

A COMPREHENSIVE EXAMINATION OF RURAL NON-FARM SECTOR THROUGH CRITICAL ANALYSIS OF EXISTING LITERATURE

Amandeep Kaur*
S.P. Singh**

ABSTRACT

The role of Rural Non-Farm Sector (RNFS) has been presented and predicted as an essential growth indicator for the rural economy since long. Still the ambiguities exist regarding the already explored dimensions of the sector. This paper represents a holistic picture of the sector by combining thoughts of the scholars regarding the growth, structure, and impacts of the sector on the overall economy and also identifies the unexplored issues related to the sector. The paper finds out that livelihood diversification can be both a coping and a thriving mechanism where it is driven by a growing and more flexible economy. But the “coping” dimension dominates where diversification is an enforced response to failing agriculture, recession, and setback situation of economy. Also, this mechanism questions the quality of employment provided by the sector. Moreover, the coping strategy by RNFS also stands out after and during the pandemic situation.

Keywords: *Non-Farm, Diversification, Employment, Coping Strategy, Rural*

* Assistant Professor, Department of Humanities and Social Sciences, Jaypee Institute of Information Technology, Noida; E-mail: amandeep.kaur@jiit.ac.in

** Professor, Department of Humanities and Social Sciences, Indian Institute of Information Technology, Roorkee; E-mail: singhfhs@iitr.ac.in

1. Introduction

The Rural Non-Farm Sector (RNFS) is an old but poorly understood sector. Its inception has been recognized since long. But still it is lacking a precisely defined connotation. Thus, it is important to have a thorough knowledge of RNFS in all its dimensions. Moreover, during the Covid-19 pandemic, when most of the economic activities had been standstill, the activities related to the RNFS played an important role in running the day-to-day life smoothly. The sector has great potential in the revival of the economy with judicious set of policies, investments, and targets. In this context, a cautious examination of the RNFS' nature, current scenario, dimensions, and its manifold impacts on the economy becomes relevant. This paper represents a holistic picture of the sector by examining the thoughts of the scholars regarding the growth, structure, and impacts of the sector on the overall economy and identifies the unexplored issues related to the sector.

On the positive side, even the low-productivity economic activities within the sector add to per capita national income and act to tighten the labour markets (Ravallion 2000; Ray 1994; Lanjouw and Procter, 2005). The sector also performs other functions for managing the risks and uncertainties associated with the rural livelihood. It acts as a safety-net during the critical times of employment and the agricultural off-season and provides employment and income. Indirectly, growth in the rural non-farm employment (RNFE) supports the growth of agriculture, allowing it to expand beyond supply-side constraints, and it leads to the development of new skills and contacts for those who participate in it (Start, 2001).

However, the negative impacts of the RNFE are closely linked with the positive ones. Portraying a residual sector as a safety net may include the fact that employment provided is often exploitative, with incomes too low to meet basic needs and a work environment too poor to meet basic human rights. Moreover, rural livelihoods are highly insecure, due to involvement in informal kinds of jobs, which are without any written contract and social security. Furthermore, with the low level of skills and education, there exists a scarcity of regular jobs and uncertainty of the employment opportunities which push the workers to join highly casualized labour markets (Start, 2001).

Therefore, an attempt has been made to understand the different dimensions of the sector through extensive literature review highlighting the various issues and challenges of the sector. The inception of the RNFS starts with the two-sector conventional development models of Lewis (1954), Fei and Ranis (1964), which explain the phenomenon through the unlimited supply of labour followed by migration model of Harris and Todaro (1970), and agricultural sector growth through linkages by Mellor and Lele (1972), but in all these models the RNFS is not explicitly considered. The RNFS terminology came into use only after

the commencement of survival, coping and livelihood strategies, and scholars like Oshima (1971), Hymer and Resnick (1969) and Byerlee and Eicher (1972) started using it as a separate and distinct sector for analytical purposes. These scholars have suggested using a tri-sector model (capital intensive non-agricultural sector, labour-intensive non-agricultural sector, and labour-intensive agriculture) for studying employment creation because in dual-sector models it is difficult to incorporate non-leisure non-agricultural activities (Liedholm, 1973). In India, specifically, the involvement of RNFS has been explained by Borkar (2013) through three stages of growth of the sector. Initially started from the development of handicrafts and artisanal industry in the 1920s (started by Mahatma Gandhi's Charkha movement), followed by the establishment of a co-operative system in the rural area for providing them financial assistance, the openness and policy reforms during 1990s led to the development of the sector.

On the basis of the reviewed literature, the role of the RNF sector can be classified into two categories, i.e., as a saviour and as a residual sector.

1. The RNF sector acts as a saviour for rural people as it provides employment, additional income and helps in reducing poverty which primarily deals with the quantitative aspect of the sector (refer Figure 1(a)).
2. Contrary to this, arguments are also given highlighting it as a residual sector under which the characteristics of informality and casualization are present (refer Figure 1(b)).

These two categories are further studied under separate sub-heads. The role of RNFS as saviour is explained as sub-headings: (a) Employment (b) Additional Income (c) Poverty Reduction (d) Rural Industrialization and (e) Reduction in Migration, whereas its role as a residual sector is described through (a) Absorption of only Surplus Labour (b) Casual Employment (c) Secondary Occupation (d) Employment of last Resort (e) Informal Employment.

RNFS provides several alternatives for those who want to go out of agriculture with a new zeal to work. In this way, the sector offers the flexibility of livelihood for the people to opt for multiple avenues for sustaining their livings. The main purpose of the paper is to stress upon the residual nature of the sector which hampers the growth of the particular sector in rural development. Though it has been seen as a potential sector to enhance the growth opportunities; still the potential has not been channelized in a proper way to reap the desired benefits.

Thus, simply seeing the RNFS as a boon for the rural development will be denying the fact that RNFS is a provision of informal and low-productive employment, which otherwise can be converted for the betterment of the economy in the coming future. So, to improve the development path of the rural economy, it is important to study the gap or loopholes where the negative

impacts surpass the positive ones and nullify the role of positive impacts. To analyze the scope of improvement, it is essential to first study and examine the sector's negative impacts and suggest the policies for improvement. These negative impacts are reviewed in detail from the past literature and further explorations are done for in-depth analysis of the RNFS. Thus, the present study focuses on the negative impacts of the RNFS, which originate from the positive sides only and presents RNFS as a residual sector or the sector of the last resort.

2. Quantitative Aspect: As a Saviour

2.1 Employment Generation

There is no denial of the fact that the RNF sector is picking up significance nowadays because it opens up the opportunities which are primarily labour intensive and run on a small scale. Moreover, RNF employment is critical, especially to the landless and marginal land owners, who generally cannot survive if there are agricultural shocks. In such a situation, they manage to endure through working at lower wages (Islam, 1997, Coppard, 2001). While supporting this argument, Fisher et al. (1997) emphasize that the RNF sector acts as a safety net for landless and marginal land owners. Since the 1980s, the role of RNF in the creation of new employment opportunities has been highlighted by the number of studies either through conducting surveys or through various existing databases (especially NSS and Census in an Indian context) (Bhalla, 2006; Basant, 1994; Chadha, 1994). However, the rise in the share of RNF employment changes as the region varies but employment expansion is certain (Papola, 1994; Sen, 1996; Chadha, 1994). Region-specific and state-specific studies are also conducted to examine the contribution of RNF as an employment provider (Chadha, 1994). RNF employment is sometimes considered the primary source of employment in many regions (Ray, 1994; Bhalla, 1993).

2.2 Additional Income

Several surveys of the rural households have been conducted over a period of time which show that the RNF sector also provides additional income to smoothen the avenues of rural masses worldwide (refer Table 1). According to Haggblade et al. (2007), 35-50 per cent of the total rural income comes from the RNF sector in Africa, Asia and Latin America. Consequently, Datt and Ravallion (1996) and Ravallion (2000) conclude that the growth of real per capita non-agricultural output can have a significant impact on reducing rural poverty if growth exceeds its usual trend. However, Chadha (1994) and Sen (1996) argue that rising non-agricultural incomes can also increase inequality, as the well-endowed people benefit more from the transition into more remunerative activities of the non-farm sector than poorer ones (Lanjouw, 2007). But, the picture is clear when earnings from the seasonal and part-time

activity are considered. The contribution of non-farm income (35-50 per cent) confirms the importance of part-time and secondary activities (Haggblade et al., 2007; Ellis, 1999; Davis, 2004). For the Sub-Saharan Africa, Food and Agriculture Organization (FAO) (1998) gave estimates of 42 per cent. On the other hand, for South Asian countries, these estimates were appreciably higher. Davis and Bezemer (2003) find that the average non-farm income shares of the rural households in some Central and Easter Europe (CEE)/Commonwealth of Independent States (CIS) countries range from 30 to 70 per cent.

1.3 Poverty Reduction

Although the RNF has been established as a suitable alternate for unemployed or disguisedly unemployed persons; households getting employment in the RNF activities are not in better conditions as perceived, because there is merely a shift from one low-wage occupation to another low-wage occupation (Haggblade et al., 2010). The majority of the rural households are engaged in construction activities which often provide casual employment to them with low wages. In this case, these RNF activities are not the best alternatives to go with, because they only help to sustain the livings rather to improve the livings.

Moreover, RNF only plays a role as a coping strategy as it helps the poor to get employment and offset the income fluctuations when there is a dearth of other coping institutions. The RNF helps in lowering down the poverty up to some extent but it does not essentially improve the rural income distribution (Islam, 1997). Therefore, empirical evidence of the link between the RNF employment growth and poverty reduction requires a careful examination given the complex inter-relationships among agriculture, rural non-farm businesses, and the national economy. However, strong correlations between growing rural non-farm income and falling rural poverty, as in China since the 1980s (Chen and Ravallion, 2004), do not necessarily imply causality. Nor do they rule out the possibility that independent third factors, such as agricultural technology, may be driving both (Lanjouw, 2007). It has also been elaborated that rich people get the benefit from the formal or regular sector jobs in the RNF sector, while low-income groups are dependent on wage labour only (Haggblade et al., 2007).

Though the incidence of poverty has declined over a period (from 2004-05 to 2011-12) in both farm and non-farm sectors in India, yet this decline is not just because of an increase in the RNF employment only. The other factors behind this decline can be increased in agricultural growth and infrastructure development which resulted from the policies adopted during the 10th and 11th five year plans (FYP) to boost the rural development and also due to the highest migration from rural to urban areas¹ (Government of India, 2012-13).

1 As for the first time, increase in urban population was reported higher than the increase in rural population during 2001-2011(Government of India, 2012-13).

1.4 Rural Industrialization

Industries in rural areas are mostly micro or tiny in structure and quick yielding. In other words, their gestation period is much less as compared to large-scale industries. Also, rural industries are labour intensive and provide substantial employment opportunities to rural folks of all age groups. Few examples of such types of industries are the food processing industry, poultry industry, cottage industry and handicrafts industry, etc. Small and cottage industries generally do not produce final products rather they produce raw material for medium and large-scale industries established in nearby towns or urban areas. Moreover, the growth of the sector also promotes the household-based rural manufacturing industries to fulfil the needs of the rural masses. These industries increase the affordability of the rural poor by providing the goods to the rural masses at a cheaper rate as compared to that of urban industries. Thus, RNFS helps in maintaining the real income of the rural poor (Islam, 1997).

3. Qualitative Aspect: As a Residual Sector

The question of quality of employment becomes more important in this globalized era where getting a “good job” is difficult than getting a “job”. Therefore, the discussion of positive aspects always takes along the negative consequences too and it is not justifiable to consider the RNF sector a boon for the rural people simply based on employment generation, provision of additional income and helping in escaping from the edge to poor. The residual nature of this sector is highlighted from the following sub-heads (refer Table 2).

1.1 Absorption of Surplus Labour

Labour absorption in rural areas lags behind agriculture output growth. Moreover, the increased labour productivity in agriculture releases the labour for employment outside agriculture. Thus, this surplus labour finds better option to work in the RNFS. When the absorptive capacity of agriculture and urban areas is limited; RNF activities tend to act as a sponge for the surplus labour. In other words, the RNFS is served by the unemployed either from the urban sector or from the agriculture sector, since they could not find employment at a lower wage rate in either of the sectors (Mahmood, 1993). Moreover, the growth of the sector was the result of a stagnant or unproductive agriculture (Islam, 1997). The majority of the scholarly work, be it international or national, is a depiction of the fact that RNFS has emerged only after the inability of agriculture sector to absorb the excess labour force (Islam, 1997; Haggblade et al., 2007). The labour force thus becomes part of small and tiny activities which can provide even surviving remuneration during the crisis.

Non-farm employment is considered as the source of sectoral diversification and overall development of rural areas. In terms of the conventional supply-demand analysis of the labour market, the pressure of excess labour supply in

rural areas will fall more heavily on rural non-agricultural sector due to limited absorptive capacity of agriculture. This simply means that the level of the rural non-agricultural wage rate relative to the agricultural wage should be quite sensitive to the extent of the imbalance between labour supply and demand in the rural areas (Vaidyanathan, 1986). This imbalance can roughly be measured through rate of rural unemployment. Higher the rate of unemployment, the higher would be the share of non-agricultural sector in the total rural employment and the lower would be the non-agricultural wage relative to that in agriculture (Vaidyanathan, 1986). That is, there is a positive correlation of RNFE with the unemployment rate. This implies that people participate in the non-farm activities in the absence of employment opportunities in the farm sector (Kundu et al., 2003). Therefore, Vaidyanathan (1986) concludes the rural non-agricultural activities as “residual sector”.

The “residual-sector hypothesis” given by Vaidyanathan (1986), in which wage rates in the rural non-agricultural sector are lower than the agricultural wage rates, was not validated and supported from the micro-level data. This was mainly because institutional factors (as in Kerala) and job opportunities offered by small and medium towns enabled the wage rates to be determined in a broader spatial context rather than conditions in the villages. Kashyap and Mehta (2007) also highlight that in rural areas, push factor or residual nature of the sector absorbed population pressure, unemployment rates, and so on.

1.2 Casual Employment

The type of employment indirectly signals towards the quality of employment and an increase in the proportion of casual workers in the total workforce. The quality of employment decreases in casual employment since social security measures for casual workers are less effective in the country (Jha, 2006). Thus, deterioration of quality of employment is associated with the increasing casualization.

The share of casual labour in the total employment has increased specifically after liberalization. It has led to raise the demand for casual and intermittent work (Coppard, 2001). The share of self-employed in the rural workforce declined from 62 per cent in 1977-78 to 56 per cent in 1999-2000, while the proportion of casual labour increased from 30 per cent to 37 per cent; though the proportion of self-employment in total employment has remained high in RNF sector (Start and Johnson, 2004). The major shift was observed from self-employment in agriculture to non-agricultural activities, especially as casual workers. According to Papola (2013), the recent trends witness the typical Indian economic scenario where informal employment prevails even in the organized sector (casual and contract labour).

The casual employment as well as self-employment (especially family-run enterprises) show a strong positive correlation with poverty. World bank also

supports this fact by stating unstable or inadequate employment as the main cause of poverty rather than lack of employment (Anyanwu, 2013). Several other scholars also have the views that casual employment (especially non-farm) is not the better option to go with, as in the case of India the lowest quintile is concentrated as casual labourers signalling at the poorest section of the economy (Lanjouw, 2007). He further states that casual, daily-wage earning opportunities are often associated with strenuous physical effort and sometimes with health hazards as well.

In earlier sections we have seen that at least some segments of the RNFE are associated with low returns. In the case of public works projects, there is an element of self-targeting associated with these low-return non-farm employment opportunities. At any moment in time, households might be exposed to shocks and crises and may find themselves unable to fall back on insurance, credit, or other means of offsetting income shortfalls. Their ability to secure some earnings, however limited, through these employment opportunities can be of great assistance in preventing them from sliding into poverty (Haggblade et al., 2007).

1.3 Secondary Occupation

When self-employment and casual labour dominate in workforce especially in low-productivity occupations, a sector or industry of attachment may keep shifting even across one-digit groups for the same person over time. Moreover, the same person at work may not get full-time gainful employment from the sector of attachment by major-time criterion and may be attached to more than one sector on a part-time basis but would not get classified against these other part-time activities (Sundaram and Tendulkar, 2002). Thus, those engaged in agriculture and allied activities on a major-time basis may well be engaged in certain non-farm activities during the year on subsidiary basis, hence having non-farm employment as their secondary occupation.

Both farmers and agricultural labour households may embrace multiple occupations to shield against seasonal fluctuations in employment and incomes. Reardon (1997) observes that in Africa non-farm income was a means for the poor to stabilise income during drought years. Walker and Ryan (1990) observe that in the semi-arid tropics in India non-agricultural self-employment not only became an increasingly important source of income but also was a means of dampening household income variability (Hossain, 2004).

Engaging in multiple activities is termed as “pluriactivity” in the literature, and this can be contrasted with specialization. One would expect the frequency of pluriactivity to be inversely related to the average income level. In poor areas, where households typically participate in both farm and non-farm activities, they may not engage efficiently, but they are able to manage risk, compensate for a poor asset base, and survive. In contrast, in richer zones the specialization rate is

higher. More households specialize in purely farm or purely non-farm pursuits (Haggblade et al., 2007). The range of households undertaking both farming and rural non-farm activities is generally around 30 to 50 per cent (Reardon et al., 2007), but a number of studies are showing even higher participation, such as in Kenya, where the share is 90 per cent (Barrett et al., 2001; Davis and Bezemer, 2003).

Given the efficiency gains from specialization, this positive correlation between income and specialization makes economic sense. Comparing individual households, however, we see the opposite relationship. Increasing household income is typically associated with higher rates of pluriactivity (Barrett et al., 2001). However, closer inspection reveals that this more extensive diversification at the household level actually involves specialization among individuals. Richer households commonly have individual members who specialize in non-farm work, often highly-paid wage employment, or work as managers of specialized non-farm trading, transport, and processing businesses (Haggblade et al., 2007).

1.4 Employment of the Last Resort

Ever-increasing land-man imbalance (in other words, ever declining land to man ratio), agriculture alone cannot provide the ultimate solution to the rural unemployment and underemployment, and poverty. The moot point in developing countries, now-a-days, is that they must steadily reduce their dependence on agriculture and expand its non-farm sector to facilitate the transfer of workforce out of agriculture, which is supposed to be the economic activity with least productivity (Kumar, 2008).

At any moment in time, households might be exposed to idiosyncratic shocks and crises. Their ability to secure some earnings, however limited, through non-farm employment opportunities can be of great assistance in preventing them from sliding into poverty or, if they are already poor, from falling into deeper poverty (Lanjouw, 2007). Yet the RNFS is still justifiably called the “forgotten sector” because of the low productivity (as it does not use very modern and sophisticated technologies) and hence, low wage rates and high levels of underemployment in the sector (Kumar, 2008; Fisher et al., 1997).

If the activities in the RNFS are rewarding, people pursue them on priority basis but in case they are not, then such activities are viewed as “last resort”, “refuge”, or “residual” and is taken up by the labourers who can’t get “adequate” work in the agriculture sector. The development of rural non-farm sector in India is not only of paramount importance but also of pressing urgency in view of the ever-rising unemployment and a high proportion of rural population in the country’s workforce. The high unemployment rate is considered as the push factor for the expansion of RNFE and positive correlation between

unemployment rate and the RNFE also supports the “residual hypothesis” given by Vaidhyanathan (1986).

As mentioned in Start (2001), the RNFS while dealing with the well-being issues, often results in negative as well as positive consequences. The diversification from a positive point of view provides employment opportunities to those who are on the verge of fall or need of employment; but such conditional employment often leaves them in a dilemma of either to opt low productive employment or to remain unemployed voluntarily. Having no option left, they choose to be employed even at lower wage rates rather than being unemployed. Even the opportunity cost is very low but is not zero in the case of opting RNF employment for these people.

1.5 Informal Employment

From an individual worker point of view, informal jobs act as a buffer against unemployment, while in the aggregate the informal urban sector serves to take up “some of the slacks created by inadequate rates of growth in the modern sector” (Bhalla, 2008). A major proportion of workers in non-farm economic activities work in the *informal sector* where they suffer from a large quality deficit in employment, in terms of low productivity, low earnings, poor conditions of work, and lack of social protection (Papola, 2013). Informal workers being spread both in the organized and unorganized sector, the National Commission for Enterprises in the Un-organised Sector (NCEUS) also gave a definition of informal workers as, “Informal workers consist of those working in the informal sector or households, excluding regular workers with social security benefits provided by the employers and the work. The composition of employment in the organised versus unorganised sector was in the proportion 13:87 in 2004-05 and 17:83 in 2011-12 indicating an increase in organized sector employment from 13 per cent in 2004-05 to 17 per cent in 2011-12. But this increase in organized sector employment was informal in nature (48 per cent in 2004-05 which increased to 55 per cent in 2011-12), while the share of organized formal employment decreased from 52 per cent in 2004-05 to 45 per cent in 2011-12. But, in the unorganized sector the share of formal employment marginally increased from 0.3 to 0.4 per cent and that of informal employment it declined marginally from 99.7 to 99.6 per cent. On the whole, the number of formally employed workers increased from 33.41 million in 2004-05 to 38.56 million in 2011-12, while the increase is in the informally employed workers in formal sector without social security benefits provided by the employers (Srija and Shirke, 2014).

According to Start (2001), RNFS offers the work to needy given the place and working conditions of the activity. Sometimes they have to go to other places for work (to be employed) and have to work under the prevailing conditions. There are no standard rules and regulations for working in these

low-profile jobs. Everything goes informally without any legal certification and norms. Moreover, working far away from home increases the cost of living and travelling expenses leaving meagre net gain from the work.

Therefore, livelihood diversification can be both a coping and a thriving mechanism where it is driven by a growing and more flexible economy. But the “coping” dimension dominates where diversification is an enforced response to failing agriculture, recession and setback situation of economy (Start and Johnson, 2004). It is observed that RNF sector has been extensively reviewed from the view point of quantitative growth but the aspects related to the quality of work provided in the sector is still unexplored in many dimensions, which are as follows:

- The most important but debatable issue related to the RNFS is its definition, which is still unexplored at both national as well as international front. The main concern in this aspect is still the studies related to RNFS are using the traditional definition of the sector which encompasses the industrial sector along with service sector of the economy. The linkage aspect in estimating either the size of the labour market provided by RNFS or the share of income provided by RNFS is majorly missing.
- Also, while defining RNFS, the problem of defining “Rural” is missing in many countries including ours (India). Although share of population engaged in non-farm sector and the administrative setup help to define the urban area but there is no set definition for rural areas. During the time of rapid rural-urban linkages, now it is difficult to distinguish the peripheries of the rural and urban because of the daily commutation of the workers from rural to urban areas. Thus, clear-cut definition of “Rural” can help define the boundaries of the areas, further to locate the workplace of the activity.
- The extent of informality included in the RNF sector is a matter of concern because in the context of Indian labour market, the quality comes with the security, paid leave, insurance, and long-term contract in the job. In simple words the aspect of formal employment is related to enhancement of the quality of employment. But Indian labour market comprises the informal jobs within formal sector and even formal jobs within the informal sector. Therefore, to estimate the quality of the employment, it is important to examine first the nature of the market and then estimate the quality dimension.
- The RNFS has been previewed as the most potential sector of the economy after the pandemic due to focus on the MSME sector, employment expansion activities through MGNREGA, construction activities, service sector growth -- basically in the form of advancement in technology, etc.

4. Conclusion

The significance of RNFS has been extensively documented in numerous studies through the magnitude of employment opportunities, increase in the income, poverty reduction, rural industrialization, and low rate of rural-urban migration. Even though proportion of employment provided by the sector is indicative of reduction in unemployment rate (directly) and increase in rural development (indirectly), still both the aspects are missing in rural areas if we observe the RNFS from the perspective of permanent employment, high productivity, lowering inequality and sustainable growth of rural areas. Furthermore, the issue of quality and skill becomes more important in the present scenario, where only those are able to sustain who are on the upper segment of the skill and have grabbed the regular kind of employment. So, everywhere around the world, the need of the hour is to make people capable of getting gainful employment. For getting them absorbed in the labour market, investments are done to create the required jobs. The developing countries like India where the focus is on being “*Atma Nirbhar*” (self-reliant), have to be more cautious about increasing the gainful employment because of prevalence of low-skilled jobs. In the context of the rural non-farm sector, decent employment refers to the creation of occupations that provide possibilities for skill development, fair salaries, and appropriate working conditions. It places a strong emphasis on offering jobs that increase a person’s socio-economic status, general wellbeing, and dignity. In order to support sustainable rural development, reduce poverty, and enhance the quality of life for individuals involved in these activities, it is imperative that quality employment be achieved in the rural non-farm sector. Therefore, it is high time to focus not just on whether jobs are being created, rather what sort of jobs are being created.

References

- Anderson, D., and Leiserson, M. W. (1980), Rural nonfarm employment in developing countries. *Economic Development and Cultural Change*, 28 (2), 227-248.
- Anyanwu, J. C. (2013), The correlates of poverty in Nigeria and policy implications. *African Journal of Economic and Sustainable Development*, 2 (1), 23-52.
- Barrett, C. B., Reardon, T., and Webb, P. (2001), Non-farm income diversification and household livelihood strategies in Rural Africa: Concepts, Dynamics, and Policy Implications. *Food Policy*, 26, 315-331.
- Basant, R. (1994), Economic diversification in rural areas: review of processes with special reference to Gujarat. *Economic and Political Weekly*, 29 (39), A107-A116.

Basu, D. (2018), An approach to the problem of employment in India. CSE Working Paper (2018-02). Bengaluru, Karnataka: Centre for Sustainable Employment, Azim Premji University.

Bhalla, S. (1981), Islands of growth: a note on Haryana experience and some possible implications. *Economic and Political Weekly*, 16 (23), 1022-1030.

Bhalla, S. (1993), Test of some propositions about the dynamics of changes of the rural workforce structure, *The Indian Journal of Labour Economics*, 36 (3), 428- 39.

Bhalla, S. (1994), Poverty, Workforce development and rural labour markets, *The Indian Journal of Labour Economics*, 37 (4), 609-22.

Bhalla, S. (1997), The rise and fall of workforce diversification process in rural India, in G K Chadha and Alakh N Sharma (eds), *op cit.*, 145-183.

Bhalla, S. (2006), Recent developments in the unorganised rural non-farm sector, Working Paper, New Delhi.

Bhalla, S. (2009), Definitional and statistical issues relating to workers in informal employment, National Commission for Enterprises in the Unorganised Sector, Working Paper, New Delhi.

Bhattacharya, D. (1996), The emerging pattern of rural non-farm sector in Bangladesh: a review of micro evidence. *The Bangladesh Development Studies*, 24 (3/4), 103-141.

Bhattacharya, D. (1996), The emerging pattern of rural non-farm sector in Bangladesh: a review of micro evidence. *The Bangladesh Development Studies*, 24 (3/4), 103-141.

Bhaumik, S. K. (2007), Growth and composition of rural non-farm employment in India in the era of economic reforms. *The Indian Economic Journal*, 55 (3), 40-65.

Binswanger-Mkhize, H. P. (2012), India 1960-2010: structural change, the rural nonfarm sector, and the prospects for agriculture.

Binswanger-Mkhize, H. P. (2013), The stunted structural transformation of the Indian economy: agriculture, manufacturing and the rural non-farm sector. *Economic and Political Weekly*, 48 (26/27), 5-13.

Borkar, A. S. (2013), Transformation of Non-farm Sector in Rural India. Gujarat: Central university of Gujarat.

Bryceson, D. F., and Jamal, V. (1997), Farewell to farms: De-agrarianisation and employment in Africa: Ashgate Aldershot, 37 (3), 265

Chadha, G. K. (1994), *Employment, Earnings and Poverty: A Study of Rural India and Indonesia (Alternatives in Development)*: SAGE.

Chen, S., and Ravallion, M. (2004), How have the world's poorest fared since the early 1980s?. *The World Bank Research Observer*, 19(2), 141-169.

Coppard, D. (2001), *The rural non-farm economy in India: a review of the literature. Rural Non-Farm Economy*: Natural Resources Institute.

Datt, G. and M. Ravallion (1996), Why have some Indian states done better than others at reducing poverty?, *World Bank Research Working Paper 1594*, Washington D,65 (257), 17-38

Davis, J. R. (2004), *The rural non-farm economy, livelihoods and their diversification: issues and options*. Chatham, UK: Natural Resources Institute.

Davis, J. R., and Bezemer, D. (2003), Key emerging and conceptual issues in the development of the RNFE in developing countries and transition economies.

Eapen, M. (1996), Rural non-farm employment: some reflections on petty production. *Economic and Political Weekly*, 31 (26), 1673-1675.

Ellis, F. (1999), *Rural livelihood diversity in developing countries: evidence and policy implications Natural Resource Perspective*. United Kingdom: Overseas Development Institute, 3-55.

Fisher, T., Mahajan, V And A. Singha (1997), *The Forgotten Sector*, Intermediate Technology Publications, London., 274.

Ghuman, R. S. (2005), Rural non-farm employment scenario reflections from recent data in Punjab. *Economic and Political Weekly*, 40 (41), 4473-4480.

Government of India. (2012), *Report of the Committee on Unorganised Sector Statistics*. National Statistical Commission, New Delhi.

Government of India. (2014), *Rural Development Statistics*. Ministry of Rural Development, New Delhi.

Gulati, A., Jain, S., and Satija, N. (2013), Rising farm wages in India the 'pull' and 'push' factors, 2 (2), 261–286.

Haggblade, S., Hazell, P., and Dorosh, P. A. (2007), Sectoral growth linkages between agriculture and the rural non-farm economy. In S. Haggblade, P. Hazell, and T. Reardon (Eds.), *Transforming the Rural Non-Farm Economy Opportunities and Threats in the Developing World* Baltimore, Maryland: The Johns Hopkins University Press, 141-182.

Haggblade, S., Hazell, P., and Dorosh, P. A. (2007), Sectoral growth linkages between agriculture and the rural non-farm economy. In S. Haggblade, P. Hazell, and T. Reardon (Eds.), *Transforming the Rural Non-Farm Economy*

Opportunities and Threats in the Developing World Baltimore, Maryland: The Johns Hopkins University Press, 141-182.

Himanshu, Lanjouw, P., Mukhopadhyay, A., and Murgai, R. (2011), Non-farm diversification and rural poverty decline: a perspective from Indian sample survey and village study data. Asia Research Centre Working Paper. United Kingdom: London School of Economics and Political Science.

Hossain, M. (2004), Rural non-farm economy: evidence from household surveys. *Economic and Political Weekly*, 39 (36), 4053-4058.

Islam, N. (1997), The nonfarm sector and rural development review of issues and evidences. Food, Agriculture and the Environment Discussion Paper: International Food Policy Research Institute, 26, 1-23.

Jha, B. (2006), Rural non-farm employment in India: macro-trends, micro evidences and policy options. New Delhi: Institute of Economic Growth.

Johnston, B. F., and Kilby, P. (1975), Agriculture and structural transformation; economic strategies in late-developing countries, 495.

Kashyap, S. P., and Mehta, N. (2007), Non-farm sector in India: temporal and spatial aspects. *Indian Journal of Labour Economics*, 50 (4), 611-632.

Krishna, K. L., Aggarwal, S. C., Goldar, B., Das, D. K., Erumban, A. A., and Das, P. C. (2018), Trends and patterns in labour quality in India at sectoral level. Disaggregate Industry Level Productivity Analysis for India: The KLEMS Approach. Delhi: Centre for Development Economics, Delhi School of Economics. Working Paper No. 285.

Kumar, M. (2008), Is rural non-farm sector the last resort for employment in India? Mumbai: Indira Gandhi Institute of Development Research.

Kundu, A., Sarangi, N., and Dash, B. P. (2003), Rural non-farm employment: an analysis of rural urban interdependencies. London: Overseas Development Institute, Working Paper No. 196.

Lanjouw, P. (2007), Does the nonfarm economy contribute to poverty reduction? In S. Haggblade, P. B. R. Hazell, and T. Reardon (Eds.), *Transforming the rural nonfarm economy opportunities and threats in the developing world* (pp.55-79). International Food Policy Research Institute: The Johns Hopkins University Press, Baltimore.

Lanjouw, P., and Proctor, F. (2005), Rural non-farm economy: Latin American experience. *Rural transformation in India: the role of non-farm sector*, 49-53.

Liedholm, C. (1973), Research on employment in the rural non-farm sector in Africa. African rural employment study. Michigan, USA: Department of Economics, Michigan State University

Liu, Y. (2017), Pushed out or pulled in? Participation in non-farm activities in rural China. *China Agricultural Economic Review*, 9 (1), 111-129. doi:10.1108/CAER-11-2015-0166

Mitra, A., and Verick, S. (2013), Youth employment and unemployment: an Indian perspective. ILO Asia-Pacific Working Paper Series. New Delhi: DWT for South Asia and Country Office for India.

Mitra, A., Singh, G. P., and Shrivastav, P. K. (2021), How unstable are the sources of livelihood?. *Economic & Political Weekly*, 56 (31), 37.

Murty, C. S. (2005), Rural Non-Agricultural Employment in India the Residual Sector Hypothesis Revisited. Begumpet, Hyderabad: Centre for Economic and Social Studies

Nayyar, R., and Sharma, A. N. (2005), Rural transformation in India: the role of non-farm sector. Institute for Human Development, New Delhi.

Papola, T. S. (1994), Structural adjustment, labour market flexibility and employment. *Indian Journal of Labour Economics*, 37 (1), 3-16.

Papola, T. S. (2009), India: growing fast, but also needs to industrialize. *Indian Journal of Labour Economics*, 52 (1), 57-70.

Papola, T. S. (2013), Economic growth and employment linkages: the Indian experience. ISID Working Paper (2013/01). New Delhi: Institute for Studies in Industrial Development.

Ravallion, M (2000), What is needed for a more pro-poor growth process in India?, *Economic and Political Weekly*, 35 (13), 1089-1093.

Ray, S. (1994), Farm-non-farm interaction in a labour surplus economy. *Economic and Political Weekly*, 29 (53), A171-A174.

Reardon, T., Berdegue, J., Barrett, C. B., and Stamoulis, K. (2007a), Household income diversification into rural nonfarm activities In S. Haggblade, P. Hazell, and T. Reardon (Eds.), *Transforming the Rural Nonfarm Economy Opportunities and Threats in the Developing World* (pp. 514). International Food Policy Research Institute: The Johns Hopkins University Press, Baltimore.

Sen, B. (1996), Rural Non-farm Sector in Bangladesh: Stagnating and residual, or dynamic and potential? *The Bangladesh Development Studies*, 24(3/4), 143-180.

Singh, S., and Singh, N. (1995), Patterns, practices and entrepreneurial aspects of non-farm enterprises: a study of Rajasthan. Anand: Institute of Rural Management Working Paper

Srija, A., and Shirke, S. V. (2014), An analysis of the informal labour market in

India special feature. Confederation of Indian industry.

Start, D (2001), The rise and fall of the rural non-farm Economy: poverty impacts and policy options. Development policy review, Wiley Online Library, <https://doi.org/10.1111/1467-7679.00147>

Start, D., and Johnson, C. (2004), Livelihood options? The political economy of access, opportunity and diversification ODI Livelihood Options study. London: Overseas Development Institute.

Sundaram, K. (2007), Employment and poverty in India, 2000-2005. Economic and Political Weekly, 42(30), 3121-3131.

Unni, J. (1998), Non-Agricultural Employment and Poverty in Rural India: A Review of Evidence. Economic and Political Weekly, 33 (13), A36-A44.

Vaidyanathan, A. (1986), Labour use in rural India: a study of spatial and temporal variations. Economic and Political Weekly, 21 (52), A130- A146.

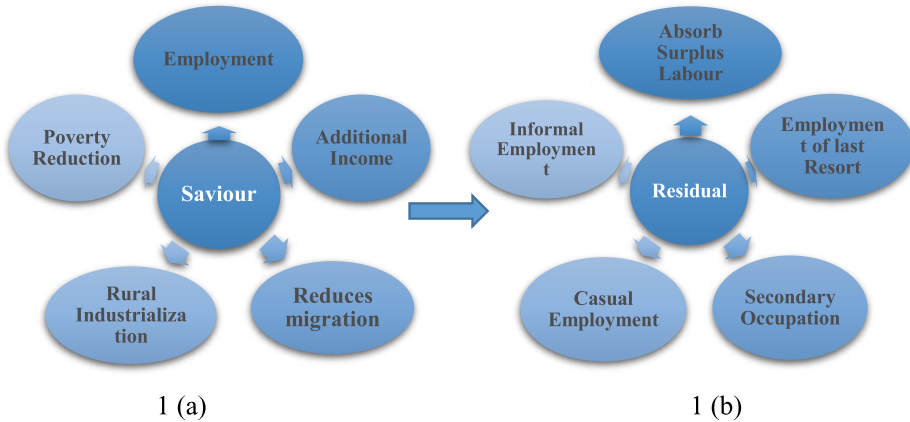
Visaria, P., and Basant, R. (1994), Non-agricultural employment in India: Problems and Perspective, 15-36.

Visaria, P., and Minhas, B. (1991), Evolving an employment policy for the 1990s: what do the data tell us? Economic and Political Weekly, 969-979.

Walker, T.S. and J.G. Ryan (1990), Village and household economies in India's semi-arid tropics, John Hopkins University Press, Baltimore and London, 394.

Tables and Figures

Figure 1: Classification of the RNFS



Source: Authors' Compilation based on the Literature

Table 1 Review of Studies highlighting the Quantitative Aspect of the RNFS

Sl. No.	Author and Year	Findings
1	Johnston and Kilby (1975)	Non-farm linkages generated by the technical change in agriculture can accentuate both the growth and the poverty-reducing impact of agricultural growth.
2	Bhalla (1993)	Based on the state-level time-series data covering the period 1971-72 to 1983-84, author found that non-farm employment exerted a more discernible impact on agricultural wages than did agricultural productivity.
3	Sunil Ray (1994)	The growth of the RNF sector is depicted as the solution to rural unemployment.
4	Papola (1994)	There was a growth of 5 per cent per annum in male workers who opted RNFE as their main occupation between 1977-78 and 1987-88. The overall share also increased from 17.9 per cent to 23.4 per cent.
5	Unni (1991)	In rural areas, gradual increases are recorded in the share of non-agriculture workers.
6	Visaria and Basant (1994)	During the last three decades (1961-1988), the share of rural non-agricultural sector in the total rural workforce has increased.

7	Chadha (1994)	A significant expansion is observed for male workers in the states like Punjab, Haryana, Gujarat, Himachal Pradesh, Rajasthan, and Tamil Nadu during the 1970s and 1980s.
8	Singh and Singh (1995)	The rural industries (part of RNFS) provide more income, social overhead costs, consumables at cheaper rates which leads to raising the standard of living of rural people.
9	Chadha (1996)	As a part of the long-term strategy of employment for rural households, non-farm avenues are a must for the eradication of poverty.
10	Sen (1996)	Non-farm employment was the main cause of poverty reduction.
11	Haggblade et al. (1989)	Countries in Sub-Saharan Africa also show that rural poverty has got mitigated as people gained access to rural non-farm employment.
12	Bhalla (1981, 1997)	Rapid rural non-farm growth is occurring along transport corridors linked to major urban centres in India, which is largely independent of their agricultural base.
13	Eapen (1996), Basant (1994) and Kundu et al. (2005)	Rural non-farm sector in India is found to be performing the safety-net function in that it contributed to raising the absolute income levels of the poor.
14	Reardon et al. (2001)	More non-farm employment, all else being equal, reduces the incidence of poverty.
15	Bhalla (2008)	The non-farm sector has drawn the labour from the farm sector and increases in farm wages.
16	Reardon et al. (2007)	Non-farm activity is positively correlated with income and wealth (in the form of land and livestock) and therefore offers a pathway out of poverty if non-farm opportunities can be seized by the rural poor.
17	Nayyar and Sharma (2005) and Murty (2005)	Rural Non-farm enterprises in China, Japan, and Taiwan are highly productive and helped reduce rural poverty dramatically.
18	Lanjouw and Procter (2005)	Even the low productive RNFE is beneficial for the poor since it prevents the poor from further deprivation.
19	Bhaumik (2008) and Chadha (2008)	Explain poverty mitigating role of the non-farm sector in the context of India; The poverty rate would inflate substantially if the workers solely depend upon agricultural income.

20	Saith (1992) and Chadha (2008)	A large proportion of the rural landless labourers and marginal and small cultivating households are involved in a wide variety of non-farm activity; this adds to their limited earnings from the farm sector and helps many of them to move above the poverty line.
21	Papola (2009)	Casual wages in non-farm rural activities are generally 40 per cent higher than casual wages in farming.
22	Himanshu et al. (2011)	The RNFS has contributed significantly to employment growth. The share of RNFS in rural jobs increased from 4 to 6 out of 10 from 1980 to 2009-10.
23	Kumar et al. (2011)	RNFS has a positive and significant impact on reducing poverty by providing gainful employment to rural people.
24	Gulati et al. (2013)	The rising trend in employment in the non-farm sector, specifically under programmes like MGNREGA has led to an increase in farm wages by enhancing the demand for casual and unskilled labour, thereby reducing the poverty in rural areas.
25	Liu (2017)	Better real wages, education and proximity to the cities are the major pull factors and the shortage of land or low productivity of land is the key push factor that have increased the employment share in the non-farm sector.
26	Bhosle (2017)	The share of the non-agricultural sector in rural employment has been steadily increasing, even accelerating from 27 per cent in 2005 to 32 per cent in 2010 to 42 per cent in 2015 (GoI, 2006, 2016).

Source: Authors' compilation based on Literature

Table 2 Review of Studies highlighting the Qualitative Aspect of RNFS

Sl. No.	Author and Year	Findings
1	Anderson and Leiserson (1980)	Approximately one-third of the rural labour force in most developing countries are engaged in RNFS. Since it provides secondary earnings to the small and landless farmers during low returns from agriculture.

2	Vaidyanathan (1986)	The positive relation between unemployment rate (UR) and the proportion of non-agricultural workers is due to disequilibrium in demand and supply of labour. The RNF activities forms the new “ residual-sector ”.
3	Visaria and Minhas (1991)	A majority of labour force will have to join as casual worker or self-employed since the organised sector has failed to absorb the surplus labour due to resource crisis and other structural rigidities during 1999-2000.
4	Visaria and Basant (1994)	The bulk of the increase in the rural non-agricultural sector is explained by the increase in the proportion of casual workers .
5	Bhalla (1994)	Agricultural involution in low-growth agricultural districts in Bihar and Madhya Pradesh, India, documents the resulting prevalence of low-productivity rural non-farm activity .
5	Singh and Singh (1995)	Authors identified the RNFS as a residual economy in rural areas.
6	Bhattacharya (1996), Visaria and Basant (1994)	There is an increase in the proportion of casual workers in the unorganized sector rather than full-time employment.
7	Eapen (1996)	The micro, petty and tiny enterprises dominate the labour market and also increase in the distress induced non-farm wage employment.
8	Fisher, Mahajan, and Singha (1997)	Most of the non-farm enterprises are small , such that an average of 2.2 workers are employed by them. These enterprises depend upon manpower mainly and produce low- quality products.
9	Bryceson and Jamal (1997)	A growing RNF economy does not guarantee access to the poor . Wealthy households often prove better equipped to take advantage of growth in the high-productivity segments of the rural non-farm economy (as entrepreneurs and as wage employees) whereas, poor households left to their own decisions.
10	Hossain (2004)	The capacity of agriculture to generate productive employment and provide a decent standard of living is becoming increasingly limited.
11	Murty (2005)	The slow growth of RNF enterprises have not served the desired objectives of reducing poverty and inequalities. This can be largely attributed to engagement of low-skilled workers in these enterprises and providing training to them requires capital.

12	Ghuman (2005)	The rural workers entered into non-farm sector because of the push effect of agricultural sector and not due to the pull effect of non-farm sector.
13	Bhaumik (2007)	The major sub-sectors employing rural males in the post-reform period are construction , wholesale, and retail trade, while rural females are engaged in manufacturing and services sector.
14	Sundaram (2007)	Incidence of poverty was higher (35.9%) among those working as casual workers and lowest (10.5%) among those employed as regular workers. Among self-employed, 19.6 per cent were poor.
15	National Commission for Enterprises in the Unorganised Sector (NCEUS), 2007	About 79 per cent of those working in the unorganised sector are poor and vulnerable. Many self-employed workers in the agricultural sector, agricultural labourers, workers in the unorganized sector and other informal Non-farm activities constitute a majority of the poor. This is not because they are unemployed, but because their productivity and incomes are low, and the nature of their work is irregular and uncertain .
16	Lanjouw (2007)	The rural workforce is largely confined to the low-return RNF activities since the factors like lack of education, limited access to land and financial capital, social and economic barriers (particularly for women) prevent them from accessing productive non-farm activities.
17	Haggblade, Hazell and Reardon (2010)	A growing rural non-farm economy does not guarantee access to the poor. Wealthy households well-endowed with financial, human, and political capital, often prove better equipped to take advantage of growth in the high-productivity segments of the rural non-farm economy, both as workers and as entrepreneurs.
17	World Bank (2010) and NCEUS (2007)	Even in the RNFS, employment has been predominantly of informal nature. The proportion of employees with informal contracts within organised sector increased from 37.8 per cent to 46.7 per cent during 1999-2004.
18	Binswanger-Mkhize (2012)	Most of the unskilled or semi-skilled workforce is employed in the informal sector or hold informal contracts in the formal sector.

19	Binswanger-Mkhize (2013)	The new form of structural transformation in India is a stunted one , because it primarily generates employment that is informal and/or insecure, and without the benefits of health and unemployment insurance and pensions.
20	Mitra and Verick (2013)	In rural areas, females are engaged in agriculture sector whereas males are turning towards non-farm sector. But the non-farm employment is largely casual-wage employment and mainly induced by the supply-side factors.
21	Bhosle (2017)	There is a severe ongoing crisis of quality of livelihoods in the rural areas to the extent that 70 per cent of agricultural households cannot meet their (low) consumption needs even given the diverse sources of income.
22	Basu (2018)	The major problem with respect to employment in non-agriculture sector is quality, not quantity. The major share of employment in the sector is of informal kind and this share has increased by 10 per cent points during 1999-2011 decade.
23	Krishna et al. (2018)	The important sub-sectors in India that contributed to growth in the average labour quality index during 1980-2014 are organized manufacturing, electricity, mining, and services. The labour quality is comparatively lower in agriculture and construction sector.
24	Mitra et al. (2021)	Majority of the rural employed, primarily in the non-farm sector, are also pursuing activities in the agriculture sector on a subsidiary status. Particularly in the rural areas, agricultural activities had to be pursued on a part-time basis to augments the household earnings and sustain consumption. Hence, the rural non-farm activities do not appear to constitute a vibrant economy.

Source: Authors' Own compilation on the basis of the Literature