CHAPTER II

REVIEW OF LITERATURE

The literature on rural non-farm sector employment made by earlier research scholars are highlighted as theoretical background. Research scholars and policy makers have carried out a number of studies during the past decades. The major issues and problems analysed in these studies range from the pattern and growth of non-farm employment at national, state and district levels to the determinants of non-farm employment. The available review of literature is explained under the following headings.

(a) Earlier Studies

1. Women and Non-farm Employment in India
2. Growth of Non-farm Employment in India
3. Non-farm Employment Pattern
4. Non-Farm Linkages and Diversification
Determinants of Non-farm Employment – Theoretical Background

1. Women and Non-farm Employment

Sujata Gothoskar (1992) focuses the problems of women at work place as “Struggle of women at work”. For men, struggle is generally confined to the workplace, while home and leisure offer a contrast; whereas for almost every women, like her work, struggle seems to occupy her entire life. For women, there is no clear division in their work and leisure, in paid and unpaid work, in work and non-work relations. Some of the most persistent issues in industry have been security of employment, living, wage, regulation of hours of work, basic facilities and allowances and discriminatory treatment.

Vijayalakshmi (1993) in her paper on a case study of women workers in electronics units in Madras city has made a comparative study on socio-economic aspects of women workers in both public and private sector units. The study highlights that women are being employed at lower wages and even under conditions of hardship as they are vulnerable and unorganised. Women in the public sector unit, get better emoluments and better perks than women in private sector. Women in private sector have no permanency of service and they are often hired on a daily wage basis. They do not have medical facilities or medical leave. Their employment is
truly an extension of the domestic help rendered by such women in private sector.

Ramanamma and Usha (1996) have examined the socio-economic structure of women who enter electronic industries in Pune and Bombay. Women between 25 years to 40 years are a major group. Most of the female workers are unskilled / semi-skilled and trained on the job by the management, lacking expertise. The majority do not find any opening or avenue for promotion. Women in small scale industries hope to join the medium and large scale industries.

A comparative picture of the three types of factories in Pune and Bombay show that women in Bombay, in all the three sectors, get better emoluments and better perks. They are strongly unionised and membership is given to a women with an executive position of the Union, even though she can be outvoted by others. These factories have provision for crèches, medical benefits and maximum allowed bonus. In the medium level factories women are paid the minimum wage, bonus and perks depending on the performance of the factory. No crèche facilities nor was there any subsidised transport. The small scale industries are the major exploiters of women. There is no enforcement of minimum wages. These factories employ women because they cannot organise and they do not have the know-how of union formation and the ability to carry out the work of the union. These factories have no facilities for women laid down
by labour laws. These women have no permanency of service, no leave, no bonus and they are often hired on the basis of daily wages. They have no medical facilities or medical leave.

Meena Gopal (2005), in her paper examines the characteristics of the labour process in home-based production in India, using the example of women workers in a rural non-farm industry, the beedi industry in Tamil Nadu. The study observes that women bring valuable income into the households. Girls in these households even earn their dowry for marriage by doing beedi work. There is a casualisation and informalisation of the female workforce both in rural and urban area.

Singh (2005) has found that women in the brick industry in Haryana were mostly migrant labourers from areas within as well as outside the state. They are no better off than other poor women in the unorganised sector, with ignorance and illiteracy compounding their social and economic suffering. The study has observed that the lives of women working in brick kilns are exhausting and tough.

Anu Saksena (2006) examines the patterns of women’s employment in textile industry in both organised and unorganised sectors of India. The study has found male-female wage differentials, gender-based division of labour and also the impact of affirmative action on the employment of women. In the textile mills of Mumbai, women formed a quarter of the work force in the 1850s, 22.9 per cent in the 1930s, 11.17 per
cent in the 1950s and a mere 1.1 per cent in 2002. The low workforce participation rate for women in the mills has been primarily due to strict gender based division of labour and prohibition of women from working in the night shift. Women are confined to the lowest paying jobs and labour laws are openly flouted in the unorganised power loom sector, in the power loom sector women were working only as weavers, winders and helpers. The average daily wage rates of women workers varied from a minimum of Rs.12.50 to a maximum of Rs.33 at an all-India level, depending upon the occupations in which such workers are working.

Rajasekhar et al., (2007) in their study have highlighted the status of women workers in urban informal employment in the agarbathi and garment industries in Karnataka. The study has observed that the women workers are severely exploited in terms of both wages paid and poor working conditions. They face harassment of varying kinds and degrees at the work place, the workers also face problems of basic amenities like lack of drinking water, toilet, lighting and ventilation. Women workers are considered to be more docile, loyal and law-abiding in nature than men. Women workers are also perceived to be more hard-working and sincere than their male counterparts, and with few contacts and little exposure. Their bargaining power in comparison to male workers is low (Afar, 2002).
Gazi Salah Uddin et al., (2008) have conducted a study through direct interview method to analyse the women labourers in the readymade garment sector in Bangladesh. The study observes that women workers are active agents in the field of production. They gain experience in the process of production. But, women lose opportunities in the labour market even where they are preferred because of lack of education and access to information owing to socio economic discrimination. The study has also found that the working conditions of women are not favourable in terms of their social and economic security.

A study by Dipa Mukherjee (2008) has found a significant low wage rate among the women workers in the new economy. Women workers in the new economy can be categorized into three groups. The first group comprises those who are engaged in activity groups where women are employed at a much low wage rate compared to men. The second group includes those who are working in the established sectors where they enjoy a stable position both in terms of wage and employment. The third category consists of those who are working in the sunrise sector of the new economy like air transport and computer related activities where workers are doing well in employment and wages as compared to men.

Anupama (2008) explores the extent of quality of women employment in the unorganised manufacturing sector of India during globalisation. It is found that though the share of women in the total
employment has increased, the average wages and productivity in the subsectors of the unorganised manufacturing sector of India decreased. However, the share of wages and productivity is higher in female dominated occupations when compared to the male dominated ones. The average productivity, however, continues to be the lowest in female dominated occupations of women workers owing to their low productivity. Their productivity is even considered to be costly as compared to that of their male counterparts, particularly in the developing countries where women are more likely to get employment in informal jobs with lesser responsibility. In a globalised economy where cost effectiveness is the prime mover of any business, cheap labour along with flexibility of employment easily matches with women labour force. This has resulted in widespread feminisation of the labour force throughout the globe (Chen, et al., 2005).

A study by Sona Mitra (2008) examines the changes in urban female employment in India in the context of the fundamental shift that has taken place in the economic policy regime in the country since the early 1990s. The experience of the last fifteen years of liberalisation is considered to be one of the success stories of globalisation with sustained moderate to high rates of growth for almost a decade now. It is observed that the employment for women workers in the traditionally labour intensive sectors like manufacturing has increased but working conditions
have further deteriorated over the years. The employment options seem almost stagnant in services and trade sectors. The non-agricultural employment elasticity of output growth for both male and female workers still remains low in the urban areas. The revelations seem important as the work participation rates for urban women seem to be the highest in the last two decades. Yet the traditional sectors have not been able to create ample employment opportunities.

Tink Paul Bhatnagar (2008) has highlighted the problems of women labourers in his book *Women employment and empowerment*. The study reveals that naturally women’s work is invisible, under valued and unacknowledged. Most of the female workers are engaged in traditional and non economic activities, which leave them out of enumeration. They are confined to relatively subordinate and inferior positions. This affects the participation of women in non-farm employment. They are exploited in terms of wages and working conditions. Sexual harassment of varying kinds prevalent in all categories of employments in the non-farm sectors. It is noted that the unorganised nature of non-farm employment and gender division of labour have created discriminatory treatment of socio economic aspects and women labourers.

**2. Growth of Non-farm Employment in India**

Vibhooti Shukla (1992) in his study on rural non-farm employment in the district of Maharashtra has analysed the growth, issues
and policy of non-farm employment. The study has observed that a strong agricultural policy and government policy increases the rural non-farm employment. Industrial development is the best place to secure the greatest benefit in non-farm activity. Per capita village panchayat expenditures positively influence the overall share of manufacturing in total and of non-household in manufacturing employment.

Jeemol Unni (1992) has found that the impetus to the growth of non-agricultural employment in rural areas can emanate both from agriculture and non-agriculture. The hypothesis of agriculture-led growth is partly substantiated by a positive relationship between agricultural productivity in a region and percentage of non-farm employment. Unemployment rate gives the expected positive relation for male, female and total workers with non-farm employment. The urbanization variable had a positive influence on the growth of non-agricultural employment. Both high levels of agricultural productivity and land concentration can lead to spill-over of excess labour in productive non-agricultural jobs. The study has also observed that distress conditions of population do not necessarily lead to the growth of non-agricultural activity, perhaps due to lack of demand for non-agricultural goods in such regions.

Partha Sarathy et. al., (1998) examines the nature of growth of rural non-farm employment in India. The article shows high degree of instability on growth rates of non-agriculture. The study has observed that
the rate of growth of workers in All-India showed a continuously declining trend. The decline was the steepest between 1987-88 and 1993-94 both in agriculture and non-agriculture. As a consequence of the trend decline in growth rates of non-agriculture, the share of non-agriculture in the overall economy which rose from 26.1 per cent in 1973-78 to 35 per cent in 1978-88 and at 35.4 per cent in 1993-94. The study shows high degree of instability on growth rates of non-agriculture. Only eight out of fifteen states, namely, Haryana, Himachal Pradesh, Karnataka, Maharashtra, Punjab, West Bengal, Tamil Nadu and Madhya Pradesh showed consistently positive growth rates when rural males alone are considered. When males and females are taken together, only five states showed stable growth of non-agricultural workers.

A study by Lanjouw and Shariff (2000) has attempted to assess the contribution of the non-farm sector across population groups in terms of per capita income. The correlates of employment in rural non-farm sector and the direct impact of a growing non-farm sector on agricultural wage rates in rural India are also examined. Their analysis shows that non-farm income accounts for a significant proportion of household income in rural India with considerable variations across major income groups and states. Education, wealth, caste, village level agricultural condition, population densities and other regional factors influence the growth of rural non-farm sector.
Mehta (2002) has analysed non-farm economy and rural development, the growth and developmental potentials of non-farm sector in the state of Uttaranchal using primary data. The study has revealed that manufacturing activity found in high attitude areas and middle altitude areas are blacksmithy, basket and mat making, rope making and woolen enterprises. During the last decade, manufacturing activities in general and traditional household-based activities in particular, have been declining. On the other hand, non-farm activities such as trading, service and transportation have been developing over the years. Lack of interest among the younger generation in these activities and shortages in the locally available raw materials are the major factors affecting the decline in the growth of manufacturing activities.

Further, it has been observed that non-farm activities have been loosing its relative importance in rural areas while a very little growth of 2.52 per cent has been observed in favour of urban area of the state. The small scale own account enterprises have been increasing in urban areas instead of rural areas which is the base of establishment because they form a part of a traditional household activities. The non-farm institutions are relatively larger as compared to own account enterprises in term of both size of production and employment. They remained functioning successfully in urban areas with favourable forward development linkage. The study has also showed that a large number of factors such as
agricultural growth, productivity of major food crops, extent of commercialization of agriculture, size of operational holdings, growth of literacy, urbanization, government policies towards the promotion of non-farm activities, demand conditions of goods and services produced by this sector and markets are influencing the growth of non-farm sector in the state.

Amitabh Kundu et al. 2003 have analysed the growth rates of non-farm employment by using NSS data. The employment situation in India during the year 2000 shows that there has been high growth in non-farm employment in rural areas. The growth of casual employment during 1993-2000, has slowed down and the relationships of non-farm employment with socio-economic indicators for urban areas further improved during this period. Moreover, the workers participation rate in non-farm sector has increased from 0.05 in 1993-94 to 0.20 in 1999-2000. Similarly, the per capita income has gone up from 0.09 to 0.35 per cent. It is noted that the growth rates of non-farm employment are higher than these of population and labour force. The decline in the growth rate of non-farm employment for females is conspicuous both for rural and urban areas compared to the male counterpart. As a consequence, the share of female non-farm employment in total employment in rural areas in 1999-2000 works out as less than that of 1989-90. Indeed, the growth in
non-farm employment has taken place largely within the urban informal sector, mostly for men at a low level of productivity.

Nasurudeen et al., (2003) have examined the growth of non-farm sectors of Union Territory of Pondicherry using secondary data. The study has revealed that the non-farm sector has grown significantly in the recent past. The growth rate of non-farm sector was 5 per cent between 1980-81 and 1992-93 and it has increased to 10 per cent between 1994-99 and 2000-01. The fastest annual growth rate in the recent past has been in the sectors of banking and insurance (19.18 per cent), transport (15.78 per cent), communications (15.88 per cent) and trade, hotels and restaurant (16.10 per cent). Two areas of comparative advantage within the non-farm sector of Pondicherry are tourism and the knowledge based economy. These two sectors have grown quickly. A good transportation network and communication system is also critical for the growth of tourism of Union Territory of Pondicherry.

Muniyandi et al., (2003) examined the growth and the changes in the labourforce, workforce participation rate, sector-wise distribution and employment status of this workforce in the non-farm and agriculture sectors in India. The study has observed that the growth of employment in the non-farm sector in all the states except Bihar and Orissa has recorded a positive growth between pre and early reform period. The growth of employment in the non-farm sector during the post reform
period at the national level has been higher (2.31 per cent per annum) than in the pre and early reform period (1.79 per cent). The employment growth in the non-farm sector has been very high compared to that in the farm sector.

The study has also found that the male workforce participation rate in the non-farm sector had continuously increased. The female workforce participation rate also showed an increase except in 1993-94. The workforce participation rate in the agricultural sector has shrunk moderately, while the non-farm sector employment has expanded during post-reform period (1991) over the pre-reform period. The sector-wise distribution of workers in rural areas has indicated that workforce participation rate in the agriculture sector has witnessed a continuous decline, while that in the non-agriculture sector has showed a steady increase.

A study on non-farm employment by Kundu et al (2003) has revealed that in India, the rate of growth of non-farm employment in rural areas has been below that of urban areas and the gap has widened during 1993-2000. The growth rate has declined significantly in the late period. The slowing down of the process of sectoral diversification has adversely affected women and rural population much more than the other. The relationship between the incidence of rural non-farm employment with levels and nature of employment, unemployment and poverty at state level
suggests that a high share of rural non-farm sector does not necessarily imply healthy economic development. The former is associated positively neither with per capita income nor with the percentage of non-poor population. In fact, people engaged in traditional occupations such as artisans, craftsmen, carpenters, goldsmiths and blacksmiths are hit badly in the relatively urbanized regions.

Usha Tuteja (2004) has examined the growth of non-farm employment using censuses and NSS data in Haryana. The study has observed that the work participation rate of male population in Haryana has improved from 47.50 per cent in 1971 to 50.89 per cent in 2001. In addition, a continuous upward movement may be observed in the work participation rate of female population. It has shown an exceptional growth from 2.29 per cent in 1971 to 34.18 per cent in 2001. The share of the rural non-farm sector workers in Haryana has increased from 21.6 per cent in 1971 to 35 per cent in 2001. The highest employment in rural non-farm sector was generated by other services. Construction, trade, communication, transport and storage emerged as the growing sector in the rural economy of Haryana.

Brajesh Jha (2005) has examined the growth of rural non-farm employment in India by using NSS data and selected information collected by Agro-Economic Research Centers. The study has highlighted the fact that both pull and push factors have contributed to rural non-farm
employment growth. Manufacturing, the most important non-farm sector is marked by a decelerating rate of growth of employment during 90s. Though mining utilities and community services account for only a small proportion of rural employment, employment growth in these sectors was negative. Construction, trade, transport and business services have emerged as the most important sources of rural employment growth in the 90s in India. These industries accounts for 11 per cent of rural employment in the country. In spite of all these discouraging trends, the real wages of rural workers have increased while the gap between rural and urban wages in non-farm activities has decreased during the 90s.

Singh (2006) has examined the patterns and dimensions of rural non-farm employment based on secondary data collected from population censuses and NSS reports of Uttar Pradesh. The study observes that during the last decade, growth of the rural non-farm employment in the state has been largely driven by faster growth in the activities related to manufacturing, construction, trade and hotels. The share of the rural non-farm employment in the total employment has increased from 15.04 per cent in 1991 to 23.91 per cent in 2001. As far as wage rates in farm and non-farm sectors are concerned, they are found to grow faster. It has been also noted that non-agricultural wages have been higher than agricultural wages.
Sankar et al., (2007) have examined the incidence and growth of rural non-farm employment in India between the period 1983 and 2005. The study has showed that both the absolute number and incidence of rural non-farm employment have expanded rapidly in all India since early 1990s. While non-farm employment for males has increased by 3.43 million per year between 1999-2000 and 2004-05, the corresponding figure for the female has been only 1.09 million per year.

The incidence of rural non-farm employment has not been uniform across the states of India. At all point of time, as regards male workers, this has been highest in Kerala and lowest in Madhya Pradesh. On the other hand, West Bengal and Kerala have captured the first position as regards incidence of non-farm employment for females. For females, manufacturing has been representing 50 per cent of non-farm employment followed by services, wholesale and retail trade and construction. In 2004-05, the manufacturing sector has been extremely important for the females in Bihar, Orissa, Karnataka and Tamil Nadu, accounting for more than 50 per cent non-farm employment. The study concluded that, at all India level, for rural males, the sectors emerging fast in the post-reform period are construction and wholesale and retail trade while manufacturing and services are the emerging sectors for rural female.

Deepak K. Mishra (2007) in his working paper has analysed growth and composition of rural non-farm employment in Arunachal
Pradesh by using primary and secondary sources of data. The study has observed that there has been far greater appreciation of the role and significance of the non-farm sector in the overall growth process in general and in employment generation particular for the country. The study has found that the share of rural non-farm employment in the state has gone-up from 17.09 per cent in 1971 to 26.07 per cent in 1991. It was noticed that rural employment in non-household manufacturing, construction trade and commerce, and transport, storage and communication have expanded during 1971-1991. Employment in transport, storage and communications has recorded the highest growth rate during this period, followed by mining and quarrying. The second most important source of employment in the rural non-farm sector comes from the construction sector. Trade and commerce have also expanded substantially in the rural areas; it accounted for around 1.93 per cent of the total employment in the rural non-farm employment in 1971 to 8.87 per cent in 1991. In 2001, the share of rural non-farm employment was found to be 27.4 per cent to the total employment of Arunachal Pradesh.

Sharma (2009) in his study on rural non-farm employment in Himachal Pradesh has analysed the growth of non-farm employment in the state by using NSS data. The growth of rural non-farm activities in terms of workforce employed in different activities have been computed separately for male and female workers for three different periods, i.e., 1971-81,
1981-91 and 1991-2001. The study has showed that employment of agricultural workers registered negative growth rates during these periods. Regarding employment in rural non-farm activities as a whole, the growth rates were higher during the nineties compared to the eighties in several districts. The individual non-farm activities registered higher rates of increase during the nineties. Likewise, the rates of growth of employment in transport and communication during the nineties accelerated in eight districts. Almost similar pattern was noted in respect of employment in trade and commerce.

3. Non-farm Employment Pattern

Mahendra Dev (1990) in his article examines trends in non-agricultural employment and inter-regional variations in the share of non-agricultural employment. The study has found that the share of non-agricultural employment increased in the tertiary sector than that of secondary sector for males while the inverse was true for female. During the period of 1972-1983, the rate of growth of non-agricultural work force was around 4.7 per cent per annum. At the all India level, the incidence of person day unemployment in ‘principal industry’ non-agriculture’ was higher than that of ‘principal industry’ in manufacturing industry and construction industry in 1983. The estimates on projections of non-agricultural workforce indicate that the work force in non-agriculture at the all India level would increase by 50 per cent between 1977 and 2001. The
study has found that the variations in the share of non-agricultural employment across 56 regions are sought to be examined with person day unemployment. The total employment level in the rural India has not only declined, but there has been also a dramatic shift of workforce across the productive sectors over the years.

Ranjit Kumar et al., (2003) have examined the shifting employment pattern in the rural India. The study has revealed that with continuing population pressure, small and fragmented agricultural holdings, highly iniquitous land distribution structures and increasing application of labour-saving farm production technologies, agriculture alone cannot provide the ultimate answer for rural unemployment and underemployment. It was further observed that the employment in the rural farm sector has declined in the recent past. The proportion of male workers engaged in the agricultural sector has been steadily declining from 83 per cent in 1972-73 to 71 per cent in 1999-2000, almost declined by 12 per cent point in 28 years. Obviously, those labourers have shifted to other non-farm activities in the secondary and tertiary sector, where their proportion has increased from 16.8 per cent to 28.8 per cent.

Rajalakshmi (2005) has examined the nature and opportunities for non-farm employment in rural Tamil Nadu in her working paper using primary data. Two districts of Tamil Nadu namely, Kanyakumari with the highest concentration of non-farm workers and
Peramballur with the lowest concentration of non-farm worker were selected for the study. The study has observed that average days of employment were high for the villages in Kanyakumari district than that in Peramballur district. The average days of employment per month in different industrial categories were 22 days and 18 days for males and females respectively. The average wage per day for males was Rs.150 and it was Rs.75/- for females, and it has varied by the nature of work undertaken. The average wage for casual labourers for male category was Rs.75 and for female category, it was Rs.50/-. The average number of days of employment for both male and female were 15 days per month. Self employed workers in different industrial categories engaged in various types of occupations such as, manufacturing, processing, service, repair, trade, transport, storage and communication. Most of them have got work on contract basis. The study has concluded that agriculture was still the major “push and pull” factor in the rural areas of Tamil Nadu in terms of rural non-farm employment and job diversification.

Murthy (2005) has examined rural non-farm employment in India by using NSS data. He has concluded that rural non-agricultural sector has not performed the safety-net function admirably by absorbing those who could not find employment in agriculture in the service sector and, to a lesser extent, in the manufacturing sector. It has contributed to the livelihoods of the poor.
Kamal Vatta and B.R. Garg (2008) have made an attempt to explore the employment pattern of rural non-farm sector in Punjab by using primary data of individual workers. The study has found that the rural non-farm sector has emerged as a major source of employment engaging 57 per cent of the male and 82.5 per cent of the female workers. On principal status, the male labor force participation rate of 84.2 per cent and female labour force participation rate of 14.0 per cent were observed. On the basis of principal and subsidiary, the respective male and female labour force participation rates were 86.8 per cent and 52.4 per cent. Similarly, the rate of unemployment for male and female workers was 5.1 per cent and 12.6 per cent on principal status and 5.0 per cent and 3.4 per cent on principal status and subsidiary status. Regarding income of the individual workers, a relatively larger proportion of rural households were deriving their income from rural non-farm sector than from farm sector. Community, social and personal services followed by transport and manufacturing were the three most dominant non-farm sources of employment and income.

Various studies indicate that the labour absorptive capacity of agriculture has reached a limit. The rural non-farm sector has potential to absorb the growing labour force. Moreover, agriculture does not keep the rural workers engaged throughout the year. Consequently, the workers who are either in self employment or in employment as wage labour in
agriculture seek employment in the non-farm sector. K. Elumalai and Sharma (2008) in their study have examined the nature and labour absorptive capacity of non-farm sectors in India. The study has found that manufacturing is the prime source of non-farm employment for rural households. The percentage of rural male workers engaged in non-farm activities increased from 25.5 per cent in 1993-94 to 28.6 per cent during 1999-2000. The percentage of female workers employment in manufacturing activities increased from 45.1 per cent during 1987-88 to 51.7 per cent during 1999-2000. The service sector was fast emerging for rural females. The study concludes that the development of small scale industries in villages would absorb the growing labour force from agriculture.

Shard Rajan (2009) has attempted to assess trends in the pattern and nature of employment in the rural non-farm sector in India between 1973 and 2005. The study has found that during this period, the total number of workers expanded more in the non-farm sector than the farm sector. The proportion of non-farm employment in total rural employment has risen from 16.6 per cent in 1977-78 to 23.7 per cent in 1999-2000 and to 27.6 per cent in 2004-05. The gender specific count showed that the rise in male workers was larger than the rise in female workers. The percentage of males rose from 16.7 per cent in 1972-73 to 33.5 per cent in 2004-05 whereas that of females registered a rise from 10.3
per cent to 16.7 per cent. In the non-farm sector, the manufacturing sector is the largest source of non-farm employment and the second largest non-farm employment source was other service sectors.

4. Non-farm Linkages and Diversification

Mellor and Lele (1972) are of the view that increase in agricultural productivity leads to the development of rural non-farm sector through production and consumption linkages. The production linkages are both backward, through the demand for agricultural inputs such as implements and tools and forward through processing for many agricultural goods. As agricultural income increases the demand for goods and services produced in the non-farm sector also increases which is consumption linkage. That increases the relative employment opportunities of women which is demand determined.

Non-farm and off-farm activities have backward as well as forward linkages, which can enhance the overall productivity, income and employment in rural areas. Srikant S. Kalamkar (1998) has examined the linkage of agriculture and non-farm sector in Maharashtra. The study has observed that the linkage of agriculture and non-farm sector has arisen from two type’s dependence. First, agriculture supplies raw materials such as cotton, jute, sugarcane, and the production of food grains and horticultural crops to a number of agro-based industries including food processing industries. The second important linkage that exists between
agricultural and non-agricultural sectors of a developing economy is
demand linkage. The farm sector provides a major domestic market for
non-farm sectors.

Manoj Kumar (2000) has studied the growth and inter
linkage of rural non-farm employment in India. The study has highlighted
the working of farm and non-farm linkages. According to the study an
increase in farm income stimulates households demand for wide varieties
of consumer goods, some of which might be produced by local non-farm
economy and growing demands for agriculture inputs which are either
produced or distributed by local rural non-farm enterprises. Moreover,
rising agricultural productivity increases wage and opportunity cost of
labour in non-farm activities including a shift in the composition of non-
farm activities.

The study has revealed two types of linkages between
agricultural and the non-agricultural sectors. Consumption linkage arises
out of increased incomes of the labourers, generating increase in services,
and is largely concentrated in rural areas since the goods and services
demanded are typically produced by small scale of intensive enterprises.
Production linkages are two types namely, backward production linkage
and forward production linkage. Backward production linkage states that
the agricultural growth and hence increase in farm income leads to
increased demand for non-conventional farm inputs manufactured in
industries and other non-farm sector of the economy. This in turn results in increased employment in industries and other non-farm sectors. Forward production linkage develops through the increased need for agro-processing activities.

Brajesh Jha (2005) focuses that the rural diversification is the result of diverse factors, grouped together as pull and push related factors. Demographic pressure with limited resources generates a push force, whereas a high infrastructure base creates pull forces for employment diversification. The average wage/salary to workers, average days of employment in a year and number of economic activities undertaken by the work also be the most comprehensive indicator of development and distress-related diversification in the rural sector.

Mukhopadhyay, et al., (2008) have examined the inter linkages of non-farm sector in their study on non-farm occupation in India. Absence of appropriate forward as well as backward integration greatly affects performance of non-farm activities in rural areas. It is noted that rural non-farm employment are not a substitute for employment in agriculture but rather as a supplementary measure. Forward linkages of the rural non-farm sector demand the outputs of other sectors. The study has indicated that forward linkages from non-farm activities to agriculture are particularly important where traditional agricultural technologies are utilized, while in the case of backward linkages between non-farm
activities and farm activities, especially the linkages between transport and marketing activities are quite significant for rural economic development. It is important to note that the gaps in the integration of the production linkages brought about by poor infrastructure, low accessibility of market lack of support services and intervention of middle men have constrained the development of non-farm enterprises in India.

b. Determinants of Non-farm Employment in India –Theoretical Background

The level of rural non-farm employment is determined jointly by the demand and the supply of labour. Theoretical basis of the linkages between education and labour supply outcome of women can be found in Neoclassical and Sociological literature. Neoclassical economists argue that education is an investment as it raises earnings potential of individuals. This increases the opportunity cost of economic inactivity and thus incentives to seek employment (Bowen and Finegan 1966). In other words, education increases wage rate and the substitution effect of a rise in wage level will induce more women to enter into the work force.

Sociologists’ argument for the existence of a relationship between education and labour force participation is the aspirations effect argument. Accordingly, education is a major determinant of income aspirations and expectations. This is likely to induce greater economic activity from more educated women (Cain, 1966). Education raises
income and occupations. A positive relationship cannot be presumed because those expectations cannot always be realized. Strong job preference of higher educated women often leads to high unemployment among them. It creates gender segregation of labour market leading to overcrowding of women into a limited number of occupations. This in turn exerts a downward pressure on their wages, which leads to further rise in unemployment as wages fall below the level. Along with education, there are other factors that influence the participation of women labourers in the non-farm employment.

Visaria and Rakesh Basant (1994) have analysed determinants of non-farm employment in India. The analysis has been done at several levels, in national, state, district and household, while the national, state and district level analysis is based on the secondary data. The household level analysis has been carried out on the basis of a survey of rural households involved in the non-farm activities in the district of Gurgaon and Jind. Gurgaon represents the area affected by the influence of economic activity of metropolitan city of Delhi and Jind represents absence of this effect. About three-fourths of casual labourers with non-farm employment belong to small/marginal households and those working in construction activity. The main determinants of rural non-farm employment are the road connectivity and the location of non-farm
enterprises. It is for this reason that the relatively developed districts in Haryana show a higher degree of rural non-farm employment.

Mridul Eapen (1995) has examined the nature and determinants of rural non-agricultural employment in Kerala by using the statistical tool correlation analysis between 1971 and 1991. The study has found that there are variations in district level shares of non-agricultural employment. The state level analysis has revealed that a high degree of commercialization, close rural-urban linkages, rapidly declining land-man ratios, increase in the proportion of marginal holdings, and growing levels of literacy have historically played an important role in generating a high level of non-agricultural employment in Kerala.

Peter Lanjouw and Abusaleh Shariff (2002) in their working paper rural non-farm employment in India have analysed the determining access to non-farm occupations. There is clear evidence that education improves prospects of finding non-farm employment and that with higher levels of education, the odds of employment in well-paid regular non-farm occupations rises. The study has observed that wealth also seems to influence access to non-farm occupations, although per capita landholdings influence non-farm employment probabilities in a negative direction. Non-farm employment probabilities are not uniformly related to community and district level characteristics across the country. The study shows that higher agricultural productivity is associated with lower odds of non-farm
employment. Growth in agricultural productivity is positively related to non-farm employment probabilities. In some regions of India higher population densities clearly associated with higher odds of non-farm employment. The non-farm sector appears to offer relatively few real opportunities for low educated women in rural India.

Lanjauw and Shariff (2002) have attempted to assess the contribution and determinants of the non-farm sector in their study. Their analysis shows that non-farm income accounts for a significant proportion of household income in rural India with considerable variations across major income groups and states. Education, wealth, caste, village level agricultural condition, population densities and other regional factors determine growth of rural non-farm sector employment.

Prasada Rao Mechar (2002) has examined the determinants of rural non-farm employment in two villages of Andhra Pradesh in his working paper using primary data. The study reveals that the size of land holding, age and poverty are negatively related to the possibility of participating non-farm work in the villages. This relationship is stronger in the agriculturally developed villages compared to the less developed villages. Farm land actively reduces total rural non-farm employment participation.

Education is significantly positively related to non-farm employment in villages. Higher education increases the participation of
labourers in the non-farm activities. An increase in education by one per cent leads to an increase of 2.47 percent in rural non-farm employment while those with less education are less likely to work in non-farm. Caste of the household has also determined the participation of workers in the non-farm employment. Non-farm employment decreases in the case of lower caste people. They may feel inhibited from entering certain types of rural non-farm employment because they fear of discriminating treatment from employment and fellow workers. Migration of labourers into villages due to seasonality has quite strong effects on non-farm employed. Rural non-farm employment requires skills which the younger generations gradually acquire and move to the modern non-farm employed option. The factor skill is found to be significant at household level in the participation of non-farm employment.

Singh (2006) in his paper has made a comparison of the determinants of the rural non-farm employment in the Western Region and the Eastern Region of Uttar Pradesh. The study confirms that the rural non-farm employment is significantly and positively affected by the density of population, rural literacy, urbanization and length of pucca roads. It also observes that agriculture related factors, level of irrigation and farm mechanization have significant positive impact on the rural non-farm employment. Regional pattern of the rural non-farm employment shows that economically developed Western Region had the highest percentage of
the rural non-farm employment, whereas Bundelkhand, an economically most backward region in Eastern Region. The study confirms that non-agricultural factors are more dominating in the Eastern Region while agriculture related factors are more effective in Eastern Region. H.R. Sharma (2006) in his study has analysed the determinants of rural non-farm employment in Himachal Pradesh. The effect of different factors on rural non-farm employment was concerned, the analysis of area under food-crops had negative effect and the area under non-food grain crops a positive and significant effect on employment in most of the activities. Factors like education, health and infrastructural facilities have played an important role in facilitating the transfer of rural work force from farm to non-farm activities. The process of crop diversification in the state expected to trigger the growth of rural non-farm employment opportunity particularly in construction and trade and commerce.

Brajesh Jha (2006) has examined the determinants of rural non-farm employment using regression analysis. The study reveals the fact that infrastructure index is the most important determinant followed by population density; both of these variables are significant at the one per cent. A regression model was fitted by Usha Tuteja (2006) to explain the contribution of important variables in the rural non-farm sector employment in Haryana. The explanatory variables included percentage of rural enterprises to total enterprises, percentage of rural non-agricultural
enterprises to total enterprises, literacy rate of population, density of population, percentage of scheduled caste population to total population, per capita gross value of agricultural output, metal roads per lakh of population and average size of holdings. The percentage of scheduled caste population, share and location of non-agricultural enterprises and the road connectivity were identified as the main determinates of the rural non-farm sector employment in Haryana.

Deepak K. Mishra (2007) has observed important determinants of participation of rural households in various non-farm activities in Arunachal Pradesh in his working paper. The study reveals the following findings.

Food crops yield and main cereal crop yield per hectare are positively correlated with the share of rural non-farm employment. Rising productivity, increasing marketing and commercialization in agriculture attributed to stronger relations with the share of rural non-farm employment. Rising farm incomes might have been resulted in greater demand for non-farm products and services, through consumption linkages. Higher level of literacy positively and significantly influences the share of non-farm workers in the total main workers. Literacy rate is positively associated with the level of non-farm employment. Size of operational land holdings has a negative influence on entry to non-farm employment.
The study has also found that in well communicated villages; 51 per cent of households depend upon non-farm occupation while the rest depend upon farm based occupation. The shares of Arunachal Pradesh scheduled tribe households have considerably lower participation in non-farm occupations. The study shows a significant relationship between nearness to urban locality and participation in non-farm occupation.

Kamal Vatta et al., (2008) also has examined the determinants of non-farm employment in Punjab. Gender, age, education, caste, family size and operational area had significant influence on the incidence of rural non-farm employment and income.

Elumalai and Sharma (2008) have analysed the determinants of the involvement of rural households in non-farm employment. The study shows that as the land size increases, the percentage of workers employed in non-farm activities declines. There exists an inverse relationship between land holding and non-farm employment. It is argued that as the level of education improves, more of the rural workers engage themselves in the non-farm employment activities. The study also observes that engagement in the non-farm wage employment increases with age factor.

Sharad Rajan (2009) has focused a number of factors that exercised their impact on non-farm employment. There existed an inverse relationship between farm size and the proportion of rural households mainly engaged in non-farm activities. Among the landless, lack of land
that seems to be predominantly responsible for the shift to non-agricultural activity and the distress labourers dominate over the push of prosperity in the move towards non-agricultural activities. A positive association between education levels and non-farm employment is empirically established. Better educated individuals possess skills which facilitate successful involvement in non-farm activities. It is also noted that the caste system remains a major stratifying force in participation in the non-farm sector. The participation in the non-farm sector is high in the low caste when compared to the upper caste.

Manoj Jatav (2010) has analysed the determinants of casual jobs in the non-farm sector by using National Sample Survey data in India. The study has observed that persons who are illiterate and belonging to poor rural households have a greater chance of becoming casual labourers in the non-farm sector. Illiterates are the major constituents of the casual workforce in this sector. The study has also revealed that level of education, size and land holding and size of family of the workers are negatively related to the participation of casual labourers in this sector. A young working population in the age group of 15 to 59 years tends to participate more as casual labourers as compared to the other higher age groups.

Rural households, which are small in size, are more likely to contribute to the casual workforce in non-farm sector. This may be due to
the fact that rural families, which are larger in size, occupy a large proportion of agricultural land due to the relative dominance of various socio-economic and cultural factors. The participation of males as casual labour force has been more owing to the fact that the nature of work in casual jobs demands more physical work. Moreover, the probability of a non-farm casual worker working in urban area is found to be more than two times as compared to those working in rural areas. Scheduled Castes, the most deprived people of the society have predominantly occupied casual job contracts in the rural non-farm sector of India.

A critical review of literature reveals that most of the studies have considered the determinant of non-farm employment as one single homogeneous entity. The role of different factors in determining the quantum of non-farm employment varies not only from region to region but from activity to activity as well. In brief, the different factors may be important in determining the incidence of non-farm employment in regions/states/districts and also in different activities. Against this background, the present study is undertaken to analyse the role of various factors in determining non-farm employment of women labourers in different activities on the supply side at the district level in the state of Tamil Nadu.