CHAPTER 2
RURAL NON-FARM EMPLOYMENT:
A REVIEW OF EVIDENCE AND ISSUES

2.1. INTRODUCTION

Review of literature on the chosen topic is inevitable step in any systematic research work. Review of earlier studies related to present study helps to gain preliminary orientation, background knowledge and to identify research gaps in the study field. Therefore, an attempt is made in this chapter to review the important studies on RNFE focusing on the trends and patterns, determinants, its impact on poverty and income inequality and RNFE among social groups and thereby identifying research gap for the present study. A large number of studies have appeared on various aspects of RNFE at the all India rural, state, region, district and taluk levels drawing upon the data from the NSSO and the census. A number of primary studies have also been carried out to analyse the economics of RNFE; socio-economic background under which the workers go in for RNFE; and, test some of the hypotheses formulated by using secondary data at the aggregate level.

This chapter has been divided into four sections. The first section being introduction; section two reviews the studies based on secondary data; section three reviews the studies based on primary data; this chapter concludes with section four.

2.2. STUDIES BASED ON SECONDARY DATA

Anderson and Leiserson (1980) in their analytical study found that the rural non-farm activities were the primary source of employment and income earnings for approximately one-fourth of the rural labour force (one-third including labour force in rural towns) in most of the Latin American, Asian and African countries and important source of secondary earnings in the slack season of agriculture for small and landless farmers. The study also found that
the proportion of workers in rural non-farm activities is relatively higher in Latin America than in Asia and Africa.

Krishnamurthy (1984) has made an attempt to analyses the changes in the share of work force involved in agriculture and non-agriculture, both in rural and urban areas drawing upon the census data for 1971 to 1981 and the NSS data for 1972-73 to 1977-78. The results of the census data indicate a greater structural shift away from agriculture towards manufacturing than that of the NSS. The data indicate the structural shift away from agriculture to services sector.

Mukhopadhyay and Lim (1985) in their study suggested that the rural non-form sector consists of two sub-sectors. Sector 1 where enterprises run on a more or less stable basis with an eye on surplus generation and growth, hiring labour and with a certain degree of technical sophistication. Sector 2 consists of products, seasonal run solely with the help of unpaid family labour, using primitive technology and catering mostly to the local market. According to them the differences in the two sub-sectors are discernible in terms of capital use and production relations rather than product categories. A third category of wage paid employment sector is characterized by low earnings and atomized markets with respect to labour supply is also distinguished.

Vaidyanathan (1986) has identified that, the proportion of rural workers (US) in RNFE increased among both male and female workers; the increase among males was more pronounced than among females. Going by different activities in the rural non-agricultural sector, the increase of workers in construction, transport, trade and services seems to be more than in manufacturing.

Harriss (1987) in his study found that the production activities are more important in terms of number of units, capital invested and employment created then are consumption activities. The study also found that forward production links are important than backward production links. The increased production of paddy and groundnuts in North Arcot district was accompanied
by a growth in activities which are production linkages, both backward (inputs) and forward (processing) production activities have important non-local links.

Basant and Kumar (1989) in their study examined that, though the NSS and the census data show a constant increase in the proportion of male workers in RNFE, the former show a relatively greater increase than the latter. While the NSS data showed this change for both female and male workers, the census data revealed such a trend only for male workers but in respect of female workers, it was found to be declining. Both sets of data showed an increase in the share of manufacturing and tertiary sector, a greater increase took place in the tertiary as compared to the secondary sector, particularly for male workers. Within the secondary sector the share of non-household manufacturing increased at the expense of household manufacturing for both male and female workers. The rise in the share of male workers in manufacturing was greater according to the NSS as compared to the census data. In relative terms, the census data showed a greater shift in favor of tertiary sector than the NSS data; but both suggest a faster growth of the service sector than that of manufacturing activity in rural areas.

Haggblade, Hazell and Brown (1989) in their study argued that the production and consumption linkages entrained by agriculture growth stimulate demand for rurally supplied non-farm goods and services. Farm, non-farm linkages are found to be larger in Asia as compared to Africa. Consumption linkages are much stronger than production linkages in most of the Asian and African countries. Consumption expenditure by peasant families provides an important stimulus to RNFE to grow. Raising farm labour productivity, therefore is important not only because it permits the release of labour from agriculture to agriculture pursuits but also it boosts up per capita income to the levels that enable consumption diversification from foods in favour of non foods.

Jayaraj (1989) in his study observed a positive association between the degree of urbanisation and the proportion of male workers in RNFE at district and taluk levels. Further, classifying the taluks on the basis of their degree of
urbanization, he found that the changes in the level of male RNFE were positively related to the changes in the degree of urbanisation in the taluk with higher degree of urbanisation in the base year (push factor). The more urbanised taluks were likely be characterised with congestion and bad living conditions. The rural workers were hesitant to stay in such urban areas when better transport and communication facilities were made available to commute between rural and urban work place. A rapid growth in urbanisation, therefore, pushed the rural workers into RNFE. The study also found that the taluks or villages, which were located near towns had a larger proportion of workers in RNFE.

Nachane et.al.(1989) have found a highly significant influence of the agricultural sector's performance on the non-farm sectors. The most pronounced effect was on agro-based industries, while its direct impact on other sectors, such as the tertiary sector was not decisive. The use of non-traditional purchased inputs and capital goods also increased considerably in food grain production. Hence, both forward and backward linkages were found to exist.

Dev(1990) in his analysis reveals that the incidence of a person days unemployment was higher in non-agriculture as compared to agriculture and severe among females as compared to their male counterparts at the all India level in 1977-78. The incidence of all person days unemployment in almost all the sub-sectors in non-agriculture was higher than that of agriculture excepting for trade and services. Further, the incidence of female person days unemployment was higher in transport fallowed by public utilities (electricity, gas and water), manufacturing, services and trade as compared to male counterparts during the same period. There was a concentration of all person days unemployment in construction, transport, mining and quarrying and others.

Unni (1991) in her NSSO regional level study found that, the insignificant positive impact of crop output per agriculture worker on the level of workers in RNFE, particularly for females. But she found a significant
positive impact of crop output per hectare (land productivity on the share of workers in RNFE), particularly for males. This implies that agriculture surplus acted as a source of capital for investment in non-agriculture pursuits (production linkage) rather than the source of expenditure on non-food items (consumption linkages). In respect of females, Unni found that with increasing levels of income and consumption expenditure, the participation of females in RNFE tends to decline with contraction of income earning potentiality and the participation tends to rise.

Shukla (1991) found a strong positive impact of net sown area per agricultural worker on the growth of RNFE. An U-shaped relationship is in evidence with regard to the distribution of landholdings. The greater the share of the smallest and largest size classes in total number of and area under operational holdings, the higher is the proportion of workers in RNFE. The proportion of operational holdings and operated area in lower [5 to 20 hectares (ha)] and higher size groups (20+ha.) were considered as proxies for consumption linkages and found a strong negative effect with the farmer and a strong positive effect with the latter on the level of RNFE.

Haggblade (1991) in his study investigated that the growth of RNFE is primarily the result of agriculture growth which led to rise income levels of the farmers and dially wages of agriculture labourers, resulting in an increased demand for non-farm goods and services.

Hazell and Haggblade (1991) in their study used district level data to estimate agricultural growth multipliers econometrically rather than by the conventional input-output models. They support the hypothesis that the growth of the rural non-form sector is driven primarily by agricultural growth. They estimate that each rupee value added created in agriculture leads to Rs. 0.37 of direct additional value added to non-farm activities in rural area plus rural towns. With feedback effects from non-farm activity back to agriculture, the total indirect income increment becomes Rs. 0.54. These multipliers are no invariant and rise with agricultural development. Besides, they also found evidence that both production and consumption linkages have grown.
substantially, buoyed up by the rising input intensity in agriculture and the
growing incomes which stimulate consumer diversification of spending into
non-food items.

Mundle (1992) in his study had estimated, using different growth
scenarios possible under structural adjustment programme (SAP), increase in
unemployment rates upto 1993-94. The estimates of demand for labour were
arrived at using a constant employment elasticity (with respect to GDP growth)
computed for the period 1983-84 to 1987-88. Unemployment was computed by
subtracting these from labour supply, which was calculated by applying a
constant labour force participation rate to population estimates for each year.
Mundle also predicts that the major reduction in employment is likely to be in
the unorganised non-agricultural sector.

Chandrashekar (1993) in his study found that the compound growth rate
of agricultural output had an insignificant impact and the compound growth
rate of agricultural output per capita had a weak negative impact on the
proportion of workers in male RNFE. Besides, the agricultural output per
capita had an insignificant negative impact on the proportion of male RNFE at
the levels of districts in West Bengal. The cropping intensity, density of
population and WPRs also play an insignificant role in determining the level of
male RNFE. The study, however, claimed that the persistent rise in the
proportion of RNFE in total rural employment is not the fall out of the
dynamism rather inadequate diffusion of the dynamism of green revolution.
The relationship between the growth of agriculture and RNFE appears to be
non-linear.

Visaria and Basant (1993) in their study examined that a clear increase
in the share of non-agricultural employment in the rural workforce during the
1980s, with the trend more clearly evident among males than among female
workers. In addition, the evidence appears to point to a more rapid expansion
of tertiary sector employment casual nature rather than of secondary sector
employment and that the bulk of employment growth is of a casual nature,
rather than permanent. Surprisingly, this expansion appears to have slowed during recent years.

Singh (1993) in his study found a positive impact of urbanisation on the proportion of workers in RNFE in the state as whole. The impact of urbanisation on RNFE in the areas with different levels of development indicated that in agriculturally prosperous areas, well developed network of transport and high rate of literacy and presence of big industrial towns, the degree of urbanisation was positively associated with the growth of RNFE through demand driven and consumption linkages. In the areas with relatively backward in terms of agriculture, social backwardness due to low rate of literacy and weak rural-urban interaction, the impact of urbanisation on RNFE was very insignificant.

Shiela Bhalla (1993a) in her study analysed that the shift of consumer demand in favour of better quality products, together with a switch to urban produced inputs is the decisive factor in districts which have reached high levels of agricultural productivity. Another prime mover which operates from outside agriculture is the growing influence of urban centres. Workforce diversification in the surrounding countryside (districts) increased rapidly in 1971 and 1981. Such diversification was not in existence in 1961.

Singh (1994) in his study found that out of the indicators measuring agricultural development and rural prosperity, while the value of agricultural output per capita was positively, but insignificantly associated with the proportion of workers in RNFE, but the value of agricultural output per hectare and per capita rural consumption expenditure were positively and significantly related to the proportion of workers in RNFE. In respect of second set of indicators, which are partial reflections of consumption linkages - Gini coefficient ratio for consumer expenditure and landholdings had respectively, a strong and weak positive impact on the level of RNFE. The proportion of people living below the poverty line had a strong negative impact on the proportion of RNFE, implying that in poor districts lack of demand inhibits the growth of RNFE. The study concluded that higher rural incomes coupled with
greater inequalities raise the level of demand for non-agricultural products, resulting in the growth of RNFE.

Eapen (1994) in his study observed that a rapid increase in the proportion of workers in RNFE is the result of sustained in the demands for goods and services produced in the non-farm sector, particularly for non-farm services and construction inputs. This growth in demand for such non-farm goods and services is attributed to a rapid increase in the Gulf remittance and daily wage rates in non-agriculture, particularly for construction workers and agriculture. It is, rather, the consumption linkages, which had a profound impact on the proportion of workers in RNFE, but it is not led by the sustained and vigorous growth of agriculture but by rapid inflow of remittance and increase in the daily wage rates in non-agriculture and agriculture sector.

Verma and Verma (1995) in their study found that there had been a negative but insignificant association between the proportion of male RNFE and the average value added in agriculture per hectare; a positive but weak association in respect of average value added in agriculture and allied activities per agricultural worker. Rural income per capita had a negative but insignificant impact on the level of male RNFE. The share of non-food items in total rural consumption was negatively and significantly associated with the proportion of male workers in RNFE.

Some studies (Rajashekar 1995; Rajashekar and Biradar 1998; Biradar 2002) for Karnataka found that the commercialization of agriculture, defined as a proportion of area under non-foodgrains to total gross cropped area, had a positive impact on the proportion of RNFE. The extent of positive impact, however, declined sharply in 1991 over 1981, implying that the magnitude of RNFE resulting from the agriculture growth led through its production linkage tended to deteriorate and increase in the importance of the factors outside agricultural sector.

Chadha (1997) in his study attempted to estimate the base of human capital in the Indian labour market. The proportion of illiterate workers was higher in agriculture and lower in non-agriculture at the all India level. But
with increasing literacy rates, the proportion of illiterate workers tended to decline in non-agriculture as compared to agriculture.

In rural non-agricultural sector, the workers with higher educational background were concentrated in self - RNFE, but the share of such workers had been on the decline, and shifted towards regular RNFE during the same period. With increasing levels of education, the proportion of casual labourers in RNFE tended to decline during the same period, implying that the quality of RNFE is on the improvement. The study concluded that the quality of human capital in non-agriculture is much better than that of agriculture. In both the sectors the share of illiterate workers declined; the declined found to be greater in the rural non-agricultural sector vis-a-vis agriculture, implying that the quality of human capital in Indian labour market is improving overtime.

Parthasarathy, Shameem and Reddy (1998) in their study found that the proportion of male workers in RNFE showed a continuous increasing trend in nine states (Haryana, west Bangal, Himachal Pradesh, Uttar Pradesh, Tamil Nadu, Kerala, Karnataka, Punjab and Maharashatra) while declining trend of growth in six states (Rajasthan, Orissa, Gujarat, Bihar, Madhya Pradesh and Andhra Pradesh) during 1987-88 to 1993-94. Most of the states, however, had a significant increase in the proportion of male workers in RNFE during 1983 to 1987-88. A rapid increase in the share of male workers in 1987-88 over 1983 was largely attributed to the drought of 1987-88. Evidence for drought driven RNFE was also explored by the above study.

Parthasarathy, Shameem and Reddy (1998) have examined that there has been a positive association between the proportion of workers, particularly for males, in RNFE and the current daily status unemployment rate, suggesting that the rural non agricultural sector is a residual sector, but whether it is distress induced or not depends upon the real wage rates in agriculture and non-agriculture. The positive association between these two variables, however, quite significantly declined in 1993-94, implying that the extent of impact of distress situation on RNFE has come down in the early years. They also found a strong negative association between the differences in the share of
male workers in RNFE and incidence of poverty between two periods (1972-73 to 1977-78 and 1983 to 1993-94). The decline in the incidence of poverty is attributed not by the growth of RNFE but due to rise in public expenditure.

Sharma, Kumar and Sharma (1999) in their study in Himachal Pradesh found that there has been a strong positive association between the proportion of area under non-food grains and the level of RNFE. The extent of impact of commercialisation of agricultural on the growth of RNFE in rural Himachal Pradesh seemed to have come down in 1991 over 1981. The backward linkages are weak due to industrial backwardness in most of the cities which are in fact trading centers and administrative areas in nature.

Acharya and Mitra (2000) in their study drew on multiple rounds of National sample survey data (Spanning the period 1984-1997) and also two rounds of Economic census (corresponding to 1990 and 1998) to ask whether the positive non-farm employment trends of the 1980s have continued through the 1990s. They found little evidence of further expansion. At the all-rural India level they found that employment in the secondary and tertiary sectors grew from about 22% of the work force in 1983 to about 25% by 1987-88. They found no evidence of further growth during the 1990s; the last NSS survey they examined (thin round for 1997) and indicated an employment rate of about 24%. The authors noted considerable variation across states in the degree of occupational diversification (with States such as Kerala, Punjab, Haryana, Gujarat and Tamil Nadu clearly more diversified than others), but observed no clear evidence of growth in non-farm employment rates during the 1990s occurring in any state other than Kerala.

Reardon, Bersdegue and Escobar (2001) have identified that rural non-agriculture provided little over one-third of employment in rural areas. A considerable regional variation also tends to exist in the proportions of workers in RNFE. While the proportion of male workers varied from 18 percent in Bolivia to 57 per cent in Costa Rica in respect of female, it varied from 16 percent in Bolivia to 93 percent in Panama in 1997. In most of the countries in Latin America and Caribbean, the participation of female workers in RNFE is
found to be more than that of male counterparts. The proportion of male workers in RNFE was estimated at 32 to 47 per cent, whereas in respect of females it was at 60 to 80 per cent in 1997. The simple average data for 12 countries in Latin America and Caribbean reveal that the share of income from RNFE was estimated at 46 percent. The share of income from RNFE varied from 22 percent in Honduras in 1997 to 68 per cent in Haiti in 1996.

Eapen (2001) in his study observed that there has been a positive relationship between the proportion of area under irrigation to total cultivated area and the proportion of workers in RNFE. A higher incidence of irrigation including the use of pumpsets, new variety of seeds, mechanical threshers, chemical fertilizers, repair services and so on seemed to have stimulated the growth of RNFE through forward linkages. The study, however, made use of the 1971 census data at the village, which may not be providing the present process of linkage effects of agricultural growth on RNFE.

Chadha (2001 a) and Chadha and Sahu (2002) in their study drawing upon the NSS data (US) covering upto (1999-2000) from 1972-73 found that, in rural areas, the proportion of male workers in RNFE increased, but not in the same pace as it was in the pre-1987-88 period. The inter-sectoral shifts were relatively more in the 1970s and 1980s than in the 1990s. The study points out that one clear trend of the 1990s i.e., a substantial slow down of the process of weaning away of rural male workers from agriculture and its complete half, if not reversal, in the case of rural females. The services sector has grown relatively much faster than that of manufacturing sector for rural male workers and opposite is true for females during the post-reform compared to the pre-reform periods.

Srivatsav and Dubey (2002) in their analytical study found that reduction in poverty incidence and an increase in the average wage rate in agricultural stimulate the growth of RNFE through an increased demand for non-form goods and services. They concluded that in better off regions the growth of RNFE is demand driven and in poorer regions, it is the result of distress diversification.
Narayanamurthy, Rodrigues and Phadnis (2002) have found a strong positive relationship between the proportion of gross area irrigated to gross cropped area and the proportion of workers in RNFE by estimating simple linear regression. The extent of relationship between these two variables increased in 1991 over 1971. The cross tabulation of the data also showed that the districts with higher proportion of workers in RNFE distinctly had a higher proportion of area under irrigation, which improved sharply over the years in these selected districts.

Mecharla (2002) in his study found a negative but insignificant association between the proportion of workers in RNFE and the average size of landholdings and the incidence of poverty. At the disaggregated level, the average size of landholdings exercised an insignificant negative influence on RNFE in household industries, services, trade and non household industries, and an insignificant positive influence mainly in construction. The incidence of poverty was negatively and significantly associated with the proportion of workers only in household industries and transport, but in most of them statistically not significant. In case of first variable, it showed that declining average size of landholding has resulted in lack of employment opportunities and led to distress diversification of workers with lower educational attainments into mainly household industries and services, the traditional RNFE was by distress factors such as proportion of small and marginal farmers and landless labourers.

Mecharala (2002) made an attempt to assess the impact of urbanisation on male and female and all RNFE. The study found that the degree of urbanisation contributed positively to male RNFE, but statistically insignificant. At the disaggregated level, the degree of urbanisation had a strong positive impact on RNFE in non-household industries, followed by transport, construction, mining and quarrying, and an insignificant positive in services and weak negative impact on household industries and trade.

Kaur (2002) examined that the unemployment rate, density of population and marginal holdings had a positive and the land man ratio had a
negative impact on the proportion of workers in RNFE. He concluded that the growth of RNFE is distress induced.

Kulkarni and Samantara (2002) have observed that manufacturing activities generated the highest level of additional annual employment on a recurring basis followed by agro-based activities, trading business and services. The results based on the classification of activities into various categories of investment revealed an inverse but not monotonic relationship between investment size category and level of employment generation. The analysis of employment elasticity indicates that a moderate rise in investment may lead to a significant rise in employment in most of the activities.

Foster and Rosenzweig (2003) in their study provided a theoretical exposition of how the non-farm economy interacts with the formal economy building on the great heterogeneity of non-farm activities in rural areas, and highlighting the importance of general equilibrium relationships. The authors argue that a key distinction has to be made between traded and non-traded goods and services, and they emphasize the significance of wage and salary employment in non-farm activities as opposed to the self-employment activities that have traditionally been the focus of attention.

Gill and Sawheny (2003) have identified a strong and positive relationship between per capita Net State Domestic Product (NSDP) and male RNFE, and week with respect to total RNFE and per capita male Gross State Domestic Product (GSDP) originated from agriculture had a strong positive impact on all and male RNFE. This implies that the growth of agricultural income per agricultural worker contributes significantly to the growth of RNFE in general and male RNFE in particular.

Sheila Bhalla (2004) in her study found that the center of gravity in the Indian economy shifted from rural to urban areas while a vast majority of income earners continue to live and work in rural areas. With the decreasing employment generating capacity in the economy and declining public investment in agriculture, the burden of providing additional employment to the growing labour force in the country fell upon the unorganised rural non-
farm sector. The growing pressure on rural non-farm sector to generate sustainable jobs pulled down employment growth rates as well as the wage levels in some sub-sectors within the rural non-farm sector. She has also analysed the quality of rural non-farm employment. She concluded with a comment that the critical issue in rural development in India today is not how to accelerate non-farm employment growth or how to raise from productivity levels or reduce poverty but where to find the financial resources needed for investment in rural infrastructure that can strengthen the employment generating capacity of the rural non-farm sector.

Mailthani (2004) in his study reviewed the employment situation in Assam and found that employment in the state was not keeping pace with the demand for the same, resulting in very high incidence of unemployment. He has devoted to identify and discuss an effective strategy for employment generation in rural areas. He too observed that the future jobs in Assam have to be created in the non-farm sector, particularly micro-enterprises. He observed scope for the growth of non-farm sector based on local resources (raw materials), which are in abundance. The state has to create an enabling policy environment and work out an appropriate strategy to utilise the local resources and meet the growing external demand and in the process generate sustainable and productive jobs in the non-farm sector.

Sambi Reddy (2004) in his study assesses the impact of economic reforms on non-form employment in rural India between two time points viz., 1987-88 and 1999-2000. For this, he used NSS household data. Through his analysis, he observed that "unemployment rate and reforms have statistically significant impact to influence the share of non-farm employment at state level. One per cent increase in the share of non-farm employment". The low levels of unemployment after reforms might be due to the withdrawal of youth from workforce indicating that there was no substantial improvement in the labour observing potential in the non-farm sector. He also observed that reforms might have caused diversification of employment within the non-farm sector. He concluded with a statement that landless household workers should be
guided to move from manufacturing to trade and service activities in rural areas.

Further, Sambi Reddy (2004) in his study found that among the social groups, the disadvantaged caste (ST and SC persons) participation in work force was higher than those of Other (forward) caste persons in 1987-88 and 1999-00 i.e., before and after reforms. While the proportion of unemployed persons among SCs was more, it was less among scheduled tribes. During the reforms period while the proportion of non working population was more or less stagnant among STs, it was marginally increased among SCs and Others. The employment status among other backward castes (OBC) in 1999-00 indicates that they were slightly better than STs and SCs in terms of low labour participation and low proportion of unemployment. Among the social groups, ST workers participation in the non-farm activities was very low compared to SCs and Others'. In all social groups the females participation in non-farm activities is lower than their counterparts in both the years. While an increased share in non-farm sector is evident after reforms among SCs and Others', a declined share is noticed in the case of scheduled tribes.

Biradar and Bagalkoti (2004) in their study found that "the growth rates of workers in rural non-farm sector tend to move in opposite direction to the growth rates of agricultural income and food grains. Agricultural income, consumption, degree of commercialization were found to be contributing to the growth of rural non-farm sector. On the otherhand, poverty related factors such as unemployment also promote the growth of rural non-farm activity, due to the distress factor. Biradar and Bagalkoti also examined the residual sector hypothesis and found that growth of rural non-farm sector is distress induced. "There has been a distress moment of male workers into the rural non-farm sector. But this does not lend any support to residual sector hypothesis. A strong and negative relationship between the share of male workers in the rural non-farm sector and rural poverty shows that the male rural non-farm employment doesn’t appear to be less remunerative". They also observed that in view of a gradual decline in the public expenditure on poverty, rural
development and social services, the growth of RNFA, followed by the increasing rate of literacy is seen as an important total for poverty alleviation and decline in inequality in the days to come.

Narayanamoorthy (2004) in his study observed a positive nexus between the availability of irrigation and the percentage of the workers involved in rural non-farm activities. However, in terms of relative significance literacy and rural infrastructure than irrigation were more closely associated with the incidence of rural non-farm employment. However, the creation of rural roads as well as the improvement in literacy rates is often accomplished through agricultural growth, which derives its momentum from the availability of irrigation facilities. He observed that irrigation can stimulate the demand for non-farm activities through agricultural growth that can ultimately reduce rural poverty.

Eswaran, Kotwal Ramaswami and Wadhwa (2007) in their study persuade the question of whether expansion of the non-farm sector is likely to influence agricultural wage rates. This could be an important route through which rural non-farm employment influences rural poverty, particularly if non-farm enterprises have been establishing themselves in areas where agricultural wages are low (and therefore rural poverty is high). This study draws on NSS data in combination with total factor productivity data from other sources. It is found that agricultural wage growth during the period 1983-1999 has been driven for the greatest part by changes in agricultural productivity and that the contribution of the non-farm sector to real wage increase is likely to have been no greater than a quarter.

Biradar (2008) in his study found that the degree of urbanization (DUH), measured in terms of urban share of population to total population, also stimulates the growth of RNFE, especially for males. The proximity to, or existence of, a large urban population in a region may also facilitate the growth of RNFE. The rural areas may cater to the demand for non-agricultural products and services in the nearly urban areas. Moreover, some of the
residents from rural areas may be engaged in non-agricultural occupations in the nearby towns and commute to their work place every day.

Biradar (2009) in his another study found that the early 1990s i.e., a substantial 'slow down' of the process of weaning away of rural male workers from agriculture and its complete halt, if not reversal, in the case of rural females. The service sector grew relatively much faster than that of manufacturing sector for rural male workers, whereas the manufacturing sector grew much faster than that of service sector for rural female workers during the reform period as compared to the pre-reform period.

2.3. STUDIES BASED ON PRIMARY DATA

Harriss (1991), in his study tried to assess the agricultural income-demand led growth of rural non-agricultural activities in the market town of Arni and its surrounding villages in Tamil Nadu. The analysis portrays an economy in which there is concentration of wealth amidst general poverty and in which antediluvian forms of capital remain powerful. This has led to the weakening of linkage effects of the recent agricultural growth. He concludes that while agricultural growth may be a necessary condition for rural diversification of a non-invalutionary kind it is certainly not sufficient.

Kumar (1993) has observed that a larger proportion of workers belonging to upper caste and rural artisan households take up non-agricultural jobs in business, trade and artisan based activities, whereas the workers belonging to the SC/BC households seek less dignified non-agricultural jobs like casual employment in construction, hotel and the like.

Adams (1994) found that while the income from agriculture is the single most contributor for increasing income inequality, the income from rural non-farm jobs and livestock reduces income inequality. Additional increments of income from rural non-farm jobs or livestock contribute to a decline in overall income inequality. Within the rural non-agricultural sector, only non-agricultural unskilled labour represents inequality reducing source of income
and non-agricultural government employment represents an inequality rising source of income.

Chadha (1994) in his study observed that a rapidly growing and highly productive agriculture is capable of promoting a strong productive network of non-farm employment avenues inside the village economy itself. However, agriculture alone does not automatically foster expansion of local non-farm employment (Chadha, 1994). The increasing share of non-farm earnings among the weaker sections as the economy moves up the development ladder according to him supports the reality of the percolation mechanism.

Shylendra and Thomas (1995) in their study identified that persons with better education had easy access to take up lucrative jobs in rural non-agricultural sector. On the other hand, unskilled and illiterate workers seasonally migrate to nearby urban areas and engage in unskilled and low paid non-agricultural jobs.

Chand (1996) in his study found that while the underdeveloped panchayats had on insignificant proportion of workers in RNFE as their main occupation, in panchayats with agriculturally prosperous a larger proportion of workers in service sector, trade and business. Due to high adult literacy and attainment of high level of agricultural development long ago in the developed areas, it has become possible for a large proportion of younger labour forces to undertake more attractive jobs outside agriculture. The differential impact of agricultural prosperity on RNFE was attributed to time lags to user in growth dynamism in agriculture.

Saleth (1996) in his study in four villages of Tiruchirapalli in Tamil Nadu found that the households with better education are more likely to participate in RNFE as compared to the households with no or little education.

Nath (1996) in his study found that the asset holding households with easy access to land, non-land assets, capital and education combine their family activity with non-agricultural, non-manual, permanent or semi-permanent jobs. The assetless households who lack education, skill, training and assets have
entry barrier into more productive, highly paid non-agricultural jobs, but sell their labour in agricultural or low paid non-agricultural employment market.

Unni (1997a) in her study rightly observed that returns to economic activity or labour in non-agriculture is rather relatively higher than in agriculture. But an increase in non-agricultural income - increases the degree of inequality in the distribution of rural income and ownership of land. If the macro economic policies push the workers into low-productive non-farm jobs, the level of inequality in rural income is more likely to increase.

Rajasekhar and Biradar (1998) in their household level study in four villages with different levels of agricultural performance in Tumkur and Shimoga districts of Karnataka, indicated that while the villages with agriculturally prosperous had a larger proportion of workers in RNFE, particularly in trade business and agro-processing activities (Kodur and Karchalli in Shimoga), the villages with agriculturally backward had relatively a smaller proportion of RNFE, characterised by distress type, low paid and seasonal (Polenahalli in Tumkur district). Further, the growth induced rural non-agricultural activities are characterised by a high level of initial investment, bank borrowings, working capital, employment generation and profit margin as compared to the distress - induced RNFE.

Rajasekhar and Biradar (1998) in their study in Karnataka also found that in agriculturally backward areas vis-à-vis agriculturally developed ones, the growth of RNFE is largely determined by distress induced factors, namely, larger proportion of landless, small and marginal households, unemployment and underemployment, absence of technological breakthrough, little or no diversification of cropping pattern in favour of commercial crops, frequent droughts and the like. In such areas the growth of RNFE is largely the result of distress factors.

Basant (1998) identified that there has been a significant and positive association between the WPRs rates and number of activities per worker and the proportion of workers without two square meals and negatively in case of non-agricultural workers, particularly for males. A negative but insignificant
association between male, followed by female, RNFE and the proportion of irrigated and cultivated area per agricultural worker, on the one hand, and strong positive correlation with, the proportion of landless households, on the other implied that the distress diversification hypothesis was partially substantiated.

Leones and Feldman (1998) in their study have found that the income from non-agriculture is more equally distributed as compared to the income from agriculture across all households. An increase in the non-agricultural income tends increase income inequality much lesser than an increase in the remittance income though it is more equally distributed than the income from all other sources.

Sidhu and Toor (2002) in their study identified that there had been an insignificant inverse correlation between the proportion of workers in RNFE and labour and land productivity in agriculture indicating that the areas with low earnings of labour from agriculture and land productivity are more likely to have a higher share of workers in RNFE. Added to this, an inverse relationship but insignificant between the share of RNFE and labour productivity in non-agriculture. This indicated that in backward areas, RNFE in which the workers from resource poor households involved are not lucrative rather distress type.

Rao and Reddy (2002) have found the transitions and other qualitative dimensions. It maintains that in the traditional caste based activity, few are subjected to extinction while others are modernizing their services. The newly emerging areas are mostly in services. A much greater expansion is occurring in non-form activities through migration to urban areas. While early migration is into manufacturing, the latter one is into services. It is also found that in the absence of growth in agriculture and manufacturing segments. There emerge limits to the expansion of services, which have already set in within the village and for migrants.

Ghuman, Sukhpal and Singh (2002) examined that the share of workers engaged in RNFS has been extremely low, only 6.7 per cent of the total male
workers were engaged in RNFS in all the villages studied. Contrary to these findings, however, the census data show a very high percentage share of workers in RNFS. Besides, more than 90 per cent of the self employed workers in RNFS were engaged in petty activities with a low level of earnings. The study also found that most of the RNFE activities emerged due to push factors rather than 'pull' factors. As such, the rural non-farm sector did not emerge as a dynamic and viable non-form sector in Punjab.

Honakeri (2002) has made an attempt to study the pattern of non-farm employment in all the five villages, examined the extent of income generated by different crafts and crops and suggested ways and means of enhancing non-farm activities so as to reduce pressure of population on agriculture. The study is based on a survey of 100 randomly selected households spread over five villages from one of the talukas of Gadag district. The data collected relates to education, wages, income from different occupations, and duration and nature of employment. The study revealed that the pattern of non-farm employment in all the five villages consists of seven non-farm related activities such as blacksmithy, carpentry, construction, goldsmithy, pottery, tailoring and others crafts. Most of those engaged in these crafts are landless labourers, marginal workers, marginal formers and non-cultivating households. Among the different activities, construction workers accounted for more than 20 per cent of all the families taken together followed by carpentry, tailoring, blacksmithy, pottery, goldsmithy and others craft, out of this, carpentry, blacksmithy and other's craft contributed comparatively large number of man days per worker per year.

It is also observed that, factors such as degree of urbanisation, literacy levels, level of general non-agricultural development of a region, have a strong association with the rural non-farm sector (RNFS). The share of non-farm earnings is gradually on the increase in the rural area, due to the launching of various employment schemes (especially self employment schemes), and increasing level of literacy. However, there is a need to further strengthen the infrastructure in the rural areas so as to augment non-farm sector employment.
which will go a long way in reducing the unemployment and disguised unemployment. Further some of the suggestions which emerged from the study have a definite policy implications i.e., to impart extensions education to craftsmen to effect improvements in their respective crafts and trades; set up non-farm units in identified growth centers or bigger villages to increase the scope of rural non-farm employment and allocate a larger proportion of resources for strengthening infrastructure facilities such as all weather roads, marketing networks, banking institutions, education, health care systems, electricity and the like which in turn will encourage rural entrepreneurs to initiate innovative programmes in non-farm sector.

Ranjit Singh Ghuman (2004) in his study found that "most of the non-farm workers, engaged in informal sector, entered into non-farm sector because of the push effect of agriculture sector and not due to the pull effect of non-farm sector". Another observation of Ghuman is that entrepreneurial capabilities and education are more important than own funds for investment. He concluded that serious efforts have to be made to improve the present quality of education in rural areas.

Mishra and Pradhan (2004) conducted a study on the impact of development externalities on the access to rural non-farm employment to the affected labour force in the Harabhangi irrigation project in Orissa. Analysing the empirical data on the households in the project area, the authors observed the loss of land among the affected rural household’s capability to diversity into non-farm income activities. In order to minimize the negative impact associated with such project induced deprivation the affected work force should be provided comprehensive assistance in terms of credit, skill development, entrepreneurship, fair access to local resources and, most important, the local development institutions.

Sankaran (2004) conducted a study based on the primary data collected from 64 artisan (carpentry) households in Soalamkudi of Poover gram panchayat, Tiruvanantapuram district, Kerala. According to Sankaran, the technology factor in the construction industry has been undergoing striking
changes during the last one and half decade. These changes are influencing the techniques, processes, materials, tools, etc., employed in the construction activity. The new technologies sometimes unfold employment opportunities in new areas resulting in the shortage of trained personnel. In the context of uncertainties associated with the market acceptance of new designs and new methods, the self-employed artisans find themselves exposed to risk by investing in new technologies that are characterised by the uncertainties while the technological changes are exposing the self-employed rural artisans in the construction industry to uncertainties and risks in investment, no development support is forthcoming from the government. He concluded with a few suggestions for minimising the technology-induced risks in the construction industry and safeguarding the interests of the artisans.

Lanjouw and Shariff (2004) conducted a large-scale sample household survey in 16 major states in India also revealed that with increasing levels of education, the proportion of workers in low quality RNFE (Casual) declines and increases in good quality RNFE like self employment or regular/ started employment. Low education levels coupled with low wealth and social status restrict accessibility of the poor to the relatively more attractive non-farm jobs, which have significant poverty reduction effects.

Further, Lanjouw and Shariff (2004) in their study also found that the workers belonging to the SC/ST households who posse little human capital and assets face additional constraints to get jobs in non-agriculture which have significant poverty reduction effect. The age and gender of workers are also other important factors upon which the extent and nature of RNFE depends too. Even with increasing age of the workers, the level of income from RNFE also increase. Men are more likely to involve in RNFE and women are in agriculture and allied activities and earn low income.

2.4. CONCLUSIONS

As is evident from the review of literature, there are certain socio-economic constraints due to which a large number of SCs/STs are not able to
take up jobs in the rural non-farm sector, and hence, the growth of employment is limited. Identification of the problems that tend to limit the growth of RNFEs and presenting solutions, therefore, is felt increasingly an important one to ensure sustained growth of employment in the rural non agricultural sector. As the labour market discrimination is one of the important source of poverty and income inequality, the factors contributing to labour market discrimination, against SCs/STs, in the rural non-farm employment sector is reviewed to be explored.

Similarly, most of the studies attempted to identify the factors contributing to the growth determinants and the changing trends in the growth of employment both in agriculture (farm) and non-agriculture (non-farm) sectors: But, enough attention is not paid to understand the structural changes in employment status among various groups of population. The socio-economic household characters like caste, type of household (occupation) and land size (owned/cultivated) may influence the decision making of a household and their (male/female, adult/child) participation in economic activity. An attempt has to be made to understand whether economic reforms in India have any dent/influence on employment scenario, in particular, non-farm employment in different groups of population in rural areas, considering the significance of these aspects, the present study modestly attempts to fill some of these research gaps as identified above.