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An Overview of Rural Non-Farm Sector: A Review

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The Rural Non-Farm sector plays a pivotal role in enhancing household income and improving standard of living especially in rural areas. This review examines the importance of Rural Non-Farm Sector as a strategy to generate employment opportunities, income diversification, rural industrialization and poverty reduction among rural households. This study also focuses on the conceptual issues in among different words like off-farm, on-farm, non-farm, agriculture and non-agriculture. Additionally, the present study also investigates the factors due to which individuals participate in the Rural Non-Farm Sector. The study synthesizes findings from various secondary sources, including journal articles, books, policy briefs, and reports from national and international organizations. The findings indicate that Rural Non-Farm Sector helps in employment and income generation diversification which further reduces the poverty in rural areas. This study also revealed that factors like education, technical education, credit availability, gender, caste significantly affects the participation in Rural Non-Farm Sector. Currently, 50.57% of the rural persons are engaged in Rural Non-Farm Sector in India, highlighting their growing importance. This review underscores the need for a more comprehensive policy approach that integrates non-farm economic activities to strengthen rural livelihoods.

Keywords: Rural Non-Farm Sector, determinants, employment, poverty, Bihar.

1. Introduction:

Agriculture has been the backbone of India's rural economy for generations, providing jobs and livelihoods to millions (Nadkarni, 2018). But the sector has been struggling in recent years, facing a prolonged crisis and slow growth. A mix of challenges like unpredictable weather, shrinking landholdings, soil degradation, waterlogging, and a rapidly growing population has made it harder for rural families to rely solely on farming (Bhattacharyya et al., 2015). With so much uncertainty, many households are finding it difficult to sustain a stable livelihood (Wik, 1999). Given these challenges, it's crucial to look at alternative sources of income that can help rural communities. One promising option is the Rural Non-Farm Sector (RNFS), which includes a wide range of non-agricultural jobs such as wage labor, running small businesses, salaried positions, and providing services. By diversifying income sources, non-farm work not only reduces dependence on agriculture but also strengthens rural economies and provides much-needed financial security (Asfaw et al., 2017). When choosing a livelihood, rural families consider many factors like household size, social norms, economic opportunities, and individual skills. Some people turn to non-farm jobs because they see them as a way to improve their standard of living, while others do so out of necessity when farming alone is no longer enough (Rahman and Akter, 2014). In reality, it's often a mix of both aspiration and survival (Das, 2018). As Ellis (1998) points out, in times of agricultural distress or natural disasters, people don't just explore non-farm work for extra income it becomes a crucial survival strategy. For many rural families, it's not just about making

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ends meet but about securing a more stable and sustainable future. The Rural Non-Farm Sector, therefore, plays a key role in helping rural communities build resilience and improve their overall well-being. With the increasing emphasis on promoting non-farm sector employment in rural areas, a substantial body of literature has emerged focusing on the Rural Non-Farm Sector (RNFS). This body of work extensively examines various aspects of the sector, including its concept (such as on-farm, off-farm, non-farm), its composition, and its role in generating employment and income. It also delves into the conditions and factors influencing its evolution and growth. The present study addresses the previously identified issues by focusing on the rural non-farm sector by reviewing existing literature, assessing progress made, and challenges faced.

2. Rural Non-Farm Sector: Concept & Definition

The Rural Non-Farm Sector (RNFS) is an instrumental component of rural economies, contributing significantly to employment, income diversification, and economic resilience. However, despite its recognized importance, a universally accepted definition of RNFS remains elusive. Different countries classify non-farm activities in varied ways, leading to inconsistencies in its conceptualization. Scholars have made various attempts to define RNFS based on its scope and function within the rural economy, highlighting its diverse nature. Davis et al. (2003) define RNFS as encompassing non-agricultural self-employment and wage employment while explicitly excluding transfer income from these activities. Similarly, Lanjouw and Lanjouw (1997) describe RNFS as any revenue-generating activity in rural areas that is not directly related to agriculture. Haggblade et al. (2007) further emphasise that RNFS includes all economic activities in rural areas that do not have a direct link to farming. These definitions illustrate the broad nature of RNFS, which extends beyond traditional agricultural activities and incorporates multiple employment and business opportunities.

The sources of rural non-farm income vary widely, as identified by Islam (1997). He categorizes these sources into three primary types: i) earnings from non-agricultural jobs within rural areas or small towns, which may involve self-employment or wage-based employment; ii) income from rural workers commuting to urban areas for work; and iii) remittances received from family members who have migrated to cities or abroad. These diverse income streams demonstrate the dynamic interplay between rural and urban economies and the increasing reliance of rural households on non-farm earnings. Barrett and Reardon (2000) offer a broad categorization of RNFS by including "all secondary, tertiary, and non-agricultural primary activities". According to their framework, the RNFS encompasses a range of economic activities, including small business operations, agro-processing, and financial transfers such as remittances, interest, and dividends. This classification highlights the heterogeneity of RNFS, which not only generates employment but also integrates financial and market linkages into rural economies. Davis and Bezemer (2003) classify rural non-farm income into two key categories: i) earned income and ii) non-earned income. Earned income consists of self-employment and wage-based employment, while non-earned income includes social insurance, pensions, and remittances. Additionally, they stress the role of socioeconomic infrastructure—such as schools, roads, and healthcare facilities—in supporting the RNFS. These infrastructures serve as critical enablers that facilitate business growth, improve market accessibility, and enhance the overall sustainability of non-farm activities in rural areas. Further, the structural dimensions of RNFS, as outlined by Fisher and Mahajan (1997), include three major aspects: "scalar, geographical, and sub-sectoral". The scalar dimension refers to the size of enterprises operating within RNFS, ranging from micro-businesses to larger firms. The geographical dimension encompasses the locations of these activities, spanning rural villages, small towns, and other non-urban spaces. The sub-sectoral dimension captures the wide variety of industries present in RNFS, including quarrying, manufacturing, processing, repairs, construction, trade, transportation, and other service-oriented enterprises. This multidimensional approach provides a comprehensive framework for analysing RNFS and its contributions to rural economic development. Saith (1992) also presents two key approaches for defining RNFS: the Location Approach and the Linkage Approach. The Location Approach considers all non-agricultural activities occurring in rural areas as part of RNFS, without considering external economic linkages. In contrast, the Linkage Approach also incorporates financial connections between rural and urban areas, such as remittances, supply chains, and employment linkages. This perspective recognises the growing interdependence between rural and urban economies, where the expansion of RNFS is influenced by broader economic transformations. Overall, RNFS plays an important role in enhancing rural livelihoods, reducing dependence on agriculture, and fostering economic resilience. However, its growth is shaped by various factors, including infrastructural development, urban-rural linkages, market accessibility, and policy interventions. Given the increasing significance of non-farm activities in rural economies, further study is essential to understand the evolving dynamics of RNFS at disaggregate level and to develop strategies that promote sustainable and inclusive growth.

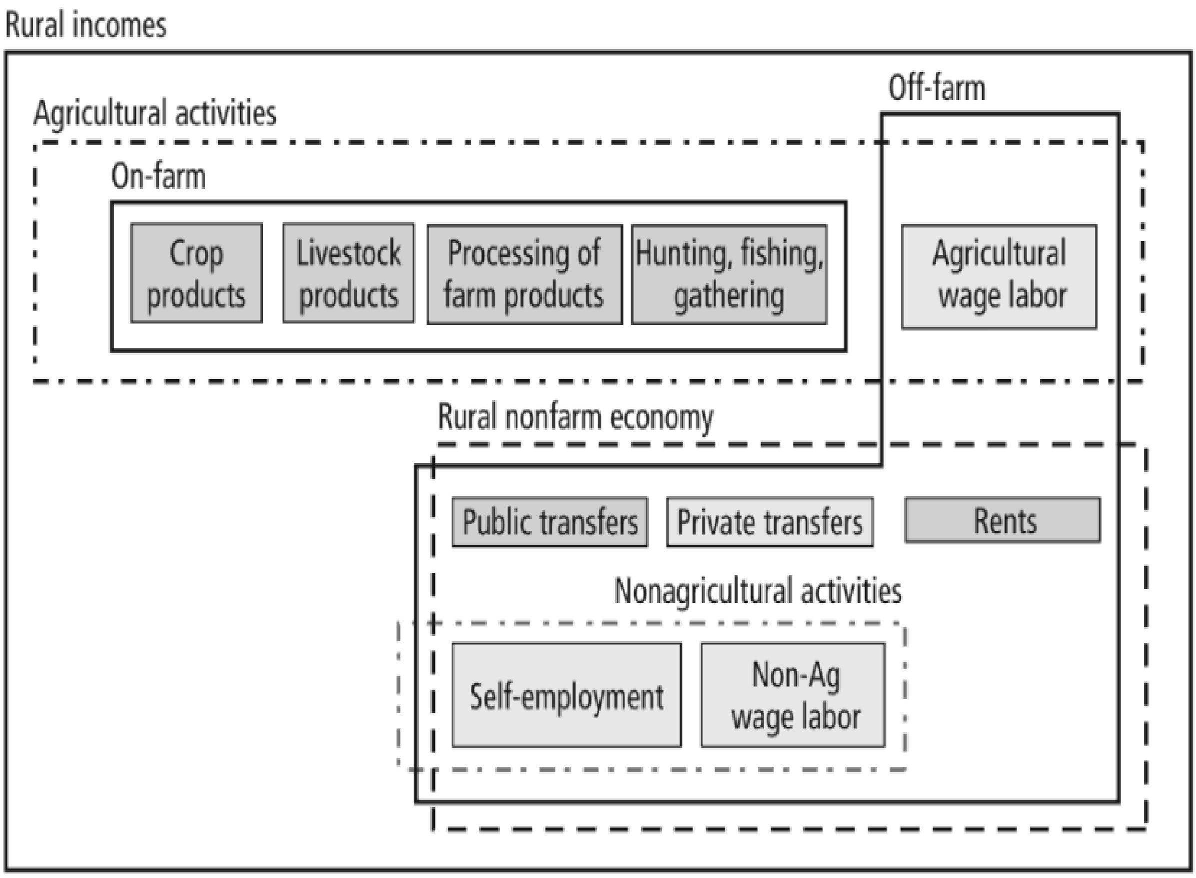
3. On-Farm, Off-Farm and Non-Farm

Further there is also debate on the terms like on-farm, off-farm and non-farm (See Figure 1.1). The academic discourse continues to debate the distinctions between "on-farm," "off-farm," and "non-farm" activities, as these classifications are crucial for accurately estimating the scope of the Rural Non-Farm Sector (RNFS). But a clear differentiation exists between farm activities and agricultural activities. Agricultural activities pertain exclusively to crop cultivation, whereas on-farm activities encompass a broader range of allied enterprises, including fisheries, dairy farming, animal husbandry, poultry farming, and beekeeping (Saith, 1992). The terms "non-farm" and "off-farm" are often used interchangeably, but they hold distinct meanings. "Off-farm" refers to activities occurring outside an individual's own farm but still linked to agriculture, such as crop and livestock-related activities beyond the farm, including processing and packaging. In contrast, "non-farm" activities include all economic pursuits that are entirely unrelated to agriculture and its allied sectors. Consequently, off-farm income consists of both wage employment in agriculture on other people's farms and income from non-farm sources. Since off-farm income includes agricultural wage earnings, it tends to be higher than the income generated solely within the Rural Non-Farm Economy (RNFE) (Haggblade et al., 2002). Ellis (1998) provides a specific definition of off-farm activity as agricultural labour performed on another person's land, distinguishing it from the broader category of non-farm activities. Similarly, "on-farm employment" strictly refers to agricultural work conducted on one's own farm, primarily involving crop cultivation processes such as planting and harvesting. Casual labour for wages may occur in both agricultural and non-agricultural sectors, but it does not take place on the worker's own farm. Jha (2011) classifies off-farm income as comprising both wage earnings and income from non-farm enterprises. The Rural Non-Farm Economy (RNFE) encompasses a diverse range of employment opportunities, ranging from high-skilled jobs requiring significant assets such as education or access to credit, to self-employment activities with minimal entry barriers, such as street vending (Davis & Pearce, 2001). RNFE also includes local non-farm jobs, urban occupations, unearned pension income, and remittances from both domestic and foreign migration (Start, 2001). Ellis (1998) emphasises that off-farm employment refers to any economic activity occurring outside a farmer's own land, although it is commonly understood as wage labour on other farms. Barrett et al. (2001) further clarify that off-farm employment includes both agricultural wage labour on other farms and all activities categorised under RNFE. This distinction is significant for understanding rural employment dynamics, income diversification strategies, and the overall impact of non-farm activities on rural livelihoods. Recognising these different employment categories is essential for policymakers, researchers, and development practitioners, as it facilitates targeted interventions aimed at strengthening rural households' income security and economic resilience. A clear understanding of on-farm, off-farm, and non-farm activities is therefore vital for the formulation of effective rural development policies, particularly in regions where agriculture alone can no longer sustain livelihoods.

Figure 1.1 illustrates the classification of rural activities and income as described by Losch et al. (2012). According to their framework, "off-farm" refers to any activity and income generated beyond the household's own farm, regardless of the sector. This includes not only all non-agricultural occupations and earnings but also wage employment in agriculture. In this regard, the off-farm category is broader than the Rural Non-Farm Economy (RNFE) when considering agricultural wage labour. On the other hand, on-farm income comprises earnings derived from crop and livestock production, on-farm processing of agricultural products, and profits from activities such as fishing, hunting, and resource collection. Additionally, off-farm income encompasses a wide range of revenue sources, including self-employment, rental income, public and private transfers, and wage employment in both agricultural and non-agricultural sectors.

From a value chain perspective, on-farm labour represents the foundational stage of agricultural production, where primary cultivation and rearing activities occur. In contrast, off-farm income extends beyond the farm and includes all agriculture-related activities that contribute to the intermediate and final stages of the value chain. As agricultural products transition from production to consumption, off-farm activities become crucial in ensuring value addition, processing, and market access. This category includes a diverse range of enterprises and services, such as agricultural extension, food processing, packaging, warehousing, transportation, distribution, and retail sales. The interconnected nature of these activities highlights the vital role of off-farm employment in strengthening rural livelihoods and enhancing the overall efficiency of agricultural markets.

Figure 1.1: Classification of Rural Activities and Income



Source: Losch et al. (2012).

4. Rural Non-Farm Sector and Employment Provision

The Rural Non-Farm Sector (RNFS) is crucial in providing employment alternatives for rural residents, lessening their reliance on agriculture. Agriculture in many poor nations is largely seasonal and frequently fails to offer adequate employment throughout the year. As a result, rural households experience income insecurity and underemployment, causing economic suffering (Haggblade, Hazell, & Reardon, 2010). The RNFS aims to bridge this gap by producing jobs in industries like as manufacturing, construction, trade, transportation, and services, providing alternative sources of income.

One of the RNFS's primary advantages is its ability to absorb surplus agricultural labor, particularly during the off-season. Rural industries, handicrafts, and small-scale businesses provide non-agricultural jobs for people who might otherwise be unemployed or compelled to relocate to cities (Lanjouw & Lanjouw, 2001). This change not only increases household income but also reduces seasonal distress migration, which can strain urban resources. Furthermore, non-farm employment is frequently more productive and pays greater earnings than traditional agricultural labor (Reardon, Berdegué & Escobar, 2001).

Table 1 presents the percentage share of different sectors in GSDP and employment of Bihar. The share of the farm sector in Gross State Domestic Product (GSDP) declined from 29.1% in 2004 to 19.7% in 2017, indicating a shrinking agricultural contribution to the economy. The employment share (E) in the farm sector dropped significantly from 72.6% in 2004 to 43.8% in 2017, showing a shift of the labor force toward non-farm activities. The non-farm sector's GSDP share increased from 70.9% in 2004 to 80.3% in 2017, highlighting the growing importance of industry and services in Bihar's economy. Employment in the non-farm sector also rose from 27.4% in 2004 to 56.2% in 2017, reflecting a structural transformation in the labor market. The secondary sector's GSDP share increased from 14.7% in 2004 to 18.0% in 2017, but the rise was moderate. Employment in the secondary sector grew significantly from 9.3% in 2004 to 25.4% in 2017, largely due to the rise in construction jobs. Construction sector employment jumped from 2.9% in 2004 to 16.2% in 2017, indicating major growth in labor absorption despite a decline in its GSDP share. Manufacturing's employment share increased from 6.2% in 2004 to 9.0% in 2017, showing a slow but steady expansion of industrial

Broad Industry Division	2004		2011		2017	
	% share (GSDP)	% share (E)	% share (GSDP)	% share (E)	% share (GSDP)	% share (E)
Farm Sector	29.1	72.6	25.7	61.6	19.7	43.8
Minning & Quarrying	0.1	0.1	0.1	0.1	0.5	0.1
Manufacturing	7.3	6.2	6.1	5.9	7.5	9.0
Construction	5.6	2.9	1.5	10.1	1.4	16.2
Electricity, gas & Water supply	1.8	0.1	11.2	0.03	8.6	0.1
Secondary sector	14.7	9.3	18.8	16.1	18.0	25.4
Transport, Storage & Communication	5.3	2.7	18.2	3.0	21.8	4.2
Tade & Hotels	17.8	9.8	7.3	10.9	9.9	14.2
Financial Intermediaries	14.4	0.7	15.3	1.2	13.5	3.3
Public administration & other services	18.7	4.9	14.8	7.1	17.1	9.1
Tertiary Sector	56.2	18.0	55.5	22.3	62.3	30.8
Non-Farm Sector	70.9	27.4	74.3	38.4	80.3	56.2

Table 1: Percentage share of different sectors in GSDP and employment (E) of Bihar

Source: Sabreen and Behera, 2020

employment. The tertiary sector's GSDP share remained stable, hovering around 55-62% between 2004 and 2017. Employment in the tertiary sector rose from 18.0% in 2004 to 30.8% in 2017, indicating an increasing reliance on service-based jobs. Trade & Hotels sector employment rose from 9.8% in 2004 to 14.2% in 2017, showing growth in commercial activities. Transport, Storage & Communication sector saw an increase in employment from 2.7% in 2004 to 4.2% in 2017, suggesting improved connectivity and logistics. Financial Intermediaries' employment share increased from 0.7% to 3.3%, indicating a slow but notable rise in banking and financial services employment. Overall, Bihar's economy is shifting from agriculture to non-farm activities, with non-farm employment surpassing farm employment by 2017 (56.2% vs. 43.8%). The construction sector has emerged as a major employer despite its declining share in GSDP. The service sector continues to dominate GSDP, but employment growth in services remains gradual compared to construction. The manufacturing sector has seen a slight improvement in employment, but its overall impact remains limited.

5. Rural Non-Farm Sector and Income Diversification

Numerous studies stress how crucial the RNFS is to diversifying rural revenue streams. Reardon et al. (2007) contend that by serving as a buffer against agricultural shocks, non-farm income can lessen the vulnerability of households that are reliant on agriculture. According to data from South Asia and Sub-Saharan Africa, non-farm income accounts for 20% to 50% of rural household income, with larger percentages seen in areas with better infrastructure and market accessibility. The RNFS also promotes connections between agricultural and non-agricultural enterprises, which raises total rural production, according to Lanjouw & Lanjouw (2001). However, because education, social networks, and asset ownership frequently act as mediators for access to non-farm income, the advantages are not equally dispersed.

6. Rural Non- Rural Non-Farm Sector and Rural Industrialization

One of the main forces behind economic progress in emerging nations has been rural industrialisation, which is a part of the RNFS. The labour surplus concept was first put out by Ranis and Fei (1961), who focused on how non-agricultural pursuits may absorb extra rural labour. The revolutionary potential of rural industrialisation in establishing regional centres of economic activity has been the subject of more recent research. Agro-processing facilities, cottage industries, and small-scale manufacturing have all been made possible by improved infrastructure, including roads, power, and digital connection (Haggblade et al., 2010). By integrating into larger supply networks and meeting local demand, these sectors frequently promote economic ties.

7. Rural Non-Farm Sector and Poverty Reduction

The non-farm sector plays a significant role in driving economic growth and alleviating poverty (Deininger et al. 2007). Participation in different rural non-farm sector employment opportunities exerts a positive impact on rural poverty (Chuta and Liedholm 1979). In addition, Malek and Usami (2009) found engagement in the non-farm sector in rural Bangladesh does not affect educational poverty but affects income poverty. According to this study, in Sri Lanka, policies aimed at supporting low-income groups have focused on eliminating barriers that hinder the growth of small enterprises. Research has emphasized the economic value of the rural non-farm sector, indicating that its contribution to poverty reduction is more direct and effective than the indirect impact of wage increases. Utilizing the Vietnamese Household Living Standards data, Hoang et al. (2014) revealed that an increase of 25% to 75% in the time spent on non-farm work raises the likelihood of escaping poverty by approximately 8% to 14% over two years. Additionally, when an extra family member engages in non-farm employment, household expenditure is observed to rise by 14% within two years and by 50% over six years, demonstrating the sector's long-term economic benefits. Similarly, in India, the rural economy underwent a significant transformation after the 1980s, leading to substantial improvements in household incomes and a marked reduction in rural poverty. The expansion of the rural non-farm sector, driven by increased employment opportunities, access to credit, and improved infrastructure, has contributed to economic diversification and resilience. (Himanshu et al. 2011).

8. Determinants of Participation in Rural Non-Farm Sector

Numerous contributing elements to the transition away from farming have been recognized by a large body of literature (Abdulai and CroleRees 2001; Reardon et al. 1992; Barrett et al. 2001). Malek and Usami (2009) determined that the primary motivators for earning money from the non-farm sector are the size of landholdings and education. They observed a negative correlation between owned land and participation in non-farm activities showing that households with significant landholdings are not interested in moving away from farm sector. According to Hossain and Bayes (2009), Bangladesh's rural economy has seen an expansion in the non-farm rural sector. They contend that the key components of rural non-farm development are loan availability, proximity to markets, energy availability, and education. In a nutshell the main determinants of rural households' involvement in the non-farm sector are the following: farm size, the quality of human capital, financing availability, ease of access to the informal sectors, household size, unequal income distribution, decreased motivation for agricultural activities and improved social and economic facilities (Hossain 2004; Asif Ishtiaque and Sofi Ullah 2013; Mandal and Asaduzzaman 2002; Hossain 2005). Furthermore, general education has a good effect on involvement in the non-farm sector, according to other Asian literature (Rahut and Scharf, 2012; Victor 2014; Rahut et al. 2014). In Madhya Pradesh, India, rural households' decision to participate in non-agricultural activities is influenced by education as well as other socioeconomic factors (occupation, employment position), as well as psychological traits economic incentive, exposure to the media (Victor 2014). Besides, human capital, household size and geographical location contribute to diversify livelihood outside farm (Rahut et al. 2014; Rahut and Scharf 2012;). Education, agricultural potential, access to farm capital, markets for farm products, and transportation are the main factors influencing the degree of income diversification, according to Sarah (2012), who conducted empirical research on the factors influencing rural household income diversification in Senegal and Kenya. Most studies on income diversification show that household members engage in a variety of non-farm occupations for socioeconomic reasons. Insufficient land and agricultural revenue encourage farm households to diversify into non-agricultural activities. Furthermore, the presence of credit markets encourages rural households to expand beyond farming (Reardon et al. 1998; Rahut et al. 2014). Labor productivity is another key indication of diversification (Bayes 2015). If the agricultural wage rate exceeds the agricultural labor productivity, it will function as a 'push' factor for quick participation in the rural non-farm sector.

9. Conclusion

The Rural Non-Farm Sector plays a crucial role in enhancing rural livelihoods by generating employment opportunities, diversifying income sources, and fostering rural industrialization. This review highlights the sector's potential in reducing poverty and improving the standard of living among rural households. The analysis of conceptual distinctions among off-farm, on-farm, non-farm, agriculture, and non-agriculture activities provides clarity in understanding the sector's scope. Furthermore, the study identifies key factors influencing participation in the Rural Non-Farm Sector, including education, technical skills, access to credit, gender, and caste. With 50.57% of rural individuals engaged in this sector in India, its significance continues to grow. The findings emphasize the need for a comprehensive policy framework that integrates and supports non-farm economic activities to enhance rural resilience and sustainable development. Strengthening education, financial accessibility, and skill development will be crucial in maximizing the sector's potential and ensuring inclusive rural economic growth. For enhancing skill development vocational and technical training programmes should be provided according to the need. Education should be provided in such a that it should promote entrepreneurship and industry relevant skill.

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