



**OCCUPATIONAL DIVERSIFICATION
AND NON-FARM EMPLOYMENT:
A REVIEW AND SOME ISSUES OF CONCERNS IN INDIA**

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Abstract

Occupational diversification in an economy is usually considered to be a positive instrument and a crucial component of growth. The concept of occupational diversification is emerging as a survival strategy of rural households in developing countries. The occupational diversification, given its potential for alleviating rural poverty and unemployment, has been examined in the literature in terms of its nature and magnitude, causal factors and impact on the household economy. At macro level, the phenomenon is characterised by an increase in the share of non-agricultural workforce engaged mainly in the tertiary sector having casual status. Theoretically, the changing occupational structure has come to be explained from both the development and distress perspectives. The present work is an attempt to review some of the existing theoretical and empirical research studies on occupational diversification and non-farm rural employment along with the rural-urban interaction and linkages in rural development. The reviewed research works suggest that forces of development and distress are influencing rural occupational structure where the changing occupational structure has been explained from two perspectives—development and distress. Further, in general, there are some factors both internal and external to the rural economy, which might lead to an increase in rural non-farm employment which have ample evidence in the literature. These factors could go beyond the purview of agricultural linkages as well.

Key-words: Occupational Diversification, Rural Non-Farm Employment, Development and Distress Perspective, Rural–Urban Interaction, Labour Migration etc.

1. Introduction

Economic development involves occupational diversification, commercialisation of agriculture, and change from primary to secondary and tertiary occupations. Occupation-wise, people in India may be divided in three groups: those engaged in primary occupations (i.e., agriculture, mining and quarrying), in secondary occupations (i.e., trade, commerce, manufacturing and transport), and in tertiary occupation (i.e., service). The concept of occupational diversification is emerging as a survival strategy of rural households in developing countries (Bryceson, 2000; Ellis, 2000). Rural Households are occupationally flexible, spatially mobile and increasingly dependent on non-agricultural income generating activities. Rural people are looking for diverse opportunities to increase and stabilize their incomes which are determined by their

portfolio of assets—social, human, financial and physical capital (Ellis, 1999). The range of non-agricultural activities varies markedly from place to place, ranging from modern to traditional, high to low-income earning and formal to informal.

Occupational diversification challenges conventional wisdom about poverty reduction in rural areas of low-income countries. Diversification takes place in order to overcome risk and seasonality in natural resource-based livelihoods, but it also reflects the failure of agriculture to deliver improving livelihoods in the post-liberalisation era. Poverty and vulnerability are often associated with undue reliance on agriculture rather than the converse.

Occupational diversification in an economy is usually considered to be a positive development as it is an important component of growth. The various population censuses and National Sample Surveys (NSS) rounds in India suggests a slow but growing trend of diversification in rural areas in recent decades by way of an increase in the share of rural non-agricultural sector in the total workforce (Basant and Kumar, 1989).

According to Lanjouw and Lanjouw (2001), occupational diversification involves incorporating all economic activities in rural areas, except crop and livestock production, fishing and hunting. Tacoli (2004) defined occupational diversification as non-farm income generating activities under taken by rural residents and farming by urban residents. Saith (2002) also defined occupational diversification in rural areas as the reallocation and recombination of all economic activities which display sufficiently strong rural linkages irrespective of whether they are located in designated rural areas or not. According to Mukhopadhyay and Lim (2005), occupational diversification comprises of two types, namely—those ventures that are administered on an approximately steady basis with an objective of generating surplus and registering growth, hiring labour and with a certain degrees of technical sophistication; and products or activities which are usually seasonal, managed exclusively with the help of unpaid family labour, relying on primal technology and catering mostly to the local market characterised primarily by petty production. Thus, occupational diversification refers to all economic activities which involve farm and non-farm activities in rural areas.

Further, the issues related to occupational diversification are –

What are the roles played by natural resources like land, forests and water in supporting and determining the livelihood of different sections of the rural community? How do changes in natural resource base bring about changes in the occupational structure? In what way and to what extent, interventions will have a positive impact towards strengthening the occupational base? Under what conditions is diversification in rural areas a fundamental positive factor in the survival of the poorest groups is relevant issue.

Under this backdrop this study is an attempt to critically review some of the available theoretical and empirical studies on occupational diversification along with the linkages in rural sector development, rural–urban Interaction, factors behind the occupational diversification and non-farm employment.

2. Theoretical Background

In developing countries, the process of changing rural occupational structure is viewed from two perspective—i.e., development perspective and distress perspective (Koppel and Hawkins, 1994; Unni, 1996). In development perspective, forces of economic growth such as

agricultural modernisation, urbanisation etc. lead to the creation of job opportunities which also further lead to the emergence of a diversified occupational structure. This process of growth as analysed by Kuznets (1966), is mediated by agricultural transformation, attendant upon the mechanisation of agriculture accompanied by a rise in the productivity of agricultural labour and its surplus. The notion behind this argument is that growth of agricultural production and productivity may create a surplus, which may be invested in non- agricultural enterprises, where an increase in rural incomes due to agricultural prosperity may alter the pattern of demand for goods and services. Further, generation of agricultural surplus and a changing pattern of consumption demand may lead to an increase in demand for labour in the non-agricultural sector (Unni, 1994). Thus, in the course of development, increase in demand for services from both the primary and secondary sectors leads to the growth of the tertiary sector. The expansion of the non-farm sector is, in Kuznets' scheme, prosperity-induced. Alternatively, it is also plausible that such agricultural prosperity (crop output per capita of agricultural population) will lead to an increase in demand for labour in agriculture, thereby leading to better absorption of labour therein and there would be less spill over of excess labour into non-agricultural employment (Vaidyanathan, 1986).

In sharp contrast to the development perspective is the distress perspective. McGee (1971) sees agricultural labour surplus more as a consequence of agrarian distress—a surplus that finds no ready absorption into productive employment in the industrial sector. The surplus labour then has no other option but to settle into a low-productivity tertiary sector. This expansion of the non-farm sector is distress-induced.

Seasonal migration of the poorer households to urban areas in search of unskilled employment in the informal sector can be considered as a typical case of such distress diversification. The deterioration trajectory is caused by factors inimical to growth and prosperity such as degradation and depletion of the natural resource base, agricultural stagnation and rapid population growth, compelling livelihood diversification of a distress nature. This distress diversification has been alternatively put forward as residual sector hypothesis (Vaidyanathan, 1986) which occurs when labour is not fully absorbed in the agricultural sector and the non-agricultural sector acts as a sponge for the excess labour. In this context, Bhalla (1989) identifies two kinds of distress diversification in which non-agricultural rural activities become residual labour force absorber. The first is the case of supplementary workers who have no main occupation, but engage in some subsidiary work to supplement household income. The second is the case of persons with a main occupation who also engage in secondary activity.

Thus, from the above discussion, we have two types of phenomena which contribute to the growth of the non-agricultural sector: those representing development, captured by variables such as agricultural productivity, growth of income, infrastructure development, urbanisation and commercialisation; and other relating to distress which gets reflected in variables such as unemployment and poverty.

3. Linkages in Rural Sector Development

The growth linkages model provided a leading paradigm in policy discussions on rural non-farm employment creation from the mid-1970s. These theoretical models suggest that economic development in any country should bring about significant changes in the structure of production and industrial distribution of the workforce, particularly in the wake of enhanced growth of national per capita income and national product.

Colin Clark (1951) noticed a shift in the allocation of labour from primary to secondary and secondary to tertiary employment which he explained on the basis of changes in domestic demand. Kuznets (1959) using time series and cross section data authenticated the hypothesis that with rising income per capita, the proportion of workers in agriculture and allied activities falls markedly and that of workers in manufacturing industries rises correspondingly. While these effects occur at the economy-wide level with non-agricultural growth occurring in urban areas, they would impact on the structure of economic activity within the rural areas as well.

Hirschman (1958) advocated unbalanced growth theory with specific reference to industries. He regarded agriculture as a weaker stimulant, compared to industries, to start new economic activities through linkage effects. While Mellor (1976) has demonstrated that agriculture has the potential to stimulate new economic activities in the RNFS through consumption-expenditure, and backward and forward production linkages. The consumption linkages would arise out of increased incomes for both farmers and labourers, generating increases in demand for goods and services, and would be largely concentrated in rural areas since the goods and services demanded are typically produced by small scale, labour-intensive enterprises¹.

Thus, according to Mellor (1976), the initial increase in rural income triggers a sequence of multiplier effects which can invigorate in other sectors of the economy including consumer goods industries and small-scale units in RNFS which are likely to be labour-intensive. The enhanced income due to higher employment of lower-income households, who spend large proportions of their increased income on food, stimulates the demand for additional food grains production. Higher income farmers also spend more on non-food products, but import a higher proportion of these products from large urban centres. This paves the way for the establishment of inter-sectoral linkages between farm and non-farm sectors in rural areas leading to simultaneous development of both the sectors. In addition to these consumption linkages, production linkages are also derived from the agricultural sector. Backward production linkages would result from farmers' increased demands for inputs from the non-agricultural sector. The inputs acquired for enhancing production in or in the vicinity of rural areas spawn rural industries. On the other hand, forward linkages result in a process of agro-based industrialization involving the establishment of a number of small-scale agro-industrial units. Accumulated commercial surpluses from agriculture give rise to a whole chain of industrial activities like wheat flour and rice milling, oil extraction, cotton pressing and ginning, sugarcane processing and so on and so forth. In this process, some benefits accrue to rural areas as well gradually. This opens up fresh avenues for the availability of non-farm incomes and employment to the rural households.

4. Non-Farm Sector and Rural Employment

The extant literature on diversification lacks common definitions or well-established conventions on the collection and classification of data with regard to activities to be included while defining RNFS in order to capture diversification behaviour. Moreover, inconsistent terminology is another common source of confusion in the literature. This lack of standard approaches impedes effective comparative analysis often leads to mistaken inferences. Saith (1992) emphasises that the question of definition is important because it specifies the scope of the sector paving the way for overall analysis and consequently policy formulation. Construction of a working definition entails consideration of various points.

¹.Hirschman had noted that consumption linkages could also be negative, for instance, through the destruction of established handicraft and artisan activities with rising income levels.

In the background paper for the 1995 World Development Report, Lanjouw & Lanjouw (1995) defined the rural non-farm sector as incorporating all economic activities in rural areas except agriculture, livestock, fishing and hunting. Like Lanjouw & Lanjouw, many Indian Scholars have also followed common convention of including animal husbandry, hunting and trapping, forestry and logging, fishing etc. in agriculture and accordingly, all other economic activities in rural areas as falling within the purview of the RNFS (Chadha, 1993). Therefore, RNFS would include activities like handicrafts, mining and quarrying, household and non-household manufacturing, processing, repairs, construction, trade, transport and communication, community and personal services in rural areas. On the other hand, Saith (1992) points out that the RNFS needs to be defined in a broader framework. This is important in order to capture all aspects of rural diversification. Accordingly, auxiliary activities like fishing and aquaculture, dairying and animal husbandry, poultry rearing and bee keeping can be included in the RNFS sector.

The second source of confusion in the literature is whether rural non-farm employment refers to employment anywhere by rural households or is solely confined to rurally located employment. Chadha (1997) notes that while National Sample Survey (NSS) data show what percentage of the rural workforce is employed in different gainful activities or the share of rural workers in total workforce in each production sector, there is no indicator of whether employment is in rural, semi-urban or urban areas. Saith (1992) affirms that the rural sector should include all economic activities which display sufficiently strong rural linkages², irrespective of whether they are located in designated rural areas or not. Another difficulty comprehending the rural non-farm sector is that it is not a homogeneous set of activities in terms of income and productivity levels. According to Mukhopadhyay and Lim (1985), the rural non-farm sector comprises two sub-sectors. Sector-I includes those ventures that are administered on an approximately steady basis with an objective of generating surplus and registering growth, hiring labour and with a certain degree of technical sophistication. While sector-II includes products or activities which are usually seasonal, managed exclusively with the help of unpaid family labour, relying on primal technology and catering mostly to the local market characterised primarily by petty production. Likewise, Fisher et al (1997) and Unni (1998) emphasize heterogeneity within the rural non-farm sector, where different activities require different entry qualifications, and argue that recognition of such diversity is often lacking in the literature.

The Non-Farm Sector, particularly in rural areas is being accorded wide recognition in recent years as a potent instrument for alleviating rural poverty and providing employment opportunities. A number of factors account for the recent interest in the rural non-farm economy. Firstly, employment growth in the farm sector has not been in consonance with employment growth in general. Secondly, most of the rural communities in the developing countries derive their incomes from multiple sources of livelihood. In particular, the rural poor derive significant income shares from rural non-farm activities. The FAO (1998) estimates the figures to be 32% for Asia. In such a scenario, the role of non-farm activities assumes importance. Thirdly, a planned strategy of rural non-farm development may prevent many rural people from migrating to urban industrial and commercial centre. In the face of the growing social and economic problems associated with urbanisation, urban centre cannot, for economic, social and environmental reasons, be assumed capable of supporting a consistently high influx of migrants. As a result, the rural migrants end up in poorly paid semi-skilled or labour-intensive jobs or remain unemployed. Urbanisation of this kind is inevitably accompanied by an increase in urban slums, poverty,

² . Hirschman (1977) defined a linkage as the record of how one thing leads to another and further explained that a linkage exists when ongoing activities invite some operators to take up new activities.

malnutrition and crime. Hence, through localizing employment in rural areas themselves, the rural non-farm activities could contribute to easing urban congestion and reducing the pressures on scarce urban infrastructure facilities (e.g., housing, transport, education etc). Fourthly, when the economic base of the rural economy extends beyond agriculture, rural-urban economic gaps are bound to get narrower along with salutary effects in many other aspects associated with the life and aspirations of the people. It is much more likely for the rural people to see, assimilate and adopt urban work patterns and higher earnings expectations when their own non-farm sector is expanding. Thus, the development of the rural non-farm sector can be an important mechanism for reducing rural-urban disparities. Fifthly, rural industries are generally less capital-intensive and more labour absorbing. Industry agriculture linkages assume increasing significance as agriculture moves on to a higher growth trajectory through modernization of its production. If the expansion of rural industry is limited, this can adversely affect agricultural growth. Further, rural income distribution is much less unequal in areas where a wide network of non-farm avenues of employment exists, the lower strata of the rural societies participate much more intensely in non-farm activities, through their involvement is much less remunerative as compared with that of the upper strata (Bhalla and Chadha, 1983).

A real dent into poverty is reported to come more readily through a wide network of non-farm activities because, in most cases, per worker productivity and earnings are higher in non-farm than farm employment (Chadha, 1994). A gender related aspect that usually does not get due recognition is a sizeable involvement of female rural workers in some of the non-farm sectors.

5. Occupational Diversification: Some Studies at Macro and Micro Levels

Much of the evidence on the growth of non-agricultural employment in India is at macro level based on NSS and Census data, which fail to capture the real nature of non-agricultural employment prevailing in different regions as they are highly heterogeneous. Further, the activities also differ according to the levels of agricultural growth in different regions and these complexities cannot be captured or observed at the macro level. Macro-level studies are concerned with the description and explanation of inter-regional and intertemporal variations in the participation of households in non-farm activities. Further, the available evidence on occupational diversification shows a complex pattern of activities undertaken in rural areas with varying degrees of emphasis on farm and non-farm work. What is important in understanding the determinants of economic diversification in rural areas is the impact of the structure and functioning of the labour markets. The economy functions in an integrated way wherein the agriculture and non-agriculture sectors are interlinked and rural and urban areas are closely interdependent. (Bharadwaj, 1989; Unni, 1994).

Most of the empirical studies at the macro and micro levels mainly indicate that occupational diversification is a result of changes in the agrarian processes. Further, they attribute it to either seasonality of agrarian operations or declining agricultural surplus resulting from declining yield or declining per capita land availability or to linkage effects created by commercialisation of agriculture by way of demand for activities like supply of inputs and services, marketing and processing of agricultural produce. But in the current debate, this view is considered narrow from the point of view of capturing the total reality of the rural labour processes as it ignores the broader structural changes influencing rural labour differentiation (Koppel and Hawkins, 1994).

Hence, studies trying to explain the phenomenon of diversification must incorporate perspectives that go beyond the narrow agrarian differentiation process (Vaidyanathan, 1997). It is important not only to develop a comprehensive analytical framework that captures the demand and supply-side factors in non-agricultural employment but also to look at outcomes in terms of level of non-agricultural employment and wage rate, incomes and impact of diversification on poverty (Vaidyanathan, 1997). In this context, the perspective to be considered could be a derivative of a broader social, economic and political process closely correlated both with local processes involving changing social significance of the family, community and rural enterprises with wider processes involving the changing relationship between the state and the economic organisation of rural areas.

Unni (1994) and Dev (1994) have done empirical work supporting the development trajectory. They show that there exists a positive relation between agricultural development and the proportion of rural non-agricultural workers. Their analysis is based on NSS data, and the relationship appears stronger when the share of rural non-agricultural workers is regressed on per hectare agricultural productivity. This evidence supports the hypothesis of Vaidyanathan (1986) which shows a significant positive relationship of the share of rural non-agricultural workers with rural prosperity, by taking agricultural output per capita of agricultural population as an indicator. Further, analysing the rural non-agricultural employment in India based on the NSS and Census data, Basant and Kumar (1989) suggests that during the last three decades, the share of the rural non-agricultural sector in the total rural workforce has increased. They show that it is primarily casual workers who shift from agricultural to non-agricultural activities during slack seasons. Emphasising the seasonality aspect, their study provides evidence to suggest that the involvement of labour in non-agricultural activities occurs counter cyclically to the demands of the agricultural calendar and results in labour flows between the rural agricultural and non-agricultural sectors. In his study, Joyraj (1992) tries to identify the determinants of the level of non-agricultural employment using Census data for 1,171 villages across 11 talukas of Tamilnadu. In his study, he adopts a broad framework which includes the development and distress perspectives. The basic focus is on spatial variables in the incidence of non-farm employment, which are both internal and external to the rural economy. The study shows that the phenomenon of non-agricultural employment is as much a function of agrarian prosperity as of agrarian distress and that prosperity like distress, could either promote or inhibit the growth of the agricultural sector.

Bhalla (1996) points out that, in order to understand the dynamism that exists in rural areas with regard to the nature of diversification, one has to look more towards micro-level studies. In a micro-level study of 30 villages in five districts of Gujarat, Basant (1993) examines diversification among different households across various income groups. For households that did not operate any land, income from non-farm activities (72%) seemed to be the major source compared with the case of those who also operated land (40%). Diversification by households involved their participation in different activities and also involvement in multiple economic activities by a single worker. It was found that diversification into different activities by the households was influenced by factors such as their access to land, family size and nearness of the village to a town.

Basant and Joshi (1994) provide micro-level evidence of diversification of the development kind, where the agriculturists invest their surplus in non-agricultural activities, especially processing and trade, in the agriculturally developed six villages of Kheda district in Gujarat. The study basically establishes the linkage between agricultural prosperity, commercialisation and urbanisation on the one hand and growth of rural non-agricultural

employment on the other. The study further shows that growth of the rural non-agricultural sector is linked to agricultural prosperity and commercialisation mainly in large villages because of the relatively large internal market. The analysis also shows how distress and development factors can operate simultaneously in the same region. At the same time, the study reveals that the identification of distress diversification is complicated at the micro level because shifts to non-agricultural activities out of distress may take various forms. The data show that both households with large landholdings and the landless contribute to the non-agricultural workforce in the region. This means that diversification takes place at both ends of the spectrum; with landed households diversifying into productive non-agricultural activities like trade and agro-processing, and the poor into less productive non-agricultural activities, like casual wage labour.

Jayraj (1996) in his micro-level study in the North Arcot District of Tamilnadu observed that households with access to land enjoy relatively better access to non-agricultural employment. He develops a framework where development of the rural non-agricultural sector is viewed as one of the components of the overall socio-economic transformation, and analyses spatial and temporal variations in the incidence of rural non-agricultural employment.

Occupational diversification of the development kind is observed in yet another micro-level study. Kumar (1996) argues that with economic growth, there has been a relative shift away from agriculture towards industry and services. Occupational diversification has occurred even among landless households, such as artisans and Scheduled Caste who have diversified into various economic activities such as government services and other odd jobs in factories and shops.

The studies reviewed above reveal that as agricultural growth takes place and its base expands the linkage effect results through increased demand for farm inputs, farm services and consumer goods, which are strong enough to raise non-farm employment. This results in a positive relative between the level of agricultural development and non-farm employment. Further, these studies have observed that diversification of the development kind could also be due to higher levels of education and increasing accumulation of capital.

6. Natural Resource Base and Occupation

We can relate the process of occupational diversification to changes in the status of the natural resource base. Natural resource such as land, water and forests could be either common or private property resources which play a crucial role in determining the nature of livelihood strategies adopted by the rural households and the resultant occupational structure. At the same time, outside interests and interventions in natural resources are likely to bring into play the local livelihood system with external factors that are either inimical to or supportive of the existing system (Koppel and Hawkins,1994)

The existing literature on occupational diversification especially in rural areas and natural resources management have tried to focus on the role of the changing resource base in bringing about occupational diversification. Similarly, the impact of such diversification on the management or development of local natural resources and how interventions in natural resource regeneration can affect occupational diversification particularly of a distress nature is a matter of concern. Occupational diversification or distress migration from rural areas can sometimes result from environmental degradation.

In a study Breman (1985) observes that in the semi-arid areas of south Gujarat forestry work was a major source of employment for the tribals during the slack agricultural seasons. However, this source of income and employment has become much less significant owing to deforestation during the last few decades, outmigration from these villages to urban areas for alternative sources of employment during the slack agricultural season has increased over the years.

Chopra and Gulati (1997) in their study address the issue of regeneration of natural resources base and thereby reducing the outmigration by defining common property rights in the arid and semi-arid regions of Western India where outmigration stem largely from push factors such as environmental degradation and decrease in common land. They establish through a simultaneous equation system that a higher extent of outmigration depicts a higher level of environmental degradation. Therefore, regeneration of the natural resource base would help to reduce migration. Thus, it can be thought of that common resource like land, if property rights are well defined through proper institutional arrangements and outside intervention, labour would move towards creation of common assets. This would bring about an improvement in the environment, leading to a decrease in outmigration. Hence, the same resources support higher levels of population.

The aforementioned studies and their findings show the importance of understanding clearly the role of natural resources in supporting rural livelihoods and in determining the demand for non-agricultural employment and thus occupational diversification.

7. Rural-Urban Interaction and Occupational Diversification

Prof. Lewis (1954) has developed a theory of economic development with unlimited supplies of labour. Unlimited labour supply exists in the UDCs where population is so large relative to capital and natural resources that there are large sectors of the economy where marginal productivity of labour is negligible, zero or negative. The surplus population exists not only in agricultural sector but also found among petty trades, casual workers and domestic servants. Prof. Lewis explains how unlimited supply of labour can be used as an instrument of development and he stresses that labour is an engine of development and reminds to Bentham's dictum 'labour is the source of wealth'.

Prof. Lewis has argued that an urban-rural wage differential of approximately 30%, attracts the labour force into the industrial sector. But, in recent years, this wage differential has widened to a large extent. Although, rural-urban migration goes on unprecedented scale, it is a pity to note that industrial sector has not created sufficient employment opportunities to absorb all those who are capable to work. Therefore, informal economy of the urban sector harbours the bulk of this labour in transition from the rural sector into industrial employment. The expected value of the urban wage, notwithstanding the probability of long spells of unemployment still exceeds the rural sector and as long as it does, the process of migration will go on. Most of the models of the rural-urban migration process are pessimistic about reducing the level of urban unemployment by conventional means such as subsidies to labour or public works programmes in the urban areas. The reason is that migration from the land is made to be a function not only of the actual urban-rural wage differential but also the level of employment opportunities. The Todaro model postulates that the migration proceeds in response to urban-rural differences in expected rather than actual earnings. The fundamental premise is that migrants consider the various labour market opportunities available to them, as between the rural and urban sectors, and choose the one which

maximises their 'expected' gains from migration. The expected gains are measured by—the difference in real incomes between rural and urban work and the probability of a new migrants obtaining an urban job.

The last few decades have observed massive seasonal or permanent migration of peasants from rural to urban areas in the Third World Countries. This has been extensively documented and there has been an enormous growth of theoretical literature and empirical evidence towards an understanding of the realities of rural-urban migration (deHann, 2000). This phenomenon has led to a considerable debate on the process of capital penetration into real areas and its role in influencing the existing socio-economic differentiation in the countryside.

One of the prominent theoretical arguments on rural-urban migration views is the individual utility maximisation behaviour (Todaro,1969), where wage differentials between the urban and rural sectors are considered to be the prime determinants of migration. The neoclassical expected income model of Todaro, with its numerous variants, seems to focus on individual potential migrants, and argues that holding much less constant, people will migrate if they expect to do better than they would if they did not move. The neoclassical theory of migration is largely based on the Lewis model, where the institutionally given urban wage rate and the wage differential between the urban and rural sectors form the basis of framework.

This implies that migration from the rural to the urban sector results when the actual rural wage rate falls short of the expected urban wage rate. However, the neoclassical model, which is the most dominating framework in the context of rural-urban migration, assumes that rural migrants are a homogeneous category of poor people, ignoring the fact that their migration is not always based on a strategy of maximisation, but of survival. At times, the circulation of labour or migration from rural to urban areas is a response to economic necessity. Here, Todaro Model does not consider non-economic factors such as pressure of population, inequalities in the distribution of land –owning and other institutional mechanisms that lead to migration from rural to urban areas.

Breman (1985) criticises that Todaro model by taking the case of large-scale displacement of labour in the tribal hinter land of south Gujarat. His study shows how the migrants who find work in the cotton ginning factories in Bardoli (migrant place) earn a lower daily wage than the labourers staying behind in Valod) originating place) to work on roads or canals there. Thus, Breman's study concludes that seasonal migration is a matter of survival or, at best, of consolidation, and hardly ever results in accumulation or re-investment in the home area.

Alternatively, inter-temporal family contract models of migration also have been constructed (Stark,1980; Stark and Bloom,1985). These emphasise risk spreading (Stark and Levani,1982) by families in the presence of imperfections in rural capital markets (Stark,1982) as a strategy to overcome constraints on production and investment activities as result of missing or incomplete credit and insurance markets in rural areas. The basic premise of these alternative models, which are based on household utility maximisation, is that the decision to migrate is not taken by an individual, but by the family members. Stark and Lucas (1988) suggest that labour migration by one or more family members can be an effective mechanism to self-financed local production activities and acts as a self-insurance against local income risks. Stark and Levani (1982) and Taylor (1986) argue that migration plays a risk –reducing and insurance-enhancing role in production and investment decisions.

Hoddinot (1994) model states that migration is an outcome of a joint utility maximisation by the perspective migrant and the other family members. These models of behavioural decision-making thus emphasize that circulation of labour is a form of risk reduction by spreading the risk spatially and occupationally while maximising consumption.

Apart from testing the validity of the above models, the discussion on rural-urban migration in India seems to have focussed on determining the relative importance of push and pull factors in inducing migration. Income differentials are seen as the major pull factors, while seasonality risk, market failure, erosion of assets and landlessness are seen as push factors. Most of these studies have also tried to address the demographic aspects of migration (Gupta, 1984; Kundu, 1986) where analysis is based on NSS and Census data at regional as well as national levels, depicting the extent and magnitude of rural-urban migration. However, a major limitation of these studies based on secondary data is that they do not throw any light on changes in economic conditions, including consumption and lifestyle, that migrants undergo in urban areas in adapting to their new environment. Besides, such studies also fail to capture the problems that migrants face in leaving the security provided by the family, the community, well-established work patterns, economic and social relationships, to live and work in a harsh and hostile environment and among people most of whom are strangers.

Dasgupta and Laishley (1975) reveals in their studies that factors related to both village base and urban relations induce migration. The factors that they identify at the village base are land shortage and low fertility and skewed distribution of land, and the resulting high proportion of landless agricultural workers. The two major urban related factors that they identify are commercialisation of agriculture and access to towns.

A major study is done by Connel et al (1976) on migration which tries to understand migration as an imbalance in access to resources that exists between regions, families and villages. The study examines the conditions that influence the decision to migrate, the destination, occupation pursued, income from migration and other socio-economic characteristics of the migrants. It also shows that inadequate access to income generally land in villages and the hope of improving living conditions in the village, encourage the rural households or individuals to migrate that may be seasonal, circular and permanent in nature.

8. Factors behind Occupational Diversification and Non-Farm Employment

In general, some important factors might lead to an increase in rural non-farm employment as mentioned below-

a. Asset endowment

Asset endowment comprising of land, livestock, real estate etc. is an important factor determining employment in rural non-farm sector. The size of land holdings is one of the most important underlying factors that appears to be responsible for the extent of RNFE within household. The relationship between land endowment and participation in the non-farm economy is a complex one. Theoretically, the relation between land holding size and the share of non-farm income in the total household income is likely to be depicted by a negatively sloped curve. The reason is that rural household with good access to land are not compelled to diversify into non-farm employment to the same extent as landless or marginal farming households, and tend to show a strong attachment to family as way of life, thereby having a tendency to specialize in agriculture and allied activities. Those with limited or no access to land have to work as agricultural labourers

and engage in non-farm activities in order to earn a living often having to migrate as a response to limited local employment opportunities. However, an inverse correlation between land ownership and the share of non-farm income at the household level may not always be verified empirically.

b. Human Capital Attributes

Age, skill, education broaden the set of employment and entrepreneurial options for individuals. Household age composition (usually assessed in the form of dependency ratios) and education levels are an often –cited measure of human capital used empirically in explaining the degree of participation across a wide range of income groups in the rural non-farm economy. Coppard (2001) found that the probability of participation in non-farm work increases with age up to 33 for men and 30 for women, and is thereafter inversely related to age. The level of education is considered as a potent instrument in influencing the rural non-farm employment pattern. Better educated individuals are likely to possess skills which facilitate successful involvement in non-farm activities, including the ability to manage a business, to process relevant information, to adapt to changing demand patterns, and to liaison with public and private service providers. They are also likely to have greater aspirations with regard to working outside agriculture.

c. Caste, Religion, Gender Affinities and Cultural Factors

Caste, religion, gender affinities and a variety of cultural factors may mean that there is a preference for involvement in certain types of non-farm livelihood activity on the part of all members of a community or on the part of some section of the community. There are often activities that are seen as undesirable by members of certain castes/classes or certain ethnic groups. There are also activities that are seen as inappropriate for certain categories of individuals in keeping e.g., with their sex or age. Access barriers may also be related to caste or class divisions, to ethnicity, language or other cultural factors. High status groups of all kinds, including high castes and high status/majority ethnic groups may gain access more easily to more remunerative non-farm activities. Individuals and households belonging to low status groups, on the other hand, find it difficult to diversify into better–paid sectors, and tend to be forced into certain less remunerative non-farm activities.

d. Risk

The risk factor includes people to diversify activity. The risk inherent in agricultural production may cause single source income to fluctuate, which can be mitigated by diversifying the portfolio of activities (Readon, 1998). Economic theory indicates that risk neutral farmers will divide their labour supply between on farm and non-farm employment opportunities such that the expected marginal returns to an extra hour of effort/work are equal. If farmers are risk-averse either less time will be allocated to the more risky jobs if the expected returns to each sector are the same or alternatively the farmer will be willing to accept lower wages in the less-risky environment (Mishra and Goodwin, 1997). Non-farm labour can be used by farmers to reduce the total variance of their income, that is, the overall risk or to increase the total returns from labour.

e. Seasonality

Seasonal labour and asset employment of agricultural production may be another reason for the growth of the RNFE. Ample evidence is found in the literature to suggest that various factors, both internal and external to the rural economy, operate on rural non-farm employment. These factors could go beyond the purview of agricultural linkages as well.

9. Conclusion

Theoretically, the changing occupational structure has been explained from two perspectives. First, the development perspective where the changing workforce composition is attributed to factors like agricultural prosperity and growing urbanisation with their positive linkages, enabling the labour force to diversify in order to tap new income and employment opportunities. Here, diversification is more growth or prosperity –induced one. The second perspective is of the distress kind where poverty, population growth and depleting resource base compel the labour force to diversify under duress, including resorting to seasonal migration to distant places.

The studies reviewed in the present work suggest that widespread labour migration in India is attributed to structural factors like inequality in land ownership, poverty and agricultural backwardness. Labour migration is explained more by these factors than the models dealing with motivation of maximising the family's income and employment. Thus, rural-urban interaction or rural-urban migration may help the rural poverty to overcome their problem of survival. Similarly, the changing occupational structure in India is influenced by the forces of development and distress. Further, in general, there are some factors both internal and external to the rural economy, which might lead to an increase in rural non-farm employment which have ample evidence in the literature. These factors could go beyond the purview of agricultural linkages as well.

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