CHAPTER I
INTRODUCTION

INTRODUCTION

Education has been identified as an important determinant of economic growth. Higher levels of educational attainment lead to a more skilled and productive workforce, producing more efficiently a higher standard of goods and services, which in turn forms the basis for faster economic growth and rising living standards. As progress is made towards the goal of universal primary education – stimulated by the Millennium Development Goal and the Education for All initiative led by United Nations Educational, Scientific and Cultural Organization (UNESCO) - demand rises for secondary schooling, including vocational education and training. Countries in all regions and of all development levels seek to ensure that basic education is of sufficiently good quality to prepare students adequately for vocational and further training.

Data from the UNESCO Institute for Statistics show major progress in educational attainment over time, but also major differences between countries. Average years of schooling for those aged 15–24 years in developing countries rose from 3.15 years in 1950 to over 8.5 years in 2014. Over that same period, average years of schooling for 15–24 year-olds in industrialized countries rose from almost seven years to over ten years. In
2014, the average number of years in school for girls reached 86 per cent of that for boys in developing countries and 98 per cent in advanced countries (UNESCO, 2013).

EDUCATION AND ECONOMIC GROWTH

Good-quality basic education is closely correlated to economic growth, although it cannot definitively be stated to follow from it. Such education is a foundation for further skill development in productive employment, both initially and throughout adult life. Moreover, a wide distribution of educational attainment across society is a better indicator of future economic growth than a high average level. A country’s capacity to pick up new technologies and turn them to economic advantage is greater when its education and training system creates a broad base of adequately educated individuals able to continue learning throughout their careers. Literacy rates are a basic indicator of education coverage and vary widely across the countries. A low literacy rate signals an education system that is not preparing society as a whole for further learning and productive work. It is increasingly acknowledged that training and skill development, whether in schools or elsewhere, is an essential complement to general education in equipping people to grasp opportunities in the world of work (ILO, 2010).

ECONOMIC GROWTH AND NATURE OF EMPLOYMENT

Indian economy in the post reform period has grown at an average rate of 7 per cent, an impressive rate considering the past performance.
Employment opportunities have increased, though it has not been commensurate with the growth of labour force. Trend in employment at the sectoral level shows that the organized sector, which provides maximum security to the labour, has witnessed only a marginal increase in employment in the 1990s, that too because of growing private sector (Sen, 2003).\textsuperscript{3} Hence, the burden of employing ever-growing labour force falls on the unorganised sector. It is noted that more than 95 per cent of jobs created in the 1990s have been in the unorganised sector. The performance of rural and urban informal sector has however been different; this can be accessed from the fact that urban employment in the recent decades has grown at a rate of more than 2 per cent; while its rural counterpart at merely 0.5 per cent. The employment statistics further indicate that even the unorganized sector in the country has mushroomed more around the big cities. This lop-sided growth of informal sector has caused several problems like that of migration from rural to nearby urban centres. This indicates a very volatile and less diversified employment condition in the rural areas of the country (Basant et al, 1998).\textsuperscript{4}

In developing economies, one cannot expect the production and employment structure to move at the same pace. There it seems to be a general rule that employment structure changes slowly and gradually, particularly so in rural areas. Consequently, diversifying the employment structure by increasing rural non-agricultural activities is often suggested and adopted as a policy measure to speed up the development process in these
countries. 'Diversification' in this context is used broadly to indicate the extent of departure of rural workers from the traditional primary sector occupations to those in the secondary or tertiary sectors (Bhalla, 1997).  

Another phenomenon that is to be noted along with diversification of employment is the change in the employment status of workers in the sector to which they have shifted. Employment status refers to the terms and conditions under which a person gets employed and it is an index of the nature and quality of work that people are getting into. When a rural economy diversifies, the workers may rise in status either as self-employed workers or as regular employees. At the same time, it is also possible that their status may be lowered to that of casual wage earners. While in most developed nations workers move to regular jobs or become self-employed, in developing countries like India, they move to the less advantageous position of casual labourers. The quinquennial rounds of National Sample Survey Organisation (NSSO) during the 80s and 90s lend evidence to these facts. Thus in India, though there occurred a progressive shift of workers to non-agriculture, it has also been characterised by increased casualness of workers (Bhatt, 2003).

**STRUCTURAL TRANSFORMATION OF THE ECONOMY AND EMPLOYMENT DIVERSIFICATION**

Structural transformation of an economy explains the sectoral shifts in its domestic product. As an economy develops, sector-wise shares of Gross Domestic Product (GDP) shift initially from primary to secondary sector and
then from secondary to tertiary sector. If such a transformation holds, sector-wise shares of workforce also get shifted in an identical way (Reddy, 2000).\(^7\)

Based on empirical studies of long-run transformation of economies, Kuznets (1966)\(^8\) synthesised such a structural transformation as part of stylized fact of modern economic growth. But Gemmel (1986),\(^9\) after analysing the time series data of 1970s separately for the developed and developing countries, concluded that Kuznets’ stylized facts are the special case of the former and in the case of the latter, the share of services sector appears to increase much faster than the manufacturing sector. This kind of structural jump (rather than a shift) by-passing the secondary sector, puts greater burden on agriculture. As Lewis explained in his ‘Theory of Surplus Labour’, when labour-displacing technical changes are adopted in the subsistence (agriculture) sector, a strong capitalist (industrial) sector is needed to absorb the displaced workforce (Lewis, 1954).\(^10\) In its absence, people are compelled to stay back in agriculture. Hence, in developing countries, there arises a mis-match between the rates of decrease in the shares of agriculture in GDP and employment.

In India too, the share of primary sector in GDP has declined at a faster rate compared to its workforce share. The former has come down from 56.7 per cent in 1950-51 to 26.2 per cent in 2000-01 and then to 14.9 per cent in 2014-15, while the latter has declined from 78.1 per cent in 1983 to 72 per cent in 1999-2000 and further down to 48.9 per cent in 2011-12. During this period, the workforce share of secondary sector has gone up from 9.4 per cent to 12
per cent and then to 24.3 per cent whereas its share in GDP has increased from 13.7 per cent in 1950-51 to 23.6 per cent in 2014-15.\textsuperscript{11}

An important objective of Indian planning since its inception was to reduce the extent of dependence on agriculture. An increase in non-agricultural employment is seen as essential for improving income and levels of living for the rural population (Visaria, 1995).\textsuperscript{12} But the poor absorbing capacity of the secondary sector puts enormous burden on agricultural employment. Thus, the share of agricultural employment among rural males stood at 59.4 per cent in 2011-12 and 74.9 per cent among females, while in the urban areas, dependence on agriculture was 5.6 per cent and 10.9 per cent among the male and female workers respectively in 2011-12 (NSSO, 2013).\textsuperscript{13} The shift towards non-agricultural employment in rural areas is neither steady over the time-periods nor uniform across regions since different factors are at play in different regions in the process of diversification towards rural non-agricultural employment.

In Tamil Nadu, the share of the primary sector in the Net State Domestic Product (NSDP) has declined from 27.2 per cent in 1983-84 to 18.96 per cent in 2000-01 and further down to 7.81 per cent in 2014-15. In the case of secondary sector, the share has declined from 32.1 per cent to 30.83 per cent and further down to 28.54 per cent in the same period, while the share of tertiary sector has increased from 40.7 per cent to 50.21 per cent and further up to 63.66 per cent during the same period (Government of Tamil Nadu,
However, at the end of 2011-12, 51.6 per cent of the rural males were depending on the primary sector, which was 50.59 per cent among the rural females, but only 9.19 per cent of the males and 14.34 per cent of the females in the urban areas were dependent on this sector. Similarly, the share of secondary sector in employment was 25.79 per cent, 39.47 per cent, 46.73 per cent and 41.04 per cent in the case of rural males and females and urban males and urban females respectively (NSSO, 2013). This clearly indicates a great deal of employment diversification between the two genders and also the two regions in Tamil Nadu during 2011-12.

**FEMALE LITERACY IN INDIA**

Along with the growth of the economy, literacy level of the female population too has gone up in India. In the rural areas, female literacy rate has moved up from 11 per cent in 1961 to 58.75 per cent in 2011, which has pushed down the gender gap from 26.49 per cent to 19.82 per cent in the same period. In the urban areas, female literacy rate has gone up from 43.75 per cent to 79.92 per cent between 1961 and 2011 and gender gap has declined from 27.02 per cent to 9.75 per cent in that period.

In the case of Tamil Nadu, female literacy rate has moved up from 21.06 per cent in 1961 to 73.86 per cent in 2011, *vis-a-vis* 51.59 per cent to 86.81 per cent among males in the same period (Government of India, 2011). This suggests that while there has been perceptible rise in the literacy rate of the female population, there is regional disparity, since the urban literacy rate has
been higher than that of the rural literacy rate, and while gender gap has come
down, it still exists in both areas.

**FACTORS INFLUENCING EMPLOYMENT DIVERSIFICATION**

Factors influencing employment diversification are explained primarily by analysing the linkages between agriculture and the non-agricultural sector. The growth of the agricultural sector itself creates linkage effects between the two sectors. The processing of agricultural products by industries is called forward linkages and the making use of manufactured inputs like chemical fertilizers, mechanical implements and others by agriculture is called backward linkages (Johnston and Kilby, 1975). Both these linkages can generate rural non-agricultural employment. But this can happen only if the agro-processing industry is located in the rural areas in the case of forward linkages, and in the case of backward linkages, all those industries which manufacture agricultural inputs are rurally located. In its absence, the impact of these linkages will get weakened. Moreover, it is also necessary that the rate of agricultural growth is sufficiently higher to augment such linkages (Papola, 1986).

Agricultural growth, as it increases income also enables rural masses to spend more on non-food commodities in rural areas whereby, rural non-agricultural employment is generated. This is known as consumption linkage (Chandrasekar, 2003). The effectiveness of these linkages depends on the nature of income and asset distribution in the concerned village. Lesser the degree of inequality, higher will be the gains from consumption linkages.
Adoption of new technology in agricultural development displaces labour that is absorbed by the developing secondary and tertiary sectors which creates labour market linkages (Lewis, 1954; Ranis and Fei, 1961). But in the Indian context, the ‘residual sector hypothesis’ was proposed to explain the labour movements from agriculture to the non-agricultural sector, though empirical studies negated it (Vaidyanathan, 1986). Still, many micro level studies at the household and individual levels support this kind of labour market linkage which arises primarily due to distress (unemployment) phenomenon in the agricultural sector (Saleth, 1996).

**STATEMENT OF THE PROBLEM**

Diversification of employment opportunities directly depends not only on the growth of different sectors in the economy, but also and more importantly on the educational attainment of the workforce. An educated workforce creates growth opportunities in a sector and also that of the economy and this leads to diversification of employment. On the other hand, policies pursued by the Government directly enable or disable growth of a sector and it plays a crucial role in the extent of employment generation in the economy. Even after 70 years of planned development, at the all-India level, more than 70 per cent of the rural female workforce depends on the primary sector for its livelihood and income, which is more than 50 per cent in Tamil Nadu.

While the Government has introduced many schemes and programmes for improving the educational opportunities in the country, still there is a gender
gap and this inequality is reflected in the neglect of the female population from the development mainstream. The extent of marginalisation and informalisation of employment is quite high among females compared to that of males and hence, the former are associated more with low quality and low paid jobs. This indicates that there is a direct link between educational attainment and the extent of employment diversification in the workforce in the economy, which is especially true among the female population. Thus, it is quite important to understand the pattern and the level of education attainment among women and the extent of employment diversification that is taking place among them, which is attempted in this study.

SIGNIFICANCE OF THE PROBLEM

Over the years, various Governments have taken different measures to augment employment opportunities in different sectors and in the whole economy. Faster economic growth in itself is an important facilitator in increasing the demand for education and also in diversifying employment opportunities. However, in India, the policies pursued by the Government has not increased the growth momentum of the secondary sector to a sufficient level and hence, still a great majority of the population, especially the rural females are compelled to depend on the agricultural sector. Thus, there is a huge amount of underemployment and disguised unemployment, which has pushed the real wage rate down and a greater burden of this, is borne by the female workforce. It is also to be noted that those who have attained better
educational qualification has managed to break this vicious circle and could seek better employment opportunities in the non-agricultural sector. This underscores the fact that educational attainment directly influences the ability to move from the agricultural sector to the non-agricultural sector or to diversify employment opportunities. This hypothesis needs to be probed in detail in order to throw more light on the nature and extent of the relationship between educational attainment and the diversification of employment opportunities at the micro level, which can be used for better policy making.

**AREA OF THE STUDY**

The basic thrust of the study is to analyse the role of educational attainment in diversification of employment opportunities among women. For this purpose, Tiruvallur district has been selected as the sample district, since it provides sufficient opportunities for non-agricultural employment as it is located next to the Capital city of Tamil Nadu, Chennai. The presence of large number of educational institutions also makes the choice as appropriate. From Tiruvallur district, out of the nine taluks, two have been identified as the sample area, viz., Poonamallee and Pallipattu. These two taluks form the area of the present study.

**PERIOD OF THE STUDY**

The level of educational attainment and employment diversification of the female workforce is examined at both macro and micro levels. At the macro level, the reports published by the NSSO have been collected for the period,
1993-94 to 2011-12, which is the latest available report, as far as the employment and unemployment condition is concerned. At the micro level, the primary data has been gathered through field survey, which was conducted during October to December 2015.

**OBJECTIVES OF THE STUDY**

The basic premise of the study is:

- **To examine the extent of educational attainment and diversification of employment opportunities among women.**

Based on this major objective, the following specific objectives have been made:

1. To understand the extent of educational attainment of women at the macro level;
2. To examine the degree of employment diversification among women at the macro level;
3. To study the societal characteristics of the sample respondents in the study area;
4. To analyse the level of educational attainment among various segments of the sample respondents;
5. To examine the pattern of employment among the different groups of the sample respondents; and
6. To trace the link between educational attainment and employment diversification among the sample respondents in the study area.
HYPOTHESES OF THE STUDY

The following hypotheses have been framed on the basis of the objectives:

1. Educational levels of the sample respondents do not differ significantly among them;

2. Employment conditions of the sample respondents do not vary significantly among them; and

3. Better educational attainment is not significantly associated with better employment diversification.

METHODOLOGY OF THE STUDY

This study analyses the level of educational attainment and employment diversification among women at both macro and micro levels. At the macro level, the information regarding the educational attainment of the female population has been gathered from the Census reports published by Census of India and the information pertaining to their employment condition has been collected from the NSSO reports. These reports and other necessary materials for the study have been accessed from the libraries of Madras Institute of Development Studies, Connemara Public Library, Madras School of Economics, University of Madras and others.

The particulars about the educational and employment conditions of the sample respondents at the micro level have been gathered through a field survey. For this purpose, a pilot study has been conducted with the help of a
standard questionnaire among the females who reside in the study area. Based on this pilot study, necessary modifications and changes have been made in the questionnaire and the final field survey has been carried out. The questionnaire contained queries regarding the personal information of the sample respondents, their household particulars, nature and extent of educational attainment, pattern of employment in terms of the sector in which they are employed, type of employment, number of days employed, wage level, etc. Also, their household income, savings, borrowings, expenditure and other details too have been gathered. The collected information has been analysed on the basis of area of the respondents, their age level, community and other factors in order to understand the role of educational attainment in the degree of employment diversification among them.

**SAMPLING DESIGN**

In order to arrive at the right size of sample for the study, multi-stage proportionate random sampling technique has been applied. In the first stage, Tiruvallur district has been identified as the sample district in Tamil Nadu, since it offers agricultural employment and also considerable amount of non-agricultural employment opportunities as it is bordering with Chennai city. In the second stage, out of the nine taluks in Tiruvallur district, two have been selected, viz., Poonamallee and Pallipattu. The former is highly urbanised (with more than 90 per cent of urban population) as it is located within the Chennai Metropolitan area, while the latter is more rural based (with 72 per cent of rural
population). This is expected to present varying education and employment opportunities to the households. In the third stage, from the two taluks, the sample areas have been identified: from Poonamallee taluk, out of the 21 wards, two wards, viz., Ward No. 3 and 9 have been selected and from Pallipattu taluk, two villages, viz., Keechalam and Karlambakkam have been identified. In the fourth stage, the sample households have been selected from the sample areas. Since the main thrust of the study is to examine the educational attainment and employment diversification of women, only those households which is either female headed or those with a female earning member could be selected. Thus, in the fourth and final stage, the sample households have been identified, which are shown in Table – 1.1.

**Table – 1.1 Sampling Design**

<table>
<thead>
<tr>
<th>Taluk</th>
<th>Sample Area</th>
<th>Total Households</th>
<th>Target Households</th>
<th>Sample Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poonamallee</td>
<td>Ward No. 3</td>
<td>686</td>
<td>487</td>
<td>146</td>
</tr>
<tr>
<td></td>
<td>Ward No. 9</td>
<td>593</td>
<td>379</td>
<td>114</td>
</tr>
<tr>
<td>Pallipattu</td>
<td>Keechalam</td>
<td>637</td>
<td>445</td>
<td>134</td>
</tr>
<tr>
<td></td>
<td>Karlambakkam</td>
<td>529</td>
<td>388</td>
<td>116</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2445</strong></td>
<td><strong>1699</strong></td>
<td></td>
<td><strong>510</strong></td>
</tr>
</tbody>
</table>

Source: Primary Census Abstract, 2011, Census of India, New Delhi.

As shown in the table, a total of 2445 households reside in the selected sample areas, in which 1699 are considered as the target households, since they are either female headed or have at least one female earning member and this forms the population of the present study. From this population, a total of 510 households, which accounts for 30 per cent from each area, have been
identified in a random manner. This consists of 260 households from Poonamallee taluk and 250 households from Pallipattu taluk.

**STATISTICAL TOOLS USED**

The collected data have to be analysed, which requires the application of appropriate statistical tools. This includes percentages, descriptive statistics, ANOVA, t-test, Chi-square test, Wilcoxon Rank Test, Mann-Whitney U Test, charts and regression model.

**LIMITATIONS OF THE STUDY**

At the macro level, the educational levels, employment and wage levels of females have been examined with the help of secondary data. While the educational data are available for the period 2014 from the 71st NSSO survey, employment and wage data are available only from the 68th round of NSSO (2011-12), published in 2013. Moreover, the analysis made in this study is based on the information and the opinions expressed by the respondents, who have differing levels of education, in which some are illiterate. Thus, the results that are the outcome of the analysis, which in turn is based on the information provided by the respondents, are expected to be true and correct.

**CHAPTER SCHEME**

This study is presented in seven chapters.

The general introduction for the study, statement of the problem and its significance, area and period of the study, objectives and hypotheses,
methodology of the study, sampling design, statistical tools used and limitations of the study are presented in the first chapter.

Chapter two presents the review of literature. Many scholars have examined the issue of education and employment diversification, in which the important ones are reviewed in order to trace the research gap.

The profile of the study area, viz., Tiruvallur district and the two taluks, Poonamallee and Pallipattu is presented in chapter three.

The educational attainment and employment conditions of women in India and Tamil Nadu are examined on the basis of secondary data in the fourth chapter.

The sample households have been drawn from two different taluks and hence, they are expected to possess different characteristics, which are analysed in chapter five.

Chapter six examines the level of educational attainment of the sample respondents and the extent of their employment diversification on the basis of primary data. It also presents testing of hypotheses.

Summary of the whole study, its findings, suggestions and conclusion are presented in the seventh chapter.
REFERENCES


11. GDP data are based on 1993-94 prices and taken from Economic Survey, various years and Employment data are taken from National Sample Survey (NSSO) Reports, various years.


