in improving employment situation in the State.

Among the three districts, Kannur shows highest unemployment rate (80.6%) for women. The fact that more than 80 percent of women in Kannur are unemployed raises serious questions regarding the pattern of development that excludes women from economic activity.

4.8.4 Work Participation by Marital Status

Marital status has a significant role in determining women's employment. It can influence women's decision to participate in the labour force in many ways. Husband's lower economic position may compel a married woman to take up employment to supplement family income; or higher socio-economic status of the husband may discourage or promote wife's employment due to several social and cultural factors.

Empirical studies in the West have demonstrated that married women are less likely to enter the labour force than single women. This is because for married women, work at home constitute a major activity and home and child care responsibilities demand a substantial amount of mothers' and wives' time which otherwise could be spend on gainful activities.

Table 4.11: Labour force structure by marital status

		Never married	Married	Wid./div./sep.
Employed	Male	47.2	88.9	80.0
	Female	23.1	25.4	52.9
Unemployed	M ale	52.8	11.1	20.0
	Female	76.9	74.6	47.1
Total	Male	43.7	56.0	0.3
	Female	23.8	74.0	2.3

Source: Navaneetham and Kannan, 2004

Labour force structure by marital status does not show much difference for married and unmarried women. But in the case of widowed/divorced/separated women, employment rate is high (52.9%) as sheer economic necessity forces them to find work.

Men and women show considerable difference in employment level by marital status. The table indicates that around 88.9 percent of the married males are employed while more than half of the unmarried men are unemployed. Thus marriage forces men to find jobs, while this pressure is not much for women.

4.9. Household Characteristics Influencing Women's Employment

Along with individual characteristics, household characteristics also influence women's labour market outcomes. Household characteristics like economic status, husband's education and employment level are used in this study to explain variations in female work participation.

4.9.1 Economic Status

The economic status of the household reckoned in terms of type of houses is found to be an important variable that affects female labour force participation. The economic status has been measured by taking the type of house of the household. The house, which has 'luxurious' and 'very good' condition, has been classified as high economic status, house, which has a 'good' condition, has been classified as medium and house, which has in 'poor' condition or 'kutcha', has been classified as low economic status (Navaneetham & Kannan, 2004). Though this won't give an accurate picture of the economic status of the household, in the absence of household income it becomes the second best criterion for determining the economic status.

More than half of women (53.5 %) in the three districts belong to medium economic status households, while only 10.6 percent of women belong to low economic status households. High economic status households form 36.0 percent of the sample. The female work participation on the basis of economic status shows certain interesting characteristics. Contrary to the general trend, female labour force participation appears to be higher for high economic status households than medium or low economic status households. Unemployment rate among the educated women is the lowest (67.1 %) in high economic status households while medium and low economic status households do not show much difference in female labour force participation.

Table 4.12: Female Employment by Economic Status

		Economic Status	3
	High	Medium	Low
Employed	32.9	21.1	23.3
Unemployed	67.1	78.9	76.7
Total	36.0	53.5	10.6

Source: Navaneetham and Kannan, 2004

High economic participation of women belonging to high economic status households can be explained using the human capital investment theory. As Table 4.13 shows, majority of the women in high economic status households has professional education. As we have seen earlier, employment level is highest for professionals. On the other hand women from low economic status are found least among diploma holders and professional women. Also, more than half of employed women are in permanent jobs.

This consists mainly of government and organised private sector jobs, which requires relatively higher levels of education. Women from the low economic status households with low educational achievement find it difficult to acquire such jobs and hence they end up as unemployed. This is further strengthened by the fact that, highest levels of unemployment (86 %) are found in lowest educational category.

Table 4.13: Education by Economic Status of Females

	Economic Status			
ļ	High	High Medium		
Secondary	8.4	30.8	29.7	
Higher Secondary	7.8	14.8	18.9	
Diploma	15.1	14.8	8.1	
Graduation	23.5	20.7	24.3	
Post Graduation	10.1	4.1	5.4	
Professional	35.2	14.8	13.5	
Total	46.50	43.90	9.61	

4.9.2 Husband's Education and Employment

Husband's education level seems to exert a significant influence on women's work participation. Out of 1105 married women, information about husband's education and employment are available only for 499 women as the survey includes only educated labour force in the working age group. The cross table showing the relationship between husband's education and employment level and women's employment for this 499 married women are given in the following tables.

Table 4.14: Female Employment by Husband's Education

Educational	Unemployed	Employed	Total
Level			
of Husband			
Secondary	77.4	22.6	31.1
Higher Secondary	70.0	30.0	12.0
Diploma	74.3	25.7	14.8
Graduate	59.5	40.5	24.2
Post Graduate	69.4	30.6	7.2
Professional	56.6	43.4	10.6
Total	68.9	31.1	100

Source: CDS Employment/Unemployment Survey, 2003

As the education level of the husband increases, women's employment rate also increases. Women whose husbands have only secondary level education register highest level of unemployment (77.4%). The positive correlation between husband's education level and women's employment may be because of the correlation between wife's and husband's educational achievement. The impact of husband's education on female employment comes *via* women's education.

Nature of husband's employment and women's work participation seems to have a close relationship. Husband's job is classified into three categories, high (which includes government, aided, semi-government and organized private sector jobs), medium (which includes self-employed husband as majority of self employed men belong to medium economic status households) and low (which includes agricultural workers, non-agricultural workers, casual labourers and unemployed).

Table 4.15: Female Employment by Husband's Employment

Nature of Husband's Employment	Unemployed	Employed	Total
High	59.4	40.6	49.9
Medium	75.9	24.1	29.1
Low	81.9	18.1	21.0
Total	68.9	31.1	100

Source: CDS Employment/Unemployment Survey, 2003

Half of married men belong to high employment category and 29 percent belong to self-employed category and 21 percent to low employment category. It is clear from the table that higher nature of husband's work has a positive association with women's employment. Almost 41 percent of women whose husbands are working in high category jobs are employed. This is to be compared with the 25.6 percent of female unemployment in the whole sample.

One probable explanation for this phenomenon is based on education factor. The correlation that exists between high level of employment and high economic status explains some part of this relationship. As women from high economic status households will be relatively better educated, their job prospects also increases. It is surprising to find that even the low employment level of husband does not make woman work to supplement the family income.

4.10. Determinants of Female Labour Force Participation – A Multivariate Logistic Regression Analysis

An attempt is made in this section to determine the factors that affect female labour force participation using a multivariate logistic regression analysis. Educational level, family background and economic status of the household provide the context within which decisions are made regarding female employment. Both individual characteristics and household characteristics influence women's participation in paid work. The extent of influence of these variables is examined here using multivariate logistic regression analysis.

4.10.1 Logistic Regression Model

Logistic regression features a qualitative dependant variable, which is dichotomous in nature and explanatory variables. Logistic regression model is useful when the dependant variable takes only two values, '0' and '1'. The distinctive feature of this type of modelling is that it seeks to investigate how the probability of a particular characteristic being present (here women's employment) varies with circumstances as depicted by the explanatory variables. To assess such changes in probabilities we use the logarithms of odds ratio in favour of this particular characteristic (Mukherjee et al 1998).

In logistic regression we are dealing with a qualitative dependant variable, Y_i , which equals 1 when a particular characteristic is present in observation I (I = 1....n), or zero otherwise. Our interest is to predict the conditional probability, P_i , that Y_i equals 1 for given values of the explanatory variables. We assume that the logit, L_i , is a linear function of the explanatory variables.

A multivariate logistic regression model takes the following form:

$$L_{i} = \beta_{1} + \beta_{2}X_{2i} + \dots + \beta_{k}X_{ki}$$
 (1)

$$P_i = \frac{1}{1 + e^{L_i}} \tag{2}$$

where,

 β_1 , β_2 β_k are the coefficients and

 X_{2i} , X_{3i} X_{ki} are the independent variables.

Our interest is to estimate the unknown coefficients, β_i , of the probability model (1). Coefficients are estimated using maximum likelihood method. Once we obtain such estimates we can calculate the predicted logits from equation (1) and use equation (2) to obtain the predicted probabilities that $Y_i = 1$ for the given X_i values.

Since we are dealing with a binary dependant variable, P_i is the probability that $Y_i = 1$ and hence, $(1-P_i)$ is the probability that $Y_i = 0$.

 P_i / 1- P_i is the odd ratio, which is basically the ratio of the probability that an event will occur to the probability that it will not occur. Each coefficient (apart from the constant term) depicts the change in the predicted logit as a result of a unit change in the corresponding explanatory variable, other things being equal².

4.10.2 Dependant Variable

The dependant variable takes the following form:

 $Y_i = 0$, if woman is unemployed

= 1, if woman is employed

4.10.3 Independent Variable

The independent variables are classified into two, individual characteristics and household characteristics. All these explanatory variables can influence women's employment status considerably.

I Individual characteristics

1. Education

 $X_1 = 0$, if woman is higher secondary and below.

= 1, if woman has diploma

= 2, if woman is a graduate

= 3, if woman is post graduate

² For details see Mukherjee et el, Econometrics and Data Analysis for Developing Countries, Routledge, 1998

= 4, if woman has professional education

2. Age

- $X_2 = 0$, if woman is between the age of 15 24
 - = 1, if woman is between the age of 25 39
 - = 2, if woman is between the age of 40 59

3. Marital status

- $X_3 = 0$, if woman is married
 - = 1, if otherwise

4. Religion

- $X_4 = 0$, if woman is a Muslim
 - = 1, if woman is a Hindu
 - = 2, if woman is a Christian

5. Place of Residence

- $X_5 = 0$, if woman is from Kannur
 - = 1, if woman is from Ernakulam
 - = 2, if woman is from Thiruvanathapuram

II Household Characteristics

1. Economic Status

- $X_6 = 0$, if woman belongs to high economic status household
 - = 1, if woman belongs to medium economic status household
 - = 2, if woman belongs to low economic status household

2. Husband's Employment

 $X_7 = 0$, if husband's employment is high status

- = 1, if husband's employment is medium status
- = 2, if husband's employment is low status

3. Husband's Education

 $X_8 = 0$, if husband is higher secondary or below

- = 1, if husband is graduate or post graduate
- = 2, if husband has professional education

Two models are estimated, first model excludes two independent variables, husband's education and employment and second model excludes marital status. First model includes all observations and second model includes 499 married women whose information about husband's education and employment are available.

The regression results show that, of the six variables included in the model, five turned out to be significant in determining women's work participation. They are education, age, marital status, place of residence and economic status.

A variable, which is found to have a strong influence on female labour force participation, is women's educational level. All the four categories of education turned out to be quite significant. The odds ratio shows that compared to women with higher secondary and below education, women with diploma and professional education have six and eighteen times more probability respectively, to be employed. It is to be noted that graduate and postgraduate are less likely to be employed compared to diploma holders. This shows the importance of skill oriented education in improving the employability of women.

Table 4.16 Results of Logistic Regression Model

	Mode	1 1	Model 2		
Variables	Odd Ratios	S.E.	Odd Ratios	S.E.	
Level of Education					
H. S. & Below®	1.00	-	1.00	-	
Diploma	6.15	0.25 **	4.54	0.43**	
Graduate	2.54	0.18**	2.13	0.31	
Post Graduate	3.83	0.29**	4.67	0.47**	
Professional	18.63	0.24**	19.53	0.42**	
Age Group	<u> </u>				
Age 15-24®	1.00	-	1.00	-	
Age 25-39	3.54	0.22**	1.24	0.42	
Age 40-59	12.97	0.25**	6.35	0.44**	
Marital Status			·		
Married®	1.00	-	- 1	-	
Single	2.79	0.20**		•	
Religion					
Muslim®	1.00	-	1.00	-	
Hindu	1.32	0.28	0.80	0.53	
Christian	1.49	0.297	1.17	0.56	
Place of Residence					
Kannur®	1.00	-	1.00	_	
Ernakulam	1.91	0.21**	1.40	0.41	
Thiruvanathapuram	0.96	0.21	1.13	0.40	
Economic Status		<u> </u>			
High®	1.00	-	1.00	-	
Medium	0.98	0.16	0.81	0.26	
Low	1.86	0.25*	5.96	0.53**	
Husband's Education					
Low®	_	-	1.00	-	
Medium	-	-	1.13	0.29	
High	-	-	0.70	0.44	
Husband's Employment					
High®	-	-	1.00	-	
Medium	-	-	0.53	0.29*	
Low	-	-	0.40	0.36**	
Constant	0.02	0.40**	0.11	0.79**	
Number of Observations	149)4	499	9	
-2 Log Likelihood	1316.58		462.63		
Model Chi Square	379.	95	155.	73	

^{® -} Reference category ** p < 0.01, * p < 0.05

Age turned out to be an important factor determining the employment status of educated women. As the age increases, women's work participation also increases. Women in the age group of 40 - 59 have thirteen times more probability to work than women in the age group of 15 - 24. This is an interesting result, which shows the important role life cycle plays in the employment decision of women.

Another factor found significant in the regression analysis is marital status. It shows that, single women have two times more probability than married women to have employment while controlling other characteristics. Religion does not exert any influence on women's employment as the coefficient of religion turned out to be insignificant.

Place of residence seems to exert an influence on women's employment. Women in Ernakulam district are two times more likely to be in the work force than women belonging to Kannur district. It shows that employment opportunity in the place matter for women's employment. Ernakulam is an industrially and commercially more developed district in Kerala. This is reflected in the over all work participation rate also. Ernakulam records the highest work participation for both males and females (76 % and 32.6 % respectively) among the three districts.

The coefficient of economic status shows the nature of relationship between economic status and women's employment. It is found to be significant for women belonging to low economic status households. It shows that women from poor family are more likely to work than women from rich family. This is because women are forced to take up employment to supplement family income. The positive relationship between women's work participation and low economic status was due to the influence of education.

The second logistic regression model was attempted to explain the work participation of married women as they form 73 percent of the total women. This model incorporates husband's education and employment as independent variables for explaining married women's work participation.

Out of 1105 married women, information about husband's education and employment are available only for 499 women. A logistic regression is run using seven

independent variables for these 499 women. Results of the model changes with regard to some variables.

Husband's employment turned out to be a significant variable in determining women's work participation. Level of husband's employment seems to have an impact upon women's employment prospects. An odds ratio less than one shows that, women whose husbands are employed at medium or low nature of work are less likely to enter into work force compared to the high employment status of the husband. Odds ratio decreases with corresponding fall in the level of husband's employment. Thus it can be concluded that women's employment has a significant and positive association with nature of husband's work.

Unlike husband's work, husband's education level is not significant in influencing women's employment, while controlling other characteristics.

It is interesting to note that in the case of married women, economic status plays a crucial role in determining their employment status. Married women from poor family are six times more likely to work. It shows that family obligations forces married women to opt for market work.

10.11 Conclusion

In this chapter we have attempted to examine the patterns and determinants of educated unemployment among women in Kerala. The analysis shows that women are employed in a narrower range of occupations and only highly educated women are able to acquire these jobs. It also reveals the mismatch between educational qualification and employment with men experiencing more underemployment than women. Strong job preferences among the educated seem to play an important role in determining the extent of unemployment among them. Also women find it more difficult to get jobs, which results in higher voluntary unemployment among them.

The logistic regression results indicate that women's work participation is dependent on many factors. Among them, education and age turned out to be the most important factors influencing women's entry into labour market. The model clearly shows that higher levels of education are associated with higher rates of employment.

The influence of education is quite pronounced in the case of diploma and professional education, which are basically skill oriented.

The likelihood of educated women being employed improves with age. Women in the age group of 40-59 have the highest probability to be employed compared to young women. It is apparent from the model that religion does not make any impact on women's employment. Place of residence and economic status partially explains differences in women's work participation. Within districts, Ernakulam turned out to be significant and within economic status, low economic status became significant in determining women's work participation.

In the case of married women husband's education and employment seems to effect women's employment in different ways. While husband's education becomes insignificant in explaining women's work participation, husband's employment level appears to influence women's employment. Higher status of husband's employment is associated with higher levels of female employment.

Chapter 5

Summary and Conclusion

In the context of female labour force participation, it has been generally hypothesized that economic growth and education increases female labour force participation. In Kerala, where economic growth is higher than all India and where women are relatively more educated, experience a lower female work participation and high unemployment, especially among the educated women. This is contradictory for a State, which ranks first in Human Development Index and Gender Empowerment Index among all Indian States. This study tries to explain the factors that lead to such a contradiction.

Women's employment is considered crucial in determining their status and well being in the society. Women's economic power relative to that of men is posited as the most important dependent variable affecting gender relations at the household level. Work opportunities outside home reduce the economic dependence of women on men and in turn, increase her economic command within the family. In this context, women's education is expected to improve the competitive power of women in the labour market and expand their horizons in search for better economic conditions.

Existing studies on gender and employment points out to the fact that gender division of labour which gives primacy to women's domestic role in terms of housework and child care and defines men as the bread winners, is closely linked with other forms of discrimination against women in the non-domestic sphere, critical within which are education and employment. Theory of household economics explains women's work participation as a choice between market work, unpaid housework and leisure. Thus, it was emphasized that analysis of female labour force participation should take place within the context of the family or household. The decision of a women, unlike that of a man to, to participate in the work force depends upon the decision of the family. It depends upon their individual and household characteristics and other intervening variables. This study aims at identifying those variables, which influence women's entry into labour market.

Macro level data on employment and unemployment shows that wide divergence exists between male and female participation in economic activities. The State wise

analysis of female work participation shows that Kerala is an outlier in many aspects of female employment. Female work participation rate in Kerala has been among the lowest in India. While majority of the States shows an increase in female work participation rate, it is only Kerala, Maharashtra and Assam that shows a decline in women's work participation. In Kerala while the male work participation rates improved in the last two decades, female work participation rates declined during the same period. From the sectoral distribution of female work force it is clear that structural transformation of women's economic activity have indeed taken place in the State with primary sector loosing its importance and tertiary sector taking up its place. A comparison of unemployment situation in major States in India also shows that Kerala has the highest female unemployment rate in the country. While gender bias is more pronounced in the case of Kerala, it is the spatial bias that is more pronounced at the all India level.

In the next section we focus on the specific problem of educated unemployment among women in Kerala. The study is based on Centre for development Studies data on Employment and Unemployment 2003 collected from Thiruvananthapuram, Ernakulam and Kannur districts of Kerala. Survey was conducted only among the educated labour force (with secondary and above education) in the age group of 15 – 59 years. The major objective of the survey was to seek quantitative and qualitative information on educated employment and unemployment situation in Kerala. The sample area represents the south, central and northern parts of Kerala thus capturing the differences in economic and social characteristics of the State.

The study uses multi-variate logistic regression analysis to determine the factors that influence female labour force participation. The study uses both individual characteristics – level of education, age, marital status, religion, place of residence – and household characteristics – economic status, husband's education and employment – for the analysis.

The study is mainly concerned with the problems of educated unemployment among women in Kerala. In the data, we have found that 74.4 percent of educated women are unemployed. Among the employed women, 88.8 percent are employed for salary/wage and 11.2 are self-employed. Employed women are found to be crowded in a narrower range of jobs. Among the salaried/wage-employed women, 81 percent are employed in professional and clerical related jobs. This shows the strong job preference

that exists among educated women in Kerala. Such strong job preferences act as a cause of unemployment among educated job seekers. In this context it is relevant to mention that 94 percent of unemployed women wanted a job at a convenient place. Thus immobility of women makes it difficult for them to find a job commensurate with their qualifications.

The CDS survey finds that men experience more underemployment than women do. This is plausible in the given situation of high unemployment among women, where most of the women who do not find suitable jobs prefer to remain unemployed. Among women, underemployment is found more among secondary educated women, while in the case of men, it is more among the postgraduates. For both men and women, underemployment is found least among professional degree holders. This indicates that professional education helps people to find jobs commensurate with their training (Navaneetham and Kannan, 2004).

Among the unemployed women, 25 percent are not actively seeking for job. Study shows that women find it more difficult to get a job than men. It shows that acute unemployment situation in the State discourages women from looking for a job.

The study clearly brings out the close association between nature of the job and level of education of women in the three districts. Majority of the casual women workers is from the lowest education category, while those who have education of graduation and above, are found more in permanent jobs. More than half of employed women (50.4%) are in permanent jobs and another one-third in regular jobs. The study also finds that the process of casualisation, which is observed for less educated women, has not affected the educated women work force in these three districts of Kerala.

The study looks into both individual and household characteristics that determine women's work participation. Among the individual characteristics, education seems to play an important role in helping women-to-find employment. The relationship between education level and employment status reveals many interesting facts. Female employment by education level shows that the incidence of unemployment is higher among women with lower educational qualifications. Unemployment level among the secondary and higher secondary educated women are as high as 86 percent. As the educational level increases beyond higher secondary, unemployment rates comes down.

(2) (i)

As the data shows, highest employment is registered among women with professional degree and diploma. This shows the importance of job-oriented education in improving the employability of women.

Another important factor, which is closely associated with women's employment, is their age. Age specific work participation reveals that educated unemployment is chronic among young women. As the age level goes up, unemployment rate decreases. A drastic decline in unemployment rate among women is observed between the age groups of 35 - 39 and 40 - 59. While 74.4 percent of women between the age of 35-39 are unemployed, it comes down to 51.4 percent for 40-59 age group.

The study finds that work participation of married women is higher than unmarried women. But in the case of widows, separated and divorced women, work participation is higher than other two categories. It is evident that economic compulsion forces them to find employment. Place of residence also explains women's decision to participate in the work force. Among the three districts studied, Ernakulam and Kannur report highest and lowest work participation respectively.

An attempt has been made to see whether women's work participation registers any marked variation across different religion. It shows that Christians have the highest (31.4%) and Muslims have the lowest (14.1%) work participation rates.

Husband's education level and employment seems to exert some influence on women's work participation. As the education level of the husband increases, women's employment rate also increases. Study also finds that higher nature of husband's work has a positive association with women's employment. Almost 41 percent of women, whose husbands are working in high category jobs, are employed. This is to be compared with the 25.6 percent of female employment in the whole sample.

The study reveals some interesting facts about the relationship that exists between economic status and female work participation. A comparative appraisal reveals that women from high economic status have relatively higher work participation than women from middle or low economic status. This may be due to their higher educational achievement. More than half of the women in the sample belong to medium economic status. Only 10.6 percent of total women belong to low economic status and among them 23 percent are employed. It shows poor women's representation among the employed

women is more than their proportion in the sample. It means that poor women are more likely to join the work force than rich or middle class women. Thus economic compulsion makes women to participate more in work force.

The study used Multivariate logistic regression analysis to identify the major determinants of female labour force participation in Kerala. Two regression models have been employed to examine the effect of individual and household characteristics on women's employment. In the first model, six variables (education, age, place of residence, religion, economic status and marital status) are used as independent variables to explain women's work participation. The regression results show that, of the six variables included in the model, five turned out to be significant in determining women's work participation namely education, age, marital status, place of residence and economic status.

All the four categories of education turned out to be quite significant. The odds ratio shows that compared to women with higher secondary and below education, women with diploma and professional education have six and eighteen times more probability respectively, to be employed. Overall it shows that higher education improves the employability of women.

Age turned out to be an important factor determining the employment status of educated women. As the age increases, women's work participation also increases. Women in the age group of 40 - 59 have thirteen times more probability to work than women in the age group of 15 - 24.

Another factor found significant in the regression analysis is marital status. It shows that, single women have two times more probability than married women to have employment while controlling other characteristics. Religion does not come out as a significant variable in our analysis. Place of residence seems to exert an influence on women's employment. Women in Ernakulam district are two times more likely to be in the work force than women belonging to Kannur district.

The multivariate regression analysis also brings out the close relationship between economic status and women's employment. The coefficient of economic status is found to be significant for women belonging to low economic status households. It shows that economic compulsion makes women to participate more in the work force.

The second regression model incorporates husband's education and employment as independent variables for explaining married women's work participation. Husband's employment turned out to be a significant variable in determining women's work participation. An odds ratio less than one for medium and low status of husband's work shows that, women whose husbands are employed at medium or low nature of work are having low probability in entering into work force compared to women whose husbands are employed at high nature of work. Odds ratio decreases with corresponding fall in the level of husband's employment. Thus it can be concluded that higher nature of husband's work has a significant and positive association with women's employment.

It is interesting to note that in the case of married women, economic status plays a crucial role in determining their employment status. Married women from poor family are six times more likely to work compared to women from high economic status.

Our analysis shows that individual and household characteristics can go a long way in explaining women's entry into labour market.

The study opens up potential for further research in many aspects of women's employment. The study raises more questions than answers about the causes of educated unemployment among women in Kerala. The conventional factors that influence labour supply like-wage-rate, demand for labourers and education level seems to be inadequate in explaining women's labour supply. When 70.5 percent of men are able to find employment, 74.4 percent of women remain unemployed. This shows that lack of employment opportunities cannot explain such wide gender differences in employment level. This prompts us to look into other likely factors that affect women's decision to work.

Educational achievements also fail to give any satisfactory explanation for low female employment rate. It is quite surprising to find that women are more educated than men across all educational categories expect diploma and secondary education. In higher education also, women are more represented than men. But unfortunately women's edge over men in educational achievements is not translated into gainful employment opportunities. Though women are more educated than men, they suffer from almost three times the unemployment rate of men. Thus it can be said that women's education has not played the transformative role so generally expected of it. Low levels of female

employment and persistence of a gendered work structure have limited women's claims to independent sources of income.

The type of education women receive also contribute to their unemployment. Women are found to be over represented in general education without any skill orientation and professional qualification (SPB 2003). This was particularly evident in the case of diploma education where 16 percent of men and 7 percent of women opting for it. It suggests the role of socio-cultural institutions such as families, which mediates micro level decisions regarding education and employment of women with the perceived requirements of marriage. Emerging norms of feminity dictate that women use their education in the interests of marriage to be accomplished wives and better mothers (Osella & Osella, 2000).

The relationship that exists between marital status, age and employment strengthens this argument. Our study finds that single women and older women are more likely to be employed. It suggests that persistence of gender differentiated family roles, with primary responsibility of domestic chores falling on women, constrain their options in other areas like employment. Given the very low employment level of women, high educational achievements attained by them does not seems to change the gender role assumptions in the society.

It therefore arises from our study that rather than labour market conditions, the likely explanation for such high levels of unemployment among educated women, lies in people's deep-seated beliefs about women's gender role in society. Any policy measure to improve women's employment situation in Kerala has to look beyond creating additional employment opportunities to changing gender roles within the household.

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