

RURAL NON-FARM SECTOR: A REVIEW OF AVAILABLE LITERATURE

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ABSTRACT

Literature concerning the rural non-farm sector emphasis on both income and employment terms. The majority of the Indian literature focused on an aggregate regional picture of the rural non-farm sector. The distinction between agriculture-led growth and distress led diversification is important to assess the significance of the rural non-farm sector. There might distress growth led factors or a mix of both factors impacts of the non-farm sector. It is very difficult to articulate the growth of the non-farm sector. From Policy perspectives, their various factors influence the growth of the non-farm sector, such as asset endowments, Human capabilities, infrastructure etc impacts of the growth of the non-farm sector.

Keywords: Non-Farm Sector, Asset Endowments, Human Capabilities, Infrastructure.

Introduction

In the recent past rural non-farm sector is seen to play an important role in transformation of developing countries. There are a number of reasons for growing importance of rural non-farm sector. Saith (1992) has given some important points to understand the importance of rural non-farm sector. Firstly, employment in the farm sector is shrinking, while employment in rural non-farm sector is rising. Over the past three decades the percent share of the rural non-farm sector has been rising at a substantial pace. Secondly, it prevents the migration of rural people from migrating to industrial and commercial centers in a context of employment in the urban sector. There are economic, social and environmental problems due to the high influx of migrants in the urban centers. Thirdly, rural non-farm sector has potential to absorb surplus labour. In India, agriculture and urban industrial sector failed to absorb the surplus labour. The every unit of capital invested in non-farm sector increases the employment and output. Fourthly, poverty reduction in the rural areas due to increase in rural non-farm employment. Fifthly, rural industrialization has a significant influence on agricultural development. Agriculture has an impact on rural non-farm employment through backward and forward linkages. Agriculture income creates demand for non-farm goods and agricultural equipment etc. and supplies raw materials to non-farm sector. Thus the interdependence of agriculture and the non-farm sector is beneficial for the industrial development. Sixthly, rural income is much unequal where the wide range of non-farm employment exists. Low strata of rural society participate in the non-farm sector (Bhalla and Chadha 1983, Jatav and Sen 2013). Rightly, the rural non-farm sector could stop the skill drain from the villages if rural industries can provide a remunerative opportunity to the educated youth. Ninth, rural non-farm sector can use the local slack resources which are not used in modern urban industries. Tenthly, rural non-farm sector could lead to a greater degree of regional and sectoral equality. There is urgency for enlarging the ambit of non-farm activities for accelerating the pace of rural development, employment opportunities, and poverty alleviation.

Definitions of the rural non-farm sector

The existing literature doesn't provide a common definition, collection and use of data in rural non-farm sector. Definition of rural non-farm sector helps to understand and capture the behavior of rural non-farm sector. The rural non-farm sector can be defined in different ways. Anderson and Leiserson (1980) defined "rural non-farm activities" as lying in or between the boundaries of usual rural-urban

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and agricultural-non-agricultural categories". Lanjouw & Lanjouw (1995) defined the "rural non-farm sector as incorporating all economic activities in rural areas except agriculture, livestock, fishing, and hunting". Most of the literature in a rural non-farm sector defined in the literature as rural non-farm activities include all activities in rural areas other agriculture. Steven Haggblade, Peter Hazell and Thomas Reardon (2007) define "rural non-farm sector includes all rural economic activity outside of agriculture". The rural non-farm sector can be measured in terms of employment, a number of establishments and income (Basant and Kumar 1989).

Empirical and Theoretical literature related to the rural non-farm sector.

There has grown importance for study of rural non-farm sector among academics and policy makers since late 70s. There major studies related to the significance to establish the linkages with sectors and major determinants. For the convenience of understanding studies can be divided to broader context. The literature can be grouped into two sets, literature related to rural non-farm sector and empirical literature.

The process of the structural transformation showed changes from agrarian, rural predominated economy to the urbanized, industrialized and capitalized economy. The developmental models showed explanation from Clark (1940), Kuznets (1966) and Lewis (1954) models explained the similar process of structural transformation of the economy. The transformation shows a decline in the agricultural sector, followed by an increase in the industrial sector and later by followed by an increase in the service sector. In the most part of the developing world, urban industrial and service sector failed to absorb the labour force. The Urban industrial sector failed to improve employment and poverty. From the Lewis (1954) to more formalized model by Ranis and Feis (other). They tried to show that low or zero productivity of the agriculture would allow for the cost less transfer of the surplus labour to the manufacturing sector. Even though in later studies Lewis (1958) has emphasis initial investments in agriculture required, which will otherwise create inflationary pressure in the economy. The movement of labour from farm to non-farm may affect the output in agriculture. The rural non-farm sector lies between the urban-industrial sector and rural sector are missing the link between them (Hazell and Haggblade, 1991). Rural non-farm sector through backward and forward linked with agriculture (Mellor 1976, Hazell and Haggblade 1991). It acts, dynamic transformation of farm sector through linkages with rural economy. Policy makers view that rural non-farm sector can contribute to the growth of employment and alleviate the rural poverty. The non-farm activity in rural areas provides a source of employment for 25 to 50 percent of the rural labour force in the developing countries.

(Anderson and Leiserson (1978), Chuta and Lindholm (1979) and Hazell and Haggblade (1991).

Literature Related to Rural Non-Farm Sector

The literature related to rural non-farm sector can be broadly classified into three groups firstly,

Agricultural-led growth theory, secondly, residual sector hypothesis and lastly Intersectoral linkage theory.

- **Agricultural-Led Growth**

The rural non-farm sector was neglected by two sector growth models (Lewis 1954; Ranis-Fei, 1961). Mellor first proposed agriculture first strategy, which expected to increase the growth of the non-farm sector through agricultural growth. Production, consumption and labour market linkages from the agriculture can influence the growth of non-farm sector.

John Mellor (1976) during the early 1970s studied the growth of the rural non-farm sector in the rural India. Forward-backward linkages and consumption linkages discussed through agricultural growth. Forward linkages directly linkages from agriculture to non-farm sector such as spinning, canning and milling etc. Backward linkages are agriculturalists lead to demand for inputs such as plows, engines, tools etc. Consumption linkage are forward linkages. consumption linkages one of the major linkages for the growth of rural non-farm sector. Consumption linkages are frequently quite forceful. The backward linkages are the agriculture (rural input suppliers) quite important for the rural non-farm sector. Consumption linkages are generated due to increase in the agriculture income. Consumption linkages important for the growth of the nonfarm sector. The process of green revolution in India set to increase the food supply through technology improve the rural income and set in motion for the expansion of production and employment in another sector of the economy. The increase in the income of farmers and agricultural labourers will increase demand for goods and services in rural areas. The demand would be generated for the small-scale, labour-intensive enterprises. Non-farm sector would supply the needs for seeds, fertilizers and agricultural equipment which increase due to growth of production in agriculture.

The rise in agricultural income give rise to increase of consumption of non-food items and thus non-farm employment is relevant. The growth agricultural income which rise the demand for goods and services in villages and nearby towns. Agricultural income will be invested in the nonfarm sector. There would be a supply of both labour - capital in both agriculture and rural non-farm sector. Both consumption and investment linkages from the agriculture to a rural non-farm sector which increase the further growth of both agriculture and non-agricultural sector in the rural areas. There would be development between farm and non-farm sectors in rural areas due to inter-sectoral linkages between farm and non-farm sectors.

Agricultural growth model emphasis on the Pull factors for the growth of the nonfarm sector. Agricultural income increases the demand for consumer goods and services. The improvement of agricultural technology will improve the non-farm activities. On other hand development of non-farm activities such as transport, storage facilities, and intermediate goods induce growth in agriculture. This indicates that developments in farm and non-farm sector influence each other.

- **Residual Sector Hypothesis**

McGee's (1971) stated in the process of urbanization due to limited absorption capacity in the industrial sector, surplus labour settles down in the low productivity service sector.

The rural non-farm sector is influenced by broad two factors such growth induced and distress induced. surplus labour entering low level service sector which McGee calls the bloated service sector. Distress induced growth. Vaidyanathan (1986) showed in his seminal paper "labour use in rural India: a study of spatial and temporal variations". The study showed the factors which are influencing the rural nonfarm employment. Firstly, local rural demand. This demand consists of inputs for agriculture, consumer goods etc for the rural population. Secondly, Extra local demand. Rural industries meet not only local demand but urban markets. Rural workers working in urban centers but residing in the rural areas. Thirdly, the level of employment of depend upon kind of technology and production technology. The commercialisation of the rural economy would affect the scale, location, and technique used in the rural non-agricultural activity. Non-agricultural activity is considered as a Residual sector. Rural workers who don't get adequate work in agriculture will spill over to the rural non-farm sector. Family and patron-client relations are strong than such spillover may not be there. Commercialisation and widespread wage system both weaken the traditional mechanism of the taking care of unemployed/under-employed. The increasing pressure on the unemployed as absorption capacity of agriculture and urban center is limited. The pressure of excess labour falls on the rural non-farm sector. Labour supply and demand sensitive to wage between farm and rural non-farm sector. If the rate of unemployment the share of rural non-farm sector tends to higher in rural employment. The wage of non-agriculture sector tends to lower than in agriculture. To examine the share of non-agriculture employment in total employment the following variables were used; Crop output per head of agricultural population, Gini index of concentration of operation holdings, the proportion of cropped area devoted to non- foodgrains and unemployed rate in rural areas. The unemployment rates seem to positive and significant correlated with the incidence of wage labour and degree of commercialization . The increase in commercialization leads to the incidence of wage labour. The breakdown of the traditional mechanism of taking care of unemployed lead to shifting of surplus labour in the open market. The author concludes that there is some support for the residual sector hypothesis. Overall Residual sector Hypothesis states that the movement of the labourers from the agricultural to the non-agriculture sector is distress driven due to the lack of the employment opportunities in agriculture, the surplus labour settle in the rural nonfarm sector, as a residual sector.

- **Intersectoral Linkage Theory**

Hymer and Resnick(1969) help to understand the development of initial stage internal trade surplus. The Goods produced by rural non-farm sector can be denoted as Z -goods. The hypothesis assumes that agriculture provides only food. Human being's desires and want are not limited to food .It hypothesis that agrarian societies would put major effort to fulfill its necessity and convenience in the absence of trade. Servants and artisans provide Z-goods to landlord society. In the absence of the landlord class, Z-goods production will take place in the household. Transformation happens in the agrarian society if trade linked to trade with manufacturing and domestic or foreign. .When agrarian society is linked with trade with manufacturing and domestic or foreign there happens will be new transformation. Households supplies need of food etc to domestic or foreign markets. There is the substitution of imported manufactured goods with Z- goods. The agrarian development of rural areas takes place with the allocation of agriculture to most commercial crops and supply of manufactured goods to rural areas. The availability of better quality manufactured goods will substitute the Z goods. There is decline in rural non-farm sector under colonialism. With the advent of the colonies in developing

countries, there would be opportunity for the export of natural resources to rest of the world. The import of cheap manufactured goods would lead to decline in rural non-farm sector in developing countries. These model have been further extended the model by Ranis and Stewart(1993) They divided the Z-goods further into traditional rural farm sector goods produced in households and villages and modern nonfarm sector goods located in the modern towns. The growth of traditional goods sector is directly linked with traditional food crops which led to the growth of the rural non-farm sector in the rural areas. While export-oriented crops direct linked with the growth of the modern non-farm sector. The consumption –investment linkages of cash crops will lead to the growth of the modern non-farm sector.

- **Empirical Literature**

The literature related to rural non-farm sector in the Indian context can broadly classify into two groups. One set of the empirical literature argued that agriculture growth led to the growth of the rural non-farm sector, second set of the literature states that surplus labour which notable absorbed in the urban industrial sector settle down in the low productivity service sector.

- **Agriculture Growth**-Mellor &Lele (1973) and Mellor (1976) stated in their studies that agriculture has potential for inducing growth in other sectors of the economy. Green revolution or rise in agricultural productivity increase the non-farm activities, particularly in rural areas through multiple linkages, Both Authors argued that agricultural growth increase the labour intensive in villages and rural towns.
- Anderson & Leiserson (1980) states that non-farm activities expanded with response to agricultural development. They view that rural nonfarm activities have grown due to low absorption in the agriculture and high elasticity of demand for non-food goods and services. Improvement in the infrastructure and growth of markets led to growth of nonfarm sectors. Kilby and Liedholm(1986) examines the importance of rural nonfarm activities in relation with agriculture in developing countries, He founded out that their inverse relation between size of landholding and share of non-farm income. Nonfarm activities absorb the surplus labour. There is strong linkages between agricultural growth and rural non-farm sector. Haggblade, Hazell& Brown(1989) states that agriculture growth generates consumption and production linkages which lead to the growth of rural non farm sector. They estimated that agricultural rural growth multipliers of 1.5 ,that means increase in 1 dollar increase the addition income of 50 percent in rural nonfarm sectoBasant & Kumar(1989) analyse rural non-farm sector for three decades(1961-1988) using census and NSS. The share of rural non-farm sector in total rural labour force has increased. There is increase in casual non-agricultural workers. Services has increased compared to manufacturing sector. Hazell & Haggblade(1991) discussed that agriculture growth plays a positive relationship in growth of rural nonfarm employment, appropriate agriculture technology and rural infrastructure induce agriculture growth and rural nonfarm activities. They have estimated 1 Rupee created in agriculture leads to addition of Rupee 0.37 direct value to non-farm sector in India. Hazell and Ramasamy (1991) studied the North Acrot district of Tamil Nadu in India. There was multiplier effect influencing the growth of the rural non-farm sector. Unni(1991) studied 56 regions located in 15 states based on NSS data. There is a positive relation between the agricultural productivity and percentage of non-agricultural employment. The positive relation between unemployment rate & percentage of non-agricultural workers cannot state as residual hypothesis. There is no correlation between non-agricultural wages relative to the agricultural wages.
- **Distress driven**-Vaidayanathan(1986)concludes that agriculture not able absorb the surplus labour to settle low productivity non-farm activities. He found that unemployment rate positively correlated with degree of commercialization & incidence of wage labour. There is some empirical evidence for residual hypothesis. Jayaraj(1989) studied trends in Tamil Nadu using census data from 1961-81 particularly for the rural male workers. In his study , he founded urbanization, commercialization & rate of literacy having positive influencing in the level of non-farm employment. Dev(1990) his study is based on data(27th,32nd& 38th rounds). There is a strong correlation between unemployment rates & rural non-farm workers among the states. Land productivity a positive relationship with the growth of non-farm activities. Inequalities in rural assets is negatively correlated with non-farm employment. Singh (1994) discussed the structure of rural non-farm sector in Uttar Pradesh. Agricultural developed region of western Uttar Pradesh there is a shift towards

the non-farm sector. Rural non-farm sector has positive correlated with electricity consumption per hectare land and level of per capita expenditure. Rural poverty and non-farm employment are negatively correlated. Overall, agriculture growth and local demand are important factors for the growth of the non-farm sector. Individuals from Scheduled Castes and Scheduled Tribes are less likely to the rural non-farm sector. Jatav & Sen(2013) the major findings, labour household that landless are less likely to enter the non-farm sector. SCs more likely to participate in non-farm sector compared to other social groups. Education has positive entering the non-farm sector. Females have a low probability of entering the non-farm sector.

- **Others studies**-Hariss(1987) studied the regional agricultural growth linkages in North Arcot district in Tamil Nadu. She conclude that local economy is not growing as mellor suggest with rise rural income. Rural industries are not dependent on agriculture or local demand they grow due to cheap wages & favour govt policy. Gillian (1998) studied based on empirical evidence from Taiwan and Muda region of Malaysia. He stated market expansion doesn't lead to agricultural industry linkages. Recent industrial expansion is not linked with agriculture. Social organisation of production & industrial factors plays an important role in rural growth & development. Start (2001) stated that agriculture led nonfarm sector may be temporary phenomenon and global economy may revival of modern rural non-farm sector based on urban-sub contracts and clusters. Lanjouw & Shariff (2004) based on NCAER data collected from rural households in 1993-94. There is positive correlated with education and wealth high remunerative nonfarm sector. Individuals from Scheduled Castes and Scheduled Tribes are less likely to the rural non-farm sector.

Conclusions

Rural non-farm sector has grown too big to be ignored by policymakers and economists. Rural non-farm sector accounts for the 30-40 of the GDP of the developing and underdeveloped countries. Although many studies have out in the past on various aspects of rural non-farm sector. There is absence of literature related micro level on determinants in Rural non-farm sector. Most of the literature related to rural non-farm sector is based on secondary data at all India level. There are few studies to the determinants at the Household level. They're also absent of literature related to the composition of Rural non-farm sector

Their demand pulls / agriculture-led growth and distress led diversification to have influence in the growth of the non-farm sector. It's difficult to identify the motivations, constraints, and outcomes for households engaging in the non-farm sector.

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