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Rural Non-Farm Economy

**The Rural Non-farm Economy in India:
A Review of the Literature**

by

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*The views expressed in this document are solely those of the author
and not necessarily those of DFID or the World Bank*



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EXECUTIVE SUMMARY

This literature review was conducted as part of a policy-oriented research programme that aims to inform the development of pro-poor policy on the rural non-farm economy (RNFE). The research is funded by the UK's Department for International Development (DFID), under a collaborative programme with the World Bank, and led by the Natural Resources Institute in co-operation with national partners in India and Uganda. This literature review represents the first phase of the India work. Field work in the Indian states of Madhya Pradesh and Orissa will commence in late-2001.

The literature reviewed largely assesses the national significance of the RNFE based on the decennial Census and NSS employment data, which include workforce and enterprise data. It is argued that the RNFE is grossly underestimated because of a failure to capture the diversity of rural employment and misrepresentation of female labour.

Rural non-farm employment is considered to be particularly important to the landless and small and marginal farmers, leading to the conclusion that the growth of real per capita non-agricultural output can have a significant impact in reducing rural poverty. Rising non-agricultural incomes can, however, also increase inequality as a consequence of differential access between the less- and better endowed.

The RNFE is highly diverse, and is significant in both the secondary and tertiary sectors, utilising both simple and more advanced technologies. Traditional household industry is considered to be the most significant sub-sector of rural manufacturing in terms of size of workforce, and to be in decline, while more modern industries are growing, and constitute a large contribution to the export market. Consistent growth in the RNFE, although modest, is considered to reflect a structural change away from agriculture towards the non-farm sector (arguably principally in the male labour force). Recent growth, however, has largely been attributed to an increase in the proportion of casual workers rather than full-time employment, and significant variation is found across states as well as between different sub-sectors.

Increased participation in the RNFE has come mainly from the tertiary sector. The impact of liberalisation in the early 1990s has increased the demand for labour, albeit unevenly shared by rural and urban regions, by men and women, and by regular and casual workers. Seasonal fluctuations in RNF employment are largely explained by rural casual labourers shifting from agricultural to non-agricultural work.

Growth in RNF employment since the 1970s is more clearly observed in male rather than female workers, and while increasing participation in the non-farm sector has continued for men, it has recently declined for women. Gender disparities are also evident in non-farm incomes. The female to male sex ratio in both household and non-household manufacturing industries has risen significantly between 1981 and 1991, which has been linked to growth in the unorganised sector. Much of this work is considered to be part time and low paid, or to involve casual labour.

A large section of the literature seeks to identify the principal determining factors of growth (or lack of) in the sector. A key debate questions whether growth in rural non-farm employment is a consequence of distress diversification, or because it is

responding to demand as the rural economy develops through linkages with the agricultural sector. Other literature has identified the influence of additional 'prime movers', notably rural infrastructure, urbanisation and government rural development schemes. Acknowledgement of the diversity of the RNFE and thus the existence of multiple growth factors has helped to resolve the debate. Patterns of demand and the influence of markets beyond the local-level have also been identified in explaining the growth of RNF sub-sectors. In addition, investigation of the impact of macro-economic policies of structural adjustment in the early 1990s indicate increased demand for casual, intermittent, low remunerative and urban labour in the RNFE.

Against a background of poor performance of rural development policies, rural industrialisation has been promoted to alleviate rural poverty, and efforts from the early 1990s have sought to accelerate economic growth and nurture a 'spread effect'. Rural industrialisation policies have either been locational, encouraging regional dispersal, or aimed to generate development linkages with the rural sector.

Literature examining the impact of government policies on the RNFE is limited, although the need to avoid a narrow RNFE focus is recognised. A number of failings of government regulation and promotion policies for the RNFE have been identified. Likewise, the literature argues that the RNFE has been poorly served by the formal credit sector, characterised by government intervention and direction. In addition to institutional barriers, small rural enterprises have lost out to larger manufacturing units in accessing formal sources of credit, and gender bias against non-farm activities commonly conducted by women has been noted.

Literature exploring the implications of democratic decentralisation is largely concerned with the impact on participation and institutional performance rather than measures of economic development in general, or the RNFE in particular. The impact of decentralisation and good governance on social and economic development is found to be ambiguous. Decentralisation literature in general largely assumes positive benefits to the economy to accrue indirectly through improvements in equity, transparency and accountability of local government growth, while there is little empirical evidence to suggest whether the decentralised provision of economic infrastructure actually promotes or hinders local economic activity.

Barriers to rural livelihoods are categorised in the literature as issues of human capital (education and health), social institutions (culture, particularly for women), financial, and institutional barriers of policy and practice. Locational barriers, a consequence of poor infrastructure, are also noted as influential factors, particularly for remote rural regions in mediating access to markets. Women face greater barriers than their male counterparts in all categories. Provision of basic and primary education, and access to effective credit for market-worthy activities are identified as key policy areas.

Small town growth can positively influence the growth of the RNFE through the provision of local and non-local markets, infrastructure, inputs and technology, as well as employment opportunities. Conversely, such advantages may render certain rural manufacturing industries non-viable in the face of competition. The debate on small town growth versus village rural enterprise development, both of which have been targeted by government policy, remains ambiguous. Other sources, meanwhile, argue that rural-urban commuting and analytical definitions of rural and urban render the measurement of the significance of urbanisation on the RNFE problematic.

THE RURAL NON-FARM ECONOMY IN INDIA

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1. INTRODUCTION

1.1 The Rural Non-Farm Economy Policy Development Programme

This report is part of a programme of research intended to improve understanding of the Rural Non-Farm Economy (RNFE) and to assist with the development of appropriate policies. The research is being undertaken by the Natural Resources Institute (NRI) of the UK, in collaboration with local and British partners. It is funded through the British Government's Department for International Development (DfID) under a collaborative agreement with the World Bank. Interest in the RNFE stems from a growing realisation of its importance to rural livelihoods, and its potential contribution to poverty reduction.

The NRI research has three main components: the first focuses on the factors that determine household or individual access to or capacity to engage in the RNFE; the second focuses on the influence of local governance on the development of the RNFE; and the third is concerned with the characteristics and dynamics of the RNFE in Central and Eastern Europe. The first two involve research in Uganda and India, with fieldwork in India starting in 2001. The research is phased over the three-year period, 2000 – 2003.

The purpose of the research on the RNFE is to inform and assist governments, DfID, and the World Bank in formulating pro-poor RNFE policies in the study countries and elsewhere. The research is intended to improve understanding of the rural non-farm economy and develop mechanisms for integrating these research results into relevant policy processes.

1.2 Scope of the literature review

The literature review was to focus on the RNFE in India, covering key texts, any detailed work on Madhya Pradesh (MP) and Orissa (the two states where field work is to be conducted), and specific studies relating to Access and Local Governance issues.

A number of sub-themes were identified:

- quantitative indicators and sources of information on the RNFE in India
- patterns of RNFE participation by the poor, and by sub-groups of poor (women, elderly, children, tribals)
- main determinants and factors, including policy and market influences
- policy history and RNFE impacts
- decentralisation, governance and impacts on local economic development
- access and barriers to rural livelihoods, and experience with policies and interventions to improve access
- impacts of small town growth

Definitions of the rural non-farm economy are problematic. There is no standard definition either internationally or within India as the sector is too diverse to allow

neat classification (Fisher *et al.*, 1997).¹ The rural non-farm economy is defined in this paper to exclude primary agriculture, forestry, fisheries, but to include trade and processing of these products, in addition to other goods and services, as secondary and tertiary sectoral activities.

The literature is beset with confusion and ambiguity as definitions of 'rural non-farm', 'non-agricultural', or indeed, 'employment' are rarely made explicit. Thus there is, for example, ambiguity as to whether non-farm employment refers to employment anywhere by rural households, or solely rurally-located employment. Nor are such definitional issues confined only to the literature. Chadha (1997) notes that while National Sample Survey (NSS) data show what percentage of the rural workforce are 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. Thus, while every effort has been made to maintain consistency here, ambiguity in the literature must be recognised.

1.3 Structure of review

The paper will proceed in seven sections, each concluding with an assessment of the project target states Orissa and MP where relevant literature has been found. The following section assesses quantitative indicators of the significance, and growth of the rural non-farm economy, including differences between sub-sectors and states. This is usually presented in terms of proportions of employment rather than incomes (and GDP) in the two key sources, the decennial Census, and the NSS.

Section 3 examines differential patterns of participation and economic returns in the RNFE generally, and between different sub-sectors of the economy specifically, while section 4 reviews the dominant theories identifying the key determinants of growth in the sector. Section 5 summarises the influence of government rural development, anti-poverty and industrial policies on the rural non-farm economy, and continues with literature concerned with decentralisation policy in Section 6. Section 7 addresses the key barriers to access to rural non-farm livelihoods identified in the literature, and the developmental impact of efforts to reduce them. The paper concludes with an examination of the influence of rural town growth and influence of the proximity to urban centres on the rural non-farm economy.

¹ See Fisher *et al.* (1997: 9) for a list of official terms used by government departments and other institutions in India.

QUANTITATIVE INDICATORS

2.1 National significance of the RNFE

Literature assessing the national significance of the RNFE is largely based on two main sources of employment data in India, namely the decennial Census, and the quinquennial rounds on employment and unemployment of the National Sample Survey (NSS). Fisher *et al.* (1997) note that definitions of employment and classification of workers differ between these data sources, rendering comparison problematic. Assessment of the sector in the literature is therefore largely in terms of proportions of the national workforce / number of small enterprises etc., rather than approximations of contributions of the sector to the national or regional GDP.

While the 1991 Census and the 1987-8 NSS records 17.7 per cent and 23.4 per cent of the rural labour force respectively to be engaged in RNF employment, there is a body of literature that argues that this is a gross underestimation (Hazell and Haggblade, 1991; Sen, 1994; Fisher *et al.*, 1997).² Women's work is often classified as unremunerative domestic work and thus is not included as part of the labour force, underestimating female work participation rates. The Census has also been criticised for classifying women's work too readily as agricultural labour (Hazell and Haggblade, 1991; Sen, 1994). Secondly, Hazell and Haggblade (1991) argue that the Census and NSS class people as rural only if resident in settlements of less than 5000 population, thus disregarding rural towns. They argue that if the Census included rural towns of up to 100,000 population, a further 5 per cent could be added. Finally, surveys do not capture the complexity of much rural employment where households and individuals may pursue a number of different activities, and employment patterns may vary both seasonally and across different years (Fisher *et al.*, 1997). Consequently, Fisher *et al.* estimate as much as 25 per cent of all rural employment to be engaged in the RNFE, accounting for some 40-50 million workers.

Fisher *et al.* cite the Economic Census of 1990 (GoI 1995) as recording 12.6 million rural non-farm enterprises employing 29.1 million people, calculated as 1.8 males and 0.5 females per enterprise. Of these units, 39 per cent were in trading and commerce, 28 per cent in 'other services' and 27 per cent in manufacturing, although the latter employed over a third of the total non-farm work force. 81 per cent of such enterprises run without power. Manufacturing enterprises typically involve simple manual technologies generating a minimal surplus. However, 86 per cent of the jobs in these enterprises accounted for full time occupation, and not simply work supplementary to agriculture. (See below for patterns of growth of sub-sectors).

2.2 Role of the RNFE in rural livelihoods: proportions of income, allocations of time and labour

As part of a major study of rural growth linkages, Hazell and Haggblade (1991) suggest that income from the RNFS contributes between 25-35 percent of the total income of rural households, in contrast with its 20-25 per cent share of employment. Based on NCAER data, the authors argue that the higher income than employment share implies either greater returns to labour in non-farm employment or extensive part-time and seasonal non-farm activity which are not captured in the employment statistics. Walker and Ryan (1990) further argue, based on NCAER statistics, that the proportion of non-farm income to rural households has increased, from 20 to 27

² See Fisher *et al.* (1997: 26) for an extended list of literature covering both national / regional statistical analysis, and micro-level household studies which support this view.

percent between 1971-2 and 1981-82, whilst the share of agricultural income fell from 60 to 53 per cent. Further, 70 per cent of the increase in real household income during the same period was attributed to the rise in non-agricultural incomes.

Fisher *et al.* (1997) emphasise that non-farm employment is particularly important to small and marginal farmers, as well as the landless, who cannot derive sufficient income in the agricultural sector, and also find the sector to be an important safety net to rural households in times of agricultural distress. They estimate marginal and landless households to spend between 20 and 50 per cent of their working days on non-farm activities. Consequently, Datt and Ravallion (1996) and Ravallion (2000), in a comprehensive study, conclude that the growth of real per capita non-agricultural output can have a significant impact in reducing rural poverty if growth exceeds its usual trend. However, Chadha (1993), and Sen (1994) argue that rising non-agricultural incomes can also increase inequality, as the more well-endowed benefit more from the transition into more remunerative activities of the non-farm sector than poorer groups. (See section 2 for participation of RNF activities of different groups).

2.3 Change over time

Overall growth of the RNFE

Literature concerned with RNF employment emphasises the importance of the sector as such employment has been growing in both absolute terms and as a share of total rural employment. Papola (1992) in examining NSS data finds that the number of workers who recorded RNF employment as their principal employment grew at 5 per cent per annum between 1977-8 and 1987-8, while the share of non-farm jobs rose from 17.9 to 23.4 per cent in rural employment. Sen (1994) argues that the non-farm sector provided the majority of new jobs in the rural sector during the 1980s. Chadha (1993) demonstrates that the Census records a growth rate of 2.8 per cent per annum between 1981-91. This compares to 1.6 per cent among cultivators and 2.8 per cent among agricultural labourers, suggesting that cultivating households are moving into the other two categories.

Other literature based on census data (Bhalla 1993), and NSS data (Basant and Kumar, 1989; Chadha, 1997; Visaria, 1995) detail similar trends within the sector. Bhalla finds that 40 per cent of all new non-farm employment was created in rural areas whilst non-farm employment in the same period account for almost one third of all new jobs for male workers. Thus numbers of households engaged in RNF employment are rising, as is the proportion of non-farm income per household.

Differential growth between sub sectors within primary, secondary and tertiary sectors

Recent literature particularly emphasises that whilst the common perception of the rural non-farm sector in India is one comprising largely of traditional village industries, in reality, the sector is diverse. Fisher *et al.* (1997) identify 17 sub-sectors which account for 80 per cent of all RNF employment. The tertiary sector, itself contributing 60 per cent of all RNF employment, includes retail trade, education, public administration, personal services, land transport, restaurants and hotels and medical services. The secondary sector includes many traditional sub sectors such as textiles, wood, pottery, food, tobacco, metal products, as well as repairs and construction. Important activities including manufacturing outside the household,

trading and public services are each estimated to account for one fifth of RNF employment.

Fisher *et al.* argue that most non farm enterprises are small, each providing employment for an average of 2.2 people, using basic manual technologies to produce simple, low quality outputs. There are also more productive, but fewer, small, medium and large enterprises which may invest in more advanced technologies to produce modern and higher quality products.

Papola (1992) estimates that over half of all manufacturing jobs are in rural areas. However, this sub-sector can be further disaggregated to household and non-household, and traditional and modern manufacturing (Mukhopadhyay *et al.*, 1985; Visaria, 1995; Samal, 1997; Fisher *et al.*, 1997) emphasising that the majority of 'high share' sub-sectors in rural manufacturing are in traditional sub-sectors, many of which are household-based and declining, with little capacity to create further employment. In contrast, the sub-sector also includes modern manufacturing industries, such as powerlooms, modern garments, furniture, ceramics and agro-processing, many of which make a large contribution to India's export market (Fisher *et al.*, 1997).³ Visaria (1995) thus argues that overall growth in manufacturing is modest due to the continuing decline of household industry and the substitution of capital for labour, particularly in food processing. Further, he concludes that attainment of rural development appears to promote the expansion of non-household components of rural industry and a relative shrinkage of traditional household industries.

He continues to identify public utilities as a dynamic sector in the rural economy, with an annual average growth rate of 11 per cent. Only male workers are employed in such activities. Visaria argues that the provision of electricity in Indian villages, which has increased from 21 per cent in 1971-72 to 86 per cent in 1994, has been a major agent of change. Construction employment is also found to have undergone a high rate of growth (8 per cent), of which public expenditure on rural and urban employment schemes in response to employment scarcity relief works (labour-intensive public works programmes), in addition to public and private investment have been a contributory factor. Other sectors witnessing relatively high growth of employment include transport, storage and communications, trade and commerce, and mining and quarrying.

Unni (1998) argues that the beginning of a structural change in employment away from agriculture towards the non-farm sector is evident, both at all-India and rural-India levels. Bhaduri (1996) finds that between 1977-78 and 1990-91, the share of the primary sector in GDP (mostly agriculture) and its share in total recorded employment fell, whilst those of the secondary and tertiary sectors have increased. Within the RNF sector, growth is found to be significantly higher in the tertiary (services) rather than the secondary (manufacturing) sector. However, the growth of RNF employment during this period is largely attributed to an increase in the proportion of casual workers in the unorganised sector, rather than full time employment or increases in the number of rural non-farm producers (Bhattacharya and Mitra, 1993; Visaria and Basant, 1994). Additionally, casual agricultural labourers report a much higher

³ According to Fisher *et al.*, the three largest export items, leather and leather products, textile fabrics and manufacturers and handicrafts, all products with significant RNF input, account for over 40 per cent of India's total exports, compared to 25 per cent from the industrial sector.

incidence of RNF employment in a secondary or subsidiary capacity (Basant and Kumar, 1989).

2.4 Differences between states

Bhalla (1993) and Chadha (1997) assess variation across states. Bhalla identifies Gujarat, Haryana, Jammu and Kashmir, Karnataka, Kerala, Maharashtra and Rajasthan as witnessing expanding non-farm employment between the 1961 and 1981 Censuses. Chadha finds significant expansion in male workers during the 1970s and 1980s in Punjab, Haryana, Gujarat, Himachal Pradesh, Rajasthan and Tamil Nadu, with modest growth in Orissa, Karnataka, West Bengal and Maharashtra.

Fisher *et al.* (1997) found inter-state variation in the the rural non-farm sector across the eight Indian states studied. The RNF sector was found to be more developed in Punjab, Tamil Nadu and Gujarat, and less so in Assam, Orissa, Andhra Pradesh, Rajasthan and Uttar Pradesh. RNFS employment, particularly the tertiary sector, in Punjab was believed to be closely connected to agricultural development, whilst transformation of the rural economy in Gujarat was attributed to a rapid growth in rural manufacturing.

Inter-state variation is reflected in the 1991 Census, which records Kerala with the highest proportion of rural workers engaged in non-farm activities at 43.9 percent followed by West Bengal (26.5), Haryana (26.2) and Punjab (25.8). At the other end of the spectrum lie Bihar and MP with 11.7 and 10.7 per cent respectively (Fisher *et al.*, 1997).

2.5 Target state profiles

Shrivastava (1995) makes an assessment of non-farm employment in MP based on an analysis of state-wise secondary data. Overall, it is concluded that MP's proportion of rural non-farm workers is very low in comparison to other states. Shrivastava speculates that this may be due to low commercialisation and urbanisation, low literacy rates, limited transport and communication facilities, and lack of financing, in comparison to other states of India.

The annual compound growth rate of employment (person-days) in the rural sector between 1973-91 was 0.29 per cent. Disaggregated, it was found to be 0.13 per cent and 1.9 per cent in the agricultural and non-agricultural sectors respectively. Total rural workers engaged in non-farm activities formed 11.92 per cent of total main rural workers in 1991, lower than the all-India average. Further, participation of female workers in non-farm activities was 5.8 per cent (14.8 per cent for males), again lower than the national average. The main non-farm activities in the state included manufacturing, accounting for 3.8 per cent of total rural workers, followed by trade / commerce and livestock / forestry, which combined, accounted for 2.8 per cent.

Samal (1997a, 1997b) makes a detailed assessment of features of the RNFE in Orissa. He finds that workers are concentrated in rural areas. Of the 11.8 million workers in Orissa, 10.6 million are rural workers, among which 9.1 million are main workers. 80 per cent of these are engaged in agricultural and related activities (Samal, 1997b). RNF workers as a percentage of rural main workers grew from 15.8 per cent in 1981 to 17.5 percent in 1991. RNF employment in the state as a whole grew at a rate of 2.8 per cent, compared to 1.7 per cent in agriculture. The decadal compound growth rate

of RNF employment was highest at 4.3 per cent in Balasore district, followed by Kalahandi (3.7 per cent) and Puri (3.2 per cent).

A study of the RNF sector by NABARD (1994) (defining rural as settlements up to 20,000 in population), cited in Samal (1997b) observed the following features:

- i. *Regional variation:* There is regional variation in the importance of the RNF sector to the local economy within Orissa. The percentage of RNF workers to rural main workers is most prominent in the coastal undivided districts of Cuttack (25.6 per cent) followed by Puri (22.1 per cent). Specific sub-sector clustering is also found, largely determined by the availability of raw materials, with the exception of cotton textiles which is on account of a strong handloom tradition. Thus two thirds of the state's paddy processing units are located in Sambalpur, cotton textiles in Cuttack, Sambalpur and Koraput, spice processing in Ganjam, fibre products and stoneware in coastal districts, non-timber forest product (NTFP) collection in Koraput and Kalahandi and mineral-based industries in Dhenkanal, Keonjhar and parts of Sundergarh district.
- ii. *Sub-sector growth:* High growth RNF sub-sectors in Orissa are identified as services, water and electricity, and jute/hemp products. The percentage of RNF workers employed in mining, household manufacturing and 'other services' are 4.6, 18.2 and 38.6 per cent respectively. District-wise, the percentage of RNF workers engaged in household manufacturing is highest in Sambalpur (35.1 per cent) followed by Mayurbhanj and Bolangir (34.4 and 30.8 per cent respectively). Thus, the major portion of RNF workers is engaged in household manufacturing and other services. The household manufacturing sub-sector however, is only growing at an annual rate of 1.5 per cent, whilst the non-household sector is even slower at 1.2 per cent.
- iii. *Technology and credit:* The majority of artisans and cottage level producers in traditional activities use traditional technologies whilst a minority of larger units such as rice mills use modern technology. Availability of credit, both for fixed capital and assets, and for working capital, was found to be the major constraint for most RNF sub-sectors in Orissa. As a consequence, a large majority of enterprises had to depend on informal sources of credit due to inadequacy of size of loan, delay and extensive paper work necessary to acquire a loan from all sector institutions.
- iv. *Product demand:* A sustained growth in both domestic and export demand for RNF products is found to be an important determining factor in the growth of sub-sectors in Orissa. Domestic demand has generated growth in spice processing, cotton textiles, minor mineral processing, handicrafts, repairs and rural transport. Growth in textile products, cut-flowers, handicrafts and handloom products is influenced by export demand. Growth of pottery and wood products was found to be constrained by lack of demand.
- v. *Types of employment:* Among the working population of Orissa, the percentage of self-employed, waged employed and casual labourers of the RNF sector was 14.4, 5.1 and 5.0 per cent respectively during 1987-8. Their respective decadal growth rates were 6.2, 5.1 and 4.6 per cent.
- vi. *Traditional RNF activity:* Orissa has a dominance of artisan-based enterprises in the industrial sector. The state government through a number of 'promotional measures' has aimed to protect these traditional enterprises. Government policy of protecting the employment of the handloom industry is

particularly prominent. Samal notes that the handloom industry employs approximately 210,000 people. However, the majority of these are part time, and do not find gainful employment throughout the year. Further, demand for handlooms and their products is declining. Samal reflects that most of the traditional RNF industries are facing similar challenges.

2.6 Summary

The literature largely assesses the national significance of the RNFE based on the decennial Census and NSS employment data in terms of proportions of the national workforce and number of enterprises, rather than contributions to GDP. However, differences in definitions between these sources render comparison problematic.

While the 1991 Census and the 1987-8 NSS records 17.7 per cent and 23.4 per cent of the rural labour force respectively to be engaged in RNF employment, it has been argued that this is a significant underestimation as a consequence of misrepresentations of female labour, and failure to capture the diversity of rural employment. Fisher *et al.* (1997) estimate as much as 25 per cent of all rural employment to be engaged in the RNFE, accounting for some 40-50 million workers.

Non-farm employment is considered to be particularly important to the landless and small and marginal farmers, leading to the conclusion that the growth of real per capita non-agricultural output can have a significant impact in reducing rural poverty. However, it is argued that rising non-agricultural incomes can also increase inequality as a consequence of differential access between the less- and better endowed.

Contrary to common perception, the RNFE is highly diverse, and is significant in both the secondary and tertiary sectors, comprising of both simple and more advanced technologies. The manufacturing sub-sector is often further disaggregated in the literature to household and non-household, traditional and modern. Traditional, household industry is considered to be the most significant sub-sector of rural manufacturing in terms of size of workforce, and to be in decline, while more modern industries are growing, and constitute a large contribution to the export market.

When combined, overall growth in rural non-farm manufacturing employment is found to be modest, but consistent (except for the early 1990s) in both absolute terms and as a share of total workforce, and greater than that of the agricultural sector. Employment in the tertiary sector has witnessed a higher growth rate. Such growth is considered to reflect a structural change away from agriculture towards the non-farm sector (arguably principally in the male labour force), thus signalling the current and future significance of the RNFE. Recent growth, however, has largely been attributed to an increase in the proportion of casual workers rather than full-time employment. Significant variation is found across states as well as between different sub-sectors.

3. PATTERNS OF PARTICIPATION

In their much-cited assessment of earlier literature examining employment patterns evident in the national Census and NSS data, Visaria and Basant (1994) summarise key national trends of participation of labour in the RNFE:

- i. The share of non-farm activities of the total labour force has increased since the 1970s, and is more clearly observed in male rather than female workers;
- ii. This increase has mainly come from the tertiary sector;
- iii. The majority of the increase in non-farm employment has been a consequence of an increase in the proportion of casual non-agricultural workers, rather than full time employment or increases in the number of rural non-farm enterprises;
- iv. The bulk of seasonal fluctuations in RNF employment can be explained by changes in the employment structure of rural casual labour who shift between agricultural and non-agricultural work;
- v. Casual agricultural workers report a much higher incidence of non-agricultural work in a secondary capacity than previously;
- vi. Participation in RNF employment is inversely proportional to size of household land holding

Unni (1996b) further argues that according to the 1993-94 NSS, results indicate that such a structural shift away from agriculture is only evident in the male workforce, and differs to patterns of rural female employment.

3.1 Disaggregation by gender, age and jati

Size of workforce

Disaggregation of the size of workforce in the literature is largely along lines of gender. In 1987-8 the NSS recorded only 24.5 per cent of rural women to be involved in the labour force, compared to 51.7 per cent of men (Fisher *et al.*, 1997). Based on a study of secondary data from Census reports, NSS and Planning Commission, Srivastava *et al.* (1995) examine the current status of participation of female workers in rural non-farm employment and the trends, constraints and prospects they face. In terms of total employment, work participation of rural females was higher than that of urban females. 44.23 per cent of female workers worked as agricultural labourers, and 34.57 per cent as cultivators. The remainder were engaged in other forms of employment including the rural non-farm sector.

Mitra (1993) assesses the role of women in the non-agricultural sector based on Census data. He finds that the number and proportion of women is much lower than men in both the non-agricultural, and RNF sectors. Further, whilst the trend of increasing participation in the non-farm sector was found for women, as well as men, women's involvement has recently declined, whilst that of the male work force has continued to grow.

Patterns between sub-sectors

Patterns of participation in RNF literature often follow categorical definitions of different types of RNF activity and levels of industry. Mukhopadhyay and Lim (1985) define rural non-farm employment as two sub-sectors:

- i. enterprises run on a stable basis with an eye on surplus generation and growth, using hired labour (perhaps over and above family labour) and a certain degree of technical sophistication.

- ii. often, but not always seasonal activities, run with help of unpaid household labour utilising primitive technology to serve local markets, and responding to the supply side of the labour market rather than to market demand for output.

A third possible category is also defined, namely the wage paid employment sector such as contract labour in handicraft industry. They argue that the key difference between the categories is most discernible in terms of capital use and production relations rather than output categories. They comment that sub-sector type 2 is the predominant form in South Asia

Samal (1997a, 1997b), based on work in Orissa, makes similar divisions between formal and informal sectors, each of which are further subdivided into modern and traditional. He argues that the traditional sub-sectors consist of caste-based artisan and service activities, the former of which suffer as a consequence of agricultural development.

Fisher *et al.* (1997), in citing the RBI 1989 All-India Debt and Credit Investment Survey identify two rural household groups which particularly use credit: households with assets between Rs5000 and Rs10,000, and households in the group with the greatest value of assets. They argue that this demonstrates that non-farm activities are pursued most by two distinct groups, namely micro entrepreneurs such as weavers and potters, and small to large rural enterprise owners, such as of brick fields and rice mills.

Regarding gender, Fisher *et al.* suggest, based on national Census data, that among different RNF sub-categories, manufacturing, 'other services' and trade generated the most jobs for women, with almost half of all female employment found in manufacturing outside the household. Important manufacturing activities included tobacco products (*bidi*), cotton textiles, wood products and ceramics, which combined generated over a third of all female employment in the RNF sector. Much of this work is part time and low paid, such as *bidi* making and matches, or involves casual labour, as in construction.

Fisher *et al.* argue that in a number of cases, rural female workers were found to be taking over low paid jobs from male workers as the latter moved on to more remunerative employment in the non-farm sector. They also emphasise the importance of the secondary sector, which employs over half of all women in the RNFE, much more than men. Manufacturing employment for rural women is growing, and manufacturing outside the household is expanding at a much greater rate than household manufacturing, "shifting women away from being family workers to more highly paid work as self-employed single workers, or even employees" (Fisher *et al.*, 1997: 39). Mitra (1993) finds that the manufacturing sub-sector, particularly within the household, continues to exhibit the highest sex ratio of number of female per thousand male workers.

The proportion of children below the age of 15 in the labour force is lower in the RNF sector than the agricultural sector, particularly so for boys. Between 20 and 30 percent of all rural women engaged in manufacturing, construction and mining were below 20, and over 10 per cent of the female labour force were below the age of 15.

However, specific sub-sectors such as *bidi* making and carpet weaving are considered to be well known for child labour and low wages (Fisher *et al.*, 1997).

In a micro study of 30 villages in Gujarat, Unni (1996a) concludes that older men specialise in agricultural activities whilst better-educated men specialise in non-agricultural employment. Men in households of significant assets (especially land) also specialise in non-farm activity. She finds that high population densities and proximity to rural towns (markets) also foster such specialisation.

Heterogeneity of rural non-farm activities as modelled by Mukhopadhyay and Lim (1985) and Samal (1997b) above is also found to be relevant when assessing the different causative factors of growth and access to differential opportunities within the sector (for example see Shylendra and Thomas, 1995; Singh and Tripathi, 1995; Basu and Kashyap, 1992; Samal, 1997b). This will be discussed further in Sections 3 and 6.

Degrees of participation (proportions of time and income, types of employment)

As noted above, the casual and part-time nature of much RNF employment, particularly among women is recorded in the literature. This is particularly emphasised in literature assessing changing employment patterns over time (see below). It also reflects hypotheses of differential causes of growth in the sector (see Section 3). For example, Eapan (1996) notes that growth in the non-farm sector induced by distress is characterised by small, petty producers, and self employed and casual workers, as does Fisher *et al.* (1997). Interestingly, Chandrasekhar (1993) in his study of non-agricultural employment in West Bengal concluded that there were greater opportunities for self-employment and salaried employment than casual wage employment, consisting of activities such as simple manufacturing such as pottery and bamboo products supplying local markets.

Unni (1996a) argues that whilst only 24.5 per cent of rural women are recorded to be involved in the labour force in the 1987-8 the NSS, evidence from an extensive micro study of Gujarat demonstrates that many more women engage in casual and part time work, particularly concentrated in the agricultural labour sector, and that the RNF sector may be particularly important for women by drawing them away from poorly remunerated agricultural work.

An extensive field survey by the Gujarat Institute of Development Research conducted in 30 villages over five districts of Gujarat aimed to study the determinants of rural non-agricultural activities (Basant, 1993). It concluded that rural households undertook both agricultural and non-agricultural activities, and that the nature of diversification of household incomes was a consequence of both diversification of activities among different members of the household, and multiple activities of a single member. Fisher *et al.* (1997) argue that standard surveys such as the Census and NSS do not capture such complexity of rural employment where households and individuals may pursue a number of different activities, and employment patterns may vary seasonally and across different years. This leads to an underestimation of the degree of participation in the RNFE, especially when secondary activities are not considered.

Differential wages

According to the 1987-8 NSS survey, male casual labourer wages are 40 per cent higher in the RNF sector than in agriculture, but only 20 per cent higher for women (Fisher *et al.*, 1997). Bhalla (1994) argues that this difference in income between the two sectors has been increasing over time, arguing that between 1950-51 and 1990-91, per capita agricultural incomes have been growing at a compound rate of less than one half of one per cent per year, whilst per capita incomes of non-agricultural activities have grown at 2.8 per cent compound. Fisher *et al.* thus argue that an increase in non-farm activities may also increase gender disparities, where women in non-agricultural activities earn 43 per cent less than men, whilst this is 'only' 34 per cent in the agricultural sector.

In a quantitative analysis of household data from villages in Tamil Nadu, Saleth (1996) investigates which households benefit most from non-farm growth. He concludes that households that benefit from non-agricultural employment may not necessarily benefit most from non-farm income. For example, large landless households with cattle benefit from non-agricultural employment, whilst wealthier households which are able to invest in better education benefit from access to non-agricultural activity with higher economic returns. This further demonstrates the potential response to growth opportunities available to better-endowed groups, whilst distress factors such as unemployment commonly mediate the poor's non-agricultural activities.

3.2 Change over time

Changing employment patterns are well documented in the literature. Visaria (1995) records that RNF employment has expanded among males at an annual rate of 4.7 per cent, while farm employment has only expanded at a rate of 1 per cent. Corresponding rates of growth for female workers are 4.6 and 1.5 per cent respectively. A significant rise in the proportion of women to men workers since 1980 in the manufacturing sub-sector of the RNFE is also noted. Mitra (1993) argues, however, that this does not necessarily represent the displacement of male by female workers leading to increases in male unemployment, nor the substitution of low-paid female workers for male workers.

Mitra demonstrates that between 1981 and 1991 the female to male sex ratio in both household and non-household manufacturing industries rose significantly. Unni (1998) points out that this occurred during a period of an increase in the proportion of employment in manufacturing in the unorganised sector generally, although draws no conclusions. Interestingly, Mitra also finds a significant variation in female to male sex ratios across states. Between 1981-91 they either increased or remained unchanged in Andhra Pradesh, Karnataka, Haryana, Kerala, Tamil Nadu, Maharashtra and West Bengal. Sex ratios in non-household manufacturing increased significantly in all states, with the exception of Bihar, Gujarat, Haryana, Orissa, Punjab and Rajasthan.

Pal et al (1995) argue that between 1981-91 the share of male workers in the non-farm sector has increased throughout India at the cost of farm employment. However, an increase in the share of female workers has only occurred in four states, namely Kerala, West Bengal, Tripura and Tamil Nadu. The tertiary sector has increased

everywhere for both sexes, although again greater for males, whilst the secondary sector share has largely declined except in Kerala, West Bengal and Punjab.

Deshpande and Deshpande (1998), based on NSS data, well summarise recent patterns (between 1987-88 and 1993-94) in the labour market, attributed to the impact of liberalisation. They conclude that the demand for labour has increased with liberalisation, but has not been shared evenly by rural and urban regions, by men and women, and by regular and casual workers. Key findings include:

- i. Demand for casual and intermittent work has increased faster than regular work.
- ii. The structure of employment has moved away from the primary sector for rural men. Rural women, classified as workers by their usual status, formed a smaller share of the population after liberalisation. Further, the proportion of women earning a regular wage decreased, as did their real incomes, whilst women's share of primary sector employment increased.
- iii. Gender-based inequalities in the earnings of casual workers was reduced, whilst that in the earnings of regular employment increased.
- iv. The view that liberalisation was the cause of change in the sectoral distribution of male labour is misplaced. The drought of 1987-8 forced men out of the primary sector into other activities, largely construction, supplied by public expenditure.
- v. Liberalisation of trade, industry and commerce had much greater relevance for urban rather than rural economy, increasing demand for labour in cities.

Thus, they conclude that liberalisation has affected casual workers, particularly female casual workers more favourably than regular workers.

3.3 Target state profiles

Based on a study of two blocks in Raipur District in MP in 1993-94, Gupta (1995) found that construction, along with private and government services provided a good opportunity of employment for marginal farmers, whilst carpentry and government jobs were the main sources of employment for medium farmers. Small farmers were only engaged either in construction work or government jobs. Total non-farm employment (in terms of work-days) accounted for 59 per cent, 48 per cent and 60 per cent of all rural employment for marginal, small and medium farmers respectively. Involvement of women in non-farm activities was considerably less than men, and under-employment was noted for both.

Selecting marginal, small and medium farmers from ten villages of Balaghat and Jabalpur districts of MP, Shrivastava et al (1995) assess the pattern of RNFE and its impact on income generation. Results found that non-farm employment accounted for 40 per cent of all employment in Jabalpur district households, in comparison to 24 per cent in Balaghat, attributed to the low level of agricultural development in the former district necessitating other sources of employment. Findings also revealed gender discrimination in employment patterns. Male workers accounted for over 70 per cent of non farm employment, attributed to the fact that some skills needed male labourers only, and that non-farm employment was often available at a distance far from the village which only male labourers could afford to access (no reference to social norms preventing women from travelling). Average wages in both agricultural and non-agricultural sectors were higher for male than female workers.

3.4 Summary

Disaggregation of patterns of participation in the RNFE is commonly along lines of gender. While the share of non-farm activities of the total labour force has increased since the 1970s, it is more clearly observed in male rather than female workers. Further, while increasing participation in the non-farm sector has continued for men, it has been found to have recently declined for women.

The female to male sex ratio in both household and non-household manufacturing industries has risen significantly between 1981-91, which has been linked to growth in the unorganised sector. Manufacturing, 'other services' and trade have generated the most jobs for women, with almost half of all female employment found in manufacturing outside the household. Much of this work is considered to be part time and low paid, or to involve casual labour.

In addition to participation, gender disparities are also evident in non-farm incomes. According to the 1987-8 NSS survey, male casual labourer wages are 40 per cent higher in the RNF sector than in agriculture, but only 20 per cent higher for women (Fisher *et al.*, 1997). It is thus argued that an increase in non-farm activities may increase gender disparities

Increases in participation in the RNFE has mainly come from the tertiary sector and is explained as largely a consequence of an increase in the proportion of casual non-agricultural workers. Seasonal fluctuations in RNF employment are explained by changes in the employment structure of rural casual labour who shift between agricultural and non-agricultural work. The impact of liberalisation in the early 1990s has further increased the demand for labour, but has not been shared evenly by rural and urban regions, by men and women, and by regular and casual workers.

4. MAIN DETERMINANTS AND FACTORS

4.1 Dominant theories of RNF economic growth in India

The majority of literature on the RNFE in India is concerned with hypotheses investigating the determinant factors of growth (or lack of) in the sector. In her review of such literature, Unni (1998) argues that studies attempting to empirically validate causality of rural non-agricultural growth can be divided into two groups according to their levels of disaggregation. The first take regional data to analyse the relationship between macro indicators (unemployment, poverty, urbanisation, agricultural development) and proportions of non-farm employment. The second type of study is disaggregated to the household or individual level. The majority of such studies are descriptive, although a minority translate macro arguments into the micro context.

Agricultural linkages

There is a considerable amount of literature investigating linkages between agricultural development and the non-agricultural sector, which fall largely into the first of Unni's categories. Much of this literature refers to Mellor's growth linkage theory (1976) which argued that as a result of development of green revolution technologies and the subsequent increase in productivity and incomes of farmers, demand-led growth of both the agricultural and non-agricultural sector would take place, stimulating a 'virtuous circle' of growth of food production and employment. The latter would occur through multiple linkages with the agricultural sector. 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 enterprises. Production linkages would also derive from the agricultural sector. Backward production linkages would result from farmers' increased demands for inputs from the non-agricultural sector, whilst forward linkages would develop through the increased need for agro-processing activity. Samal (1997b) emphasises a focal theme that without having an equal distribution of rural income and assets, there can still be growth through inter-sectoral linkages between farm and non-farm sectors in rural areas. Such growth, however, can only be achieved by the development of capitalist agriculture through technological advance.

Regarding the role of growth linkages, Harris (1987) cites Hazell and Roell's identified implications for development policy. These are considered to be dependent on whether::

- i. growth linkages are stronger in agriculture or industry;
- ii. consumption are stronger than production linkages;
- iii. local linkages are stronger or weaker than the non-local;
- iv. local are preferable to non-local linkages, and thus whether state governments should implement policies to strengthen local secondary benefits in regions already favoured with public sector investment in agriculture.

A number of Indian studies suggest growth of agriculture is likely to stimulate growth and development of the RNFE (Hazell and Haggblade, 1991; Bhalla, 1993; Dev, 1990; Papola, 1992; Shukla, 1991,1992; Unni, 1991, 1994).

Fisher *et al.*'s study concludes that, "growth in the RNF sector is clearly boosted by a thriving agricultural economy" (1997: 206) citing the 1991 Census which records that in states with a healthy agricultural sector such as Punjab, Haryana and West Bengal, over 25 per cent of rural workers were engaged in the non-farm sector whilst in Bihar and Madhaya Pradesh (with more limited agriculture) it was only 10 per cent.

In his influential article analysing data from 16 states, Vaidyanathan (1986) found a significant positive relationship between crop output per head of agricultural population and non-farm employment, while Dev (1990) found agricultural productivity rather than crop production to be significant at a more disaggregated level. Interestingly, both agreed that inequality in land distribution was negatively correlated with non-farm employment. Papola (1994) argues that in different states, the rural industrial sector (as a sub-sector of the RNFE) is associated with agricultural productivity, and has a high correlation with growth in agricultural output.

In their much-cited analysis based on district-level data Hazell and Haggblade (1991) substantiate the linkage hypothesis, arguing that agricultural growth is the principle factor for growth in the non-agricultural sector. In contrast to Shukla (below), they also conclude that both consumption and production linkages have increased significantly as a consequence of increased usage of agricultural inputs and growing rural incomes.

In their analysis of agricultural industry linkages between 1971/2 and 1983/4, Nachane *et al.* (1989) also find a strong correlation between agricultural and non-farm growth, in addition to strong forward and backward production linkages. This is found to be particularly significant with regard to agro-based industries, whilst it's impact on the tertiary was considered uncertain.

In his micro study of 18 villages, Chadha (1994) conducted detailed employment and poverty household surveys across three states of differing levels of development: Bihar, considered a backward region, Andhra Pradesh, an agriculturally developed region but with comparatively little non-agricultural activity, and UP, a state with both developed agricultural and non-agricultural sectors. He concluded that a quickly growing and productive agricultural economy is able to promote well-developed non-agricultural activity within the village itself. However, he concludes that this linkage between the sectors cannot be taken for granted, highlighting his finding that as the economy develops, the proportion of non-farm incomes increases in poorer households.

Shukla (1991, 1992), based on econometric modelling of data from the state of Maharashtra, argued that consumption linkages were twice as strong as all production linkages (although forward were considered greater than backward linkages), and that once the consumption effect had been removed, agricultural production had little impact on the growth of the non-farm sector.

A more qualitative assessment of agricultural-led growth of the non-farm sector by Harris (1987) and Harris (1991) in Tamil Nadu led to the conclusion that while agricultural growth was a necessary condition for growth and diversification in the non-farm sector, it is not sufficient in itself (see below, and Section 8 for the role of urban centres in the RNFE). Based on evidence collected in the market town of Arni

in Tamil Nadu and surrounding server villagers, they found that the political economy of a small concentration of wealth and power among businessmen and rich farmers had weakened linkage effects of agricultural growth.

However, the linkage argument is not found in other India studies. Basant (1994) observed that the level and growth of agricultural productivity, per capita output, non-food crops were not significantly related to the RNFE in taluk and district levels of Gujarat. Chandrasekhar (1993) found in West Bengal that in districts where productivity increased the proportion of male workforce in the RNFE declined, while Singh (1994) in UP argued that areas of increased agricultural productivity had reduced RNF employment due to its ability to absorb more labour in agriculture.

'Prime movers' outside agriculture

In response to attempts of empirical validation of the growth linkage model, alternative hypotheses were established, seeking additional prime movers outside of the agricultural sector (Unni, 1998). Whilst agriculture-led growth was acknowledged, additional important factors (particularly rural infrastructure, urbanisation and government rural development schemes) were also considered significant.

Bhalla (1993, 1997) argues for the importance of proximity to urban centres for rural livelihood diversification. In an assessment of district-level census data she concludes that a switch in preference for urban-produced inputs has had a significant impact on the growth of the non-farm sector in districts of high agricultural productivity. Papola (1992) emphasises the role of rural towns in the employment of rural workers and diversification of rural non-farm employment. He found that the productivity and incomes of non-farm enterprises were higher in regions where rural towns were more evenly spread than where there were only a few concentrated settlements, which he attributes to the action of forward and backward linkages. Further, rural towns with populations between 20,000 and 50,000 had the highest growth between 1971 and 1981, with new workers predominantly coming from rural areas. Shukla (1991, 1992) in Gujarat, Jayaraj (1994) in Tamil Nadu, and Eapen (1995) in his study of non-agricultural employment in Kerala, also find an important positive influence of urbanisation on rural non-farm growth, aside from the effects on rural-urban migration (see Section 8).

Visaria (1995) also details how the 1991 Census data reveals patterns in the nature of the activities of 'main' workers, that attributes market size as an important factor influencing the scope for non-agricultural employment. He argues that according to the census, the share of cultivators in the workforce varies inversely with size, and that of agricultural labourers, workers engaged in 'other services' and some non-agricultural activities rise with the size class of the village. Visaria argues that that such patterns are due to the fact that a certain population size is needed for the development of labour, product and service markets, before some workers can specialise in non-farm activities.

Literature also refers to the important role of urban centres in generating processes of rural-urban migration in search of RNF employment.⁴ As a consequence Shylendra

⁴ The literature on labour migration in India, notably rural-urban migration is extensive, and is not covered in this review.

and Thomas (1995), take account of migration by looking at different categories of the RNFE (see below), while Basu and Kashyap (1992) argue for an urban-rural continuum rather than the pervasive analytical divide.

In their analysis of growth linkages, Hazell and Haggblade (1991) emphasise the importance of rural infrastructure in increasing the income multipliers of agricultural growth to the non-farm sector. Jayaraj (1994) emphasises the importance of the development of transport infrastructure for RNF employment opportunities, while Singh (1994) finds significance in rural electrification. Harris (1991) also highlights the need for good rural infrastructure to maximise rural growth linkages, as does Shukla (1992), who found that trading and non-household manufacturing particularly benefited from roads, whilst household manufacturers became disadvantaged.

Literacy and education was found by Eapen (1994) to play a significant role in non-farm employment in Kerala, allowing shifts in employment from the agricultural to non-agricultural sectors. Positive correlation between literacy and non-farm employment were also found in Tamil Nadu (Jayaraj, 1994), Orissa (Samal, 1997b) and Gujarat (Basant, 1993).

The role of government development programmes and public expenditure have also been considered an influencing factor in the growth of the rural non-farm sector. Sen (1997) argues for a positive role of the government for non-agricultural employment. During the 1980s, slow agricultural growth was coupled with both falling levels of poverty and rising wages. Sen (1997) and Ghosh (1995) attribute this to a rapid growth in the RNFE, itself a consequence of large government expenditure. Demand for non-agricultural goods were maintained during periods of low agricultural income by the further promotion of rural development and employment schemes, whilst agricultural inputs were maintained through importing and the depletion national stocks. While modelling by Sen suggests the importance of government spending for rural non-agricultural employment, Unni (1998) emphasises the diversity of the nature of government spending and questions the specific causality. Conversely Ghosh (1995) continues to argue that increases in rural poverty following structural adjustment in 1991-92 is also explained in terms of a reduction in government rural spending such as rural employment schemes and rural development and fertiliser subsidies. Case studies in Orissa (Samal, 1997b) and Kerala (Eapen, 1994) find a positive role of administrative, development and social services in generating RNF employment, both directly within such services, and indirectly as a consequence of their activities.

A number of studies identify several factors combining to influence the growth of the RNFE. For example, Eapen (1994, 1995) in his extensive research in Kerala suggests that a high degree of commercialisation of agriculture, strong rural-urban linkages, declining land to man ratios, increase in the proportion of marginal landholdings, overall rural prosperity, the flow of remittances to rural areas and the growing level of literacy have played important parts in growth of the RNFE in the state. Other identified determinants include changes in the taste of rural consumers and levels of rural and extra-local demand (Harris, 1987; Harris, 1991; Samal, 1997b; Vaidyanathan, 1994; see section 8); competition from factory sector (Visaria and Basant, 1994) and landlessness (Basant, 1993).

Chandrasekhar (1993) is widely cited as a demonstration of other reasons for an absence of a clear relationship between agricultural growth and the RNFE. Based on data from West Bengal, he describes three phases of this relationship between the two sectors, resulting in an inverted U-shaped 'time profile' when per capita output is plotted against share of non-farm employment:

- i. In the pre-green revolution phase there is some limited local demand for products of labour intensive manufacturing and services, and share of non-agricultural workers is low.
- ii. As the locality enters the early green revolution phase, increased demand for agricultural labour reduces the elasticity of labour demand for RNF employment resulting in a net movement of labour into agriculture (despite increased demand for agriculture-supporting RNF activities), thus reducing further the share of rural, non-agricultural workers.
- iii. Finally, as the agricultural sector matures increased demand for more specialised goods of higher quality increase the share of RNF employment, with some of the demand met by urban-based production.

Chandrasekhar argues that much of India is yet to reach phase three, or is in the early stages, explaining low participation in RNF employment in certain regions of India. Basant (1994) however, argues that such a process cannot be necessarily generalised for the rest of India.

'Residual sector' hypothesis of distress-induced growth

Vaidyanathan's study based on data from 16 states (1986) is considered a seminal work initiating a lively debate in the literature as to whether growth in rural non-farm employment is a consequence of distress diversification, or because it is responding to demand as the rural economy develops. Vaidyanathan found a positive correlation between non-farm employment and unemployment rate, and postulated that non-agricultural employment absorbed surplus labour when the potential of agricultural employment was limited, suggesting a distress-induced growth of the non-farm sector. Basu and Kashyap (1992) argue that this debate has been fuelled by the fact that growth in the sector does not appear to be linked to any explicit policy initiative.

A number of studies based on the analysis of NSS and Census data demonstrate that the process of labour absorption in the agricultural sector is strained in several regions (Bhalla, 1987, 1989, 1990 cited in Basu and Kashyap, 1992; Vaidyanathan, 1986). Basu and Kashyap (1992) summarise Bhalla's findings from a series of articles (1987, 1989, 1990) which demonstrate however a wide regional differentiation in these processes. They argue that Punjab, Haryana and western UP where the green revolution flourished have now entered a phase of reduction in labour intensity, but which has been countered by a general overall increase in gross cropped area. Conversely, in states such as Orissa, Tamil Nadu, West Bengal and Bihar, low agricultural output growth has accompanied an increase in labour intensity, sometimes resulting in a decline in labour productivity. Other states, such as Rajasthan and Madhya Pradesh show more mixed patterns, which have adopted labour-saving technologies while exhibiting low overall rates of growth in labour productivity. Only in Andhra Pradesh, Gujarat and Maharashtra were both high rates of labour absorption and increasing labour productivity observed.

Following Vaidyanathan (1986) various studies have examined the growth-distress debate, and the identification of factors explaining regional variation of growth in the RNF sector. Unemployment, poverty and population pressure have been the principle arguments for the operation of push factors out of the agricultural sector. For example, using proxies for rural distress and agricultural 'push' factors, Eapan (1995), based on Kerala Census data, finds that both land area to man and marginal to total landholding ratios were positively related to non-farm employment, concluding that rural distress factors were significant for the growth of the non-farm sector in both 1981 and 1991.

Literature emphasising distress over dynamic forces is also supported by other studies. Singh (1994) on work in eastern India identify the RNF sector as a residual economy in rural areas. Bhalla (1990) (cited in Basu and Kashyap, 1992) identifies two kinds of distress situation reducing RNF activity to a residual labour force: supplementary workers who have no main occupation, but engage in subsidiary work to supplement household income; and those with main occupation also engaged in a secondary activity.

Conversely, Unni (1991), based on NSS data, finds no correlation between either the incidence of rural poverty, nor percentage of landless households with non-farm growth, and argues that lack of demand in regions of rural distress inhibits non-agricultural growth. Other state level studies have also demonstrated that growth has not been due to distress (Basant, 1994; Dev 1990). Visaria (1995) argues that Vaidyanathan's residual hypothesis is difficult to test, and does not seem plausible. A key argument against distress-induced diversification is the observation that at the national level, the real wage rate in agriculture steadily increased during the mid 1970s and 80s in the face of growth in the non-farm sector (Vaidyanathan, 1994; Bhalla, 1994; Sen, 1994; Visaria, 1995; Mukherjee, 1995). Mukherjee argues that it is in fact the growth of the non-farm sector which was primarily responsible for the rise in agricultural wages, whilst Sen (1997) adds that increases in non-farm employment were responsible for falling poverty levels (see above).

Multiple causality

While Basu and Kashyap (1992) find results suggesting distress diversification, they highlight the problematic of testing the residual sector hypothesis through a positive relationship between unemployment rates and the size of the non-agricultural sector, arguing that high unemployment rates are, "likely to be associated with relative agricultural prosperity and an outcome of job expectation...and better reporting about employment status" (1992: A-180). They further argue that a generalised hypothesis equating RNF growth with population pressure and unemployment rates conceal other factors, in addition to the role of the agricultural process, although it may be limited to certain regions of the country. They emphasis that generalisation not possible, as processes of growth will vary across space according to agro-ecological conditions, enabling conditions (described in terms of agriculture: land productivity and cropping patterns), and compelling (population pressure, agricultural stagnation) and exogenous factors (namely rural-urban continuum and infrastructure).

Likewise, Fisher *et al.* (1997) and Unni (1998) emphasise heterogeneity within the RNF sector, where different activities require different entry qualifications, and argue that recognition of such diversity is often lacking in earlier literature. Bhalla (1994)

argues that poverty is greatest among households depending on activities of agriculture, mining and construction, which are also low-entry barrier activities in which casual labour is most highly concentrated. Thus, these may be residual activities absorbing excess workers who cannot support livelihoods through cultivation. Fisher *et al.* suggest services such as retail trading, household manufacturing and personal services, which offer wages only slightly higher than that of agriculture, may also be performing a similar function. However, other activities such as manufacturing outside the household, transport, and a number of services are much more remunerative and belong to the “more productive and dynamic part of the rural non-farm sector,” responding to demand factors (1997: 40). Likewise, in agriculturally backward regions, the RNFE may act as a safety net for lean season employment, whilst in other regions agricultural growth may support the RNFE by supplying raw materials for processing industries, generating demand for agricultural inputs, and by increasing rural incomes and thereby increasing demand for RNF services and inputs. Papola (1992) further argues that the shifting trend from self-cultivation in agriculture to higher-waged casual work in the RNF sector renders the fear of the causalisation of rural labour redundant.

Case studies also reflect diversity of causality and impact. A micro study of marginal, small, medium and large farmers in Allahabad district of UP by Singh and Tripathi (1995) assessed the factors affecting the occupational shift from agriculture to non-agriculture. They concluded that for upper caste and large farmers increases in education, enhancement of per capita income and decreases in per capita availability of cultivated land were the main causes. Small farmers were encouraged into non-farm employment as a consequence of uncertainty of returns to agricultural cultivation. For the marginal and landless groups, mechanisation, industrialisation and urbanisation were found to be most influential, in addition to poor conditions (low pay, seasonality etc) of waged employment in the agricultural sector. Small and tiny industries provided alternative sources of employment in rural areas. They conclude that the unemployed but educated youth of different caste backgrounds do not wish to participate in agricultural and related activities, and thus there is a need to establish small-scale industry in rural areas.

Shylendra and Thomas (1995) find that growth in different RNF activities are due to both developmental pull factors, and distress-induced push factors, which sometimes work in mutually reinforcing ways. Based on a micro study of a semi-arid village in Gujarat, significant occupational diversification was found. 90 per cent of households were found to be engaged in non-farm activity, as a consequence of two processes impacting on different levels of RNF employment. Firstly, growth in what they labelled as the ‘non-farm proper’⁵ sub-sector was largely attributed to pull factors, which particularly consisted of increased local demand for goods and services and expansion of government activities. Other positive factors included agricultural modernisation and commercialisation, increased demand for non-crop goods and services, urbanisation, and growing literacy and welfare-oriented policy interventions leading to increased job opportunities. 41 percent of these were artisan / service activities, commonly seasonal in nature, and most female labour were employed in these. 21 per cent of this category was attributed to trade and business, carried out throughout the year. Formal sector jobs were available outside the locality to those

⁵ This category is considered to include, "artisan/service, trade and business, and white collar and other jobs" (1995: 413).

with educational qualifications. However, most activities in this category were found within the village. Growth in their second sub-sector, 'non-farm migratory', involving seasonal migration to urban centres to undertake unskilled jobs, was found to be a consequence of distress factors include poverty, unemployment / under-employment. This was found to be due to the inability of agriculture to absorb surplus labour, and natural poor agro-ecological conditions. This sub-sector was found to be more prevalent than 'non-farm proper' activities. The processes were considered to be facilitated by the availability of unskilled jobs in urban centres and improved transport facilities. Migrants included both men and women engaged in very casual employment with the majority of workers entering into a daily-wage contract.

Samal (1997b) emphasises the need to distinguish different types of RNF employment, arguing that agricultural growth is more likely to have an adverse impact the on traditional RNFE, particularly artisans, while other traditional services such as barbers, washermen may not be affected. Traditional agriculture mostly uses locally produced inputs, largely supplied by agriculture and animal husbandry. However, the dependence of agriculture using modern technology on non-local inputs is comparatively more, thus growth does not necessarily increase demand for local inputs (Chandrasekhar, 1993; Vaidyanathan, 1994). Declining trends of the traditional RNFE, and disguised unemployment has also been observed in a number of state level studies: Orissa, Gujarat, Himachal Pradesh, Haryana, UP an Eastern India (Samal, 1997b; Basant, 1994; Sardana *et al.*, 1995; Sarswat *et al.*, 1995; Singh, 1994; Verma and Verma, 1995).

4.2 Economic policy, structural adjustment and rural employment

The stabilisation and structural adjustment programme implemented in 1991 generated econometric modelling estimating the impact on employment and unemployment. Mundle (1992) estimated under different growth scenarios a transitory increase in unemployment, largely in the unorganised non-agricultural sector, whilst Bhattacharya and Mitra (1993) predicted more long-term unemployment beyond that created by population growth, and thus a direct consequence of the SAP. Sen (1996) argues that whilst increasing agricultural output and controlling inflation can reduce poverty, a rise in relative food prices combined with stabilisation policies will result in a decline in non-agricultural employment and reduced wages in the unorganised sector. In contrast to Mundle, Papola (1994) argued that following a transitory period, the restructured economy would generate employment growth predominantly in the non-agricultural sector, characterised by low incomes and poor working conditions. Unni (1998) argues that empirical evidence from the 1990s supports these arguments.

The differential impact of liberalisation on national employment patterns recorded by Deshpande and Deshpande (1998) has been detailed in section 2.2.

4.3 Market forces and RNF sectoral growth

In an overview of 80 sub-sectors in the RNFE, Fisher *et al.* conclude that demand conditions are of primary importance to the growth of any RNF activity, demonstrated by the growth of output from powerlooms despite a hostile policy environment designed to protect traditional handloom weaving. They conclude that promotional resources have been wasted in the face of demand trends leading to a series of policy

failures, exemplified by policy makers identifying lack of credit rather than demand as the key constraint, and channelling financial resources into unproductive activities. Whilst acknowledging the importance of rural linkages with the agricultural sector, they emphasise the RNFE as a sector in its own right, arguing that processing of agricultural produce only accounts for 4.1 per cent of RNF employment. Some dynamic sectors of the RNFE (textiles, leather, gem processing, chemicals and ceramics) rely heavily on urban and export demand, and cottage industries producing products and services for village consumption are no longer the dominant part of the rural non-farm economy.

Based on the observation of agricultural productivity and employment diversification from district-level census data, Bhalla (1993) argues that it is not agricultural push and pull factors, but a shift in patterns of consumer demand towards products of higher quality and urban-produced inputs that are primarily responsible for high agricultural productivity. When district level census data is disaggregated according to farm productivity, she finds that districts of low productivity have undergone agricultural involution rather than distress diversification. She argues that below a certain income threshold level, diversification is inhibited and agricultural involution and labour migration occurs. Likewise, Unni (1991), based on NSS data, argues that lack of demand in regions of rural distress inhibits non-agricultural growth.

In a series of studies in the district of North Arcot, Tamil Nadu, Harris (1987) argues contrary to the normal categorisation of rural growth linkages and resource flows in the non-farm economy. From an examination of commodity, financial and labour flows, she concludes that for the most part, industry is not small scale, is not rurally-located, labour intensive, nor based on local raw materials and local final markets. Rather, the increasing importance of national markets and of regional integration is highlighted. She continues to assess the implementation of government policies designed to favour rural non-farm activity, and the capacity of the state to encourage the rural-led growth which forms the major policy conclusion of much of the research on growth linkages, and concludes that such policies serve to divert resources away from priority-targeted sectors (see section 8). Key processes in explaining the pattern of non-agricultural growth are identified as:

- i. inevitable growth of the non-local and national market;
- ii. growing regional integration in terms of commodity flows;
- iii. increased interaction, particularly among large firms, banks and financiers
- iv. imbalances in financial flows suggesting a flow of agricultural surpluses to the urban/commercial/industrial economy;
- v. the search by industrial capital for low costs of production – trade-offs between increased transport costs and cheaper rural labour;
- vi. state support of this pattern by taxing commerce to pay for support services such as infrastructure, electricity, utilities, and subsidies on loans.

4.4 Target state profiles

Factors determining the role and significance of the RNFE in MP as identified by Shrivastava (1995) and Srivastava et al (1995) have been detailed above in sections 1.5 2.2 respectively.

Based on a micro-study of 18 (accessible and inaccessible) villages across three blocks of Keonjhar district, Orissa, Singh and Mohanty (1995) examine the

employment pattern of tribals (Juangs and Bhuinyas) in 1993-4. They conclude that the most dominant source of non-agricultural employment fell outside of the region, so that 25 percent of Bhuinya workers and 21 per cent of Juang workers were migrants having employment exclusively outside the region. Limited local agricultural and non-farm employment meant that among the migrant workers of sampled households, extra-local sources of employment accounted for the bulk of person-days worked. Interpretation of multiple regression analysis found that farm size, family size and number of animals significantly determined patterns of employment, and that non-farm employment generated through different state development programmes provided additional employment.

Chakraverty and Mishra (1995) assess patterns of employment of Bauri (SC) community in the district of Puri (Orissa) across three blocks representing high, medium and low irrigated regions. In general, they find that the absence of a strong resource base, skills and desired attitudinal change has resulted in limited occupational diversification, since the largest proportion of total employment came from agricultural waged labour and cultivation of small land holdings. When the sample is disaggregated by income, they find that non-agricultural activity amongst the low-income group consisted of livestock rearing, collection and sale of NTFPs and non-agricultural wage labour. In contrast, in the middle income group, services in the private sector, collection and sale of NTFPs, trade and commerce, and non-agricultural labour provided a relatively higher level of non-farm activity. In the high-income group, the service sector was the prominent non-farm activity, followed by trade and commerce, which contributed marginally to non-farm activity. In all groups, despite departure from traditional household occupation, dependence on traditional agricultural activities remained prominent.

Samal (1997a, 1997b) in an extensive study, examines the determinants of the levels of the RNFE in Orissa. He particularly stresses the importance of observing the dualism of the RNFE, between the formal and informal, and within the latter, the distinction between modern and traditional. He argues that the traditional hypotheses explaining the growth of the sector, namely the linkage model, urbanisation, and the residual sector hypothesis largely only applies to the informal sector (with the notable exception of agro-based industrial units). Further, he argues that an analysis of the RNFE with reference to specific regions is more relevant to references to rural areas of a state as a whole, describing how an area, although away from the influence of an urban centre, may still be economically vibrant if situated in an industrial belt with good infrastructure. Further, high proportions of RNF employment in an underdeveloped region may be attributed to historical / traditional reasons.

He argues that in Orissa, *kharif* is the major portion of food-grain production. Agricultural productivity thus has little to do with RNF activity and it is not possible to predict whether the RNFE expands or contracts with agricultural activity. However, a positive correlation is found between the percentage of urban population and the percentage of rural workers in the RNFE. He also argues that a large part of total industrial activity is a consequence of tradition, without a necessary integration with local resources and changing demand pattern. Thus most enterprises are carried out as family subsistence rather than as a business

Examining districts of Orissa, Samal finds that districts with more equal distribution of land had larger proportions of rural main workers engaged in the RNF sector. He suggests that a more equitable distribution of land and rural assets (such as under effective land reform) implies the transfer of rural assets and thereby income and purchasing power, from wealthier peasants to the marginal and landless. This in turn transfers consumer demand from non-local products to locally produced, labour intensive RNF products. However, Samal argues that it cannot be automatically concluded that the reverse is also true, that participation in the RNFE reduces inequality. He finds that districts with a lower percentage of families below the poverty line have a higher percentage of percentage shares of workers in the RNFE. Thus, he concludes, RNF activity in Orissa is not a residual activity, and the RNFE has helped reduce poverty.

In his field study of an industrially developed region of Orissa, he concludes that income from RNF employment as a percentage of total household income has increased rapidly. However, agricultural development in another region has adversely affected the sale and income of the traditional informal RNFE, although disguised unemployment is evident through a net increase in the number of workers engaged in this sub-sector. In a survey conducted in a village in the most prosperous agricultural developed block in Orissa, Attabira, he found that artisanal incomes had declined in the last ten years once inflation was taken into account. A fall in sales of traditional RNF products had also occurred due to urban, modern, cheaper substitutes. During 1979/80, a sizeable proportion of artisanal incomes came from large farmers. Samal concludes that agricultural development has had no impetus for the growth of the RNFE. He suggests that this is the result of the concentration of fertile lands in the hands of a few large farmers who mostly migrated in from other states, and their siphoning off of surplus to other regions and states (see below).

He argues that inequality is further increased with technological innovation and commercialisation of agriculture. Increased consumption demand has largely been for urban-based, capital intensive formal manufacturing goods, including multinationals, not local. Thus the surplus generated in agriculture is not spent on local RNF goods, but siphoned off to large industries in urban centres, and in some cases, to foreign countries. In a study of an Orissa village with concentrations of rural artisans, a fall in the sale of traditional products was observed among blacksmiths, carpenters and potters due to modern urban substitutes, or similar products produced by large industries at cheaper prices. Demand had also decreased, but artisans had not decreased in numbers over the last 30 years. Thus an increase in the number of artisans, combined with declines in income from the sector had resulted in a rise in disguised unemployment. The emergence of new opportunities for exporting cash crops and natural resources, and availability of cheap and higher quality manufactured goods from foreign countries may result in competition from imports, and the drawing of labour into cash crop production, thus stifling RNF activities.

The level and location of the RNFE, particularly the service sub-sector including administration, health and education may be attributable to state policy on administration and social development. The role of education and large-scale public industrialisation programs are also emphasised, which will be discussed in Sections 6 and 8 respectively.

4.5. Summary

The majority of literature on the RNFE in India seeks to identify the principle determining factors of growth (or lack of) in the sector. There is a considerable amount of literature investigating linkages between agricultural development and the non-agricultural economy. This largely refers to Mellor's growth linkage theory (1976) which argues for a virtuous circle of demand led-growth through production and consumption linkages as a result of increased agricultural productivity. While agriculture-led growth is acknowledged, other literature has identified additional important factors, or 'prime movers', notably rural infrastructure, urbanisation and government rural development schemes. Following Vaidyanathan (1986), a further debate in the literature has arisen as to whether growth in rural non-farm employment is a consequence of distress diversification, or because it is responding to demand as the rural economy develops. Acknowledgement of the diversity of the RNFE and thus the existence of multiple growth factors has helped to resolve the debate.

Patterns of consumer demand and the influence of markets beyond the local have been identified in explaining the growth of RNF sub-sectors. Fisher *et al.* argue that many governmental promotional resources have been wasted in the face of market demand trends. Macro-economic policies of structural adjustment in the early 1990s has also been found to have a significant impact on the RNFE, increasing the demand for casual, intermittent, low remunerative and urban labour.

5. GOVERNMENT POLICY: AGRICULTURAL AND RURAL DEVELOPMENT

5.1 Historical overview of Indian rural development policy

Dreze and Sen (1989) identify two broad strategies defining the nature of public action poverty elimination, namely growth-mediated, and support-led security. Vyas and Bhargava (1995) give an overview of the history of this public action in poverty alleviation, focusing on 'chronic' rather than 'transient' poverty, which can be summarised below:

Time period	Poverty alleviation approach
Early 1950s-end of 1960s	Redistribution of non-renewable resources (land). Land reform and the plight of poor tenants: abolition of functionless intermediaries, protection of tenants, ceilings on land holdings, ownership rights to tenants and stringent ceiling legislation. Uprisings of poor farmers and landless labourers also spurred the move towards radical land reforms. However, with the exception of West Bengal and Kerala, redistributive land reforms only dented large farmers, while tenancy reform largely benefited the middle peasantry.
Late 1960s, gathering momentum in the late 1970s.	Target group-oriented approach to create employment opportunities and distribute renewable resources among the poor. Initiated in backward regions, and became the programme for the development of small and marginal farmers and landless labourers, finally culminating in IRDP and NREP. Serious efforts in poverty alleviation were initiated in this phase. Additionally, heavy emphasis was placed on the transfer of income to the poor through indirect means, e.g. food subsidies, and 'dual pricing' of essential commodities. In this way recourse was taken to soft, unconflictual policies and such programmes removed issues of political orientation out of the equation.
Early 1990s	Measures to accelerate economic growth and creating an environment to nurture a 'spread effect'. Vyas and Bhargava argue that lip service is paid to structural change and direct targeting, while the dominant thought is to create more wealth and enable the poor to benefit from the secondary effects.

Vyas and Bhargava (1995) argue that all states have followed these three phases more or less in unison. Following independence, the government declared a strategy of reduction of rural poverty through land reform. Barring a few exceptions however, this proved ineffective, and in response, the Union Government initiated a range of rural development programmes such as the FWP, IRDP, JRY, IAY, MWS, EAS, GKY, DWCRA, TRYSEM, DPAP, DDP, RWSS, NSAP in the 1970s and 1980s targeting rural poverty through the alleviation of rural under-employment. However, such programmes were also largely unsuccessful due to inefficiencies of implementation, incorrect identification of beneficiaries, inflation of person-days of employment generated and major leakages (see below). Ray (1997) argues that the limits of India's rural development programmes can be explained firstly in terms of poor implementation of programmes (thus not reaching the poor), and secondly, the absence of structural change in society. Against this background, RNF employment is

seen as a strategy to alleviate rural poverty by reducing rural unemployment (Samal 1997b).

5.2 Government rural development policy and the RNFE

Basant (1994) notes that very few studies examine the impact of government policies on the RNFE, such as fiscal incentives to locate industries in rural areas. To this area, Fisher *et al.* (1997) makes a significant contribution, concentrating largely on the role of government and associated formal institutions, on government policies of regulation, promotion and credit and the institutional contexts of such policies in their formulation and execution. They are generally critical of the role of government and its agencies in terms of rural development and advocate a shift in its role from (an often corrupt) regulator of the micro environment, to the provider of an enabling, market-friendly environment, of a more developed infrastructure, and focused promotional inputs. This study is complemented by a number of micro studies that indirectly refer to the impact of government programmes and policies on the RNFE, of which credit is most commonly discussed.

Government perception of the RNFE

Fisher *et al.* (1997) argue that the rural non farm sector has been largely neglected by Indian policy makers as a residual sub-sector that falls between agriculture and (urban) industrialisation. The traditional policy approach is based on a narrow perspective of the rural non-farm economy, promoting cottage scale units in villages (such as individual weavers and potters). This has been the strategy of the Khadi and Village Industries Commission, a major player, and the IRDP, the nation's largest poverty-alleviation scheme which targets 40 per cent of its loans on industries services and businesses (ISB) and has also focused on enterprises for the self-employed and tiny units. Fisher *et al.* argue that this reflects the widespread political economy of the non-farm sector, where traditional rural livelihoods employ large numbers of rural workers, and are thus important as vote banks.

Promotional and regulatory policy environment and its impact on the RNFE

Regulatory policy

Fisher *et al.* examine the Indian framework of regulatory policies and the agencies responsible for implementing them from the perspective of neo-institutional economics. They review whether such policies meet their objectives in practice, their impact on the RNFE, and suggest changes to further promote rural development. They conclude that many of the laws which regulate economic activity, (including the non-farm sector) have both failed to meet their objectives and hindered the economic development of the rural non-farm sector. Regulations are flouted by RNF enterprises and are used by regulators for rent extraction, a consequence of rational responses to the incentives provided by the regulatory environment. They do, however, argue that a degree of regulation is necessary and in some cases has had a positive impact, notably in the preservation of employment in traditional sub-sectors, such as handlooms, pottery, fisheries and sericulture. Regulations specifying the preference in the allocation of resources to traditional producers and small farmers have also had an indirect positive effect of enabling such groups to fight for their entitlements.

The authors give an overview of specific regulatory policies, including incorporation, registration, licensing for production, licensing for raw materials, taxation, labour wages and welfare, environmental and consumer protection. From this overview they

identify four common characteristics of regulations that apply to the RNFE. Firstly, there is great disparity in the degree of regulation between different sub-sectors. For example, mining, leather, wood, food processing textiles, *bidis*, matches, transport and education are heavily regulated (often a consequence of the government assignment of property rights over primary resources), while spices, poultry, traditional textiles, metal products, cement products, rural construction and many services enjoy little regulation. Secondly, a number of laws have failed to achieve their objectives as a consequence of corrupt and inefficient bureaucracy. Thirdly, the sector is characterised by complexity in the nature of, and quantity of different regulatory policies. Finally, a number of policies are considered outdated or inappropriate. Based on this sub-sector analysis, they argue that the regulatory environment often has a negative impact on the non-farm sector, beyond bureaucracy and corruption to also create barriers to entry.

Liberalisation has made some headway in reducing the “regulatory burden” (1997: 112) where much licensing of production and control of raw resources has been abolished, in addition to the reduction of many import duties. Fisher *et al* continue to cite evidence that a lighter regulatory environment can assist economic growth, evidenced in the growth of small units manufacturing metal, plastic and cement products since raw materials were decontrolled.

In their recommendations they argue, “the issue is not so much the rationale of regulation as how to achieve the objectives for which regulations are designed” (1997: 113) since the impact of current regulations has often been to undermine their objectives. They argue firstly that the current framework needs to be simplified, made transparent and then more rigorously enforced, since current complexity promotes asymmetries in information and power. Secondly, liberalisation needs to be pushed further, both at the national and state level, particularly in regulations that inhibit competition, and the state should place a greater emphasis on supporting market mechanisms.

Promotional policies and agencies

Fisher *et al* state that the rural non-farm sector in India has often been treated as a residual category, where agriculture and industry have been the principle policy focus which have impacted on the diverse non-farm sector. Most direct policies are, within broad industrial policy, strategies promoting rural enterprises under ‘*khadi* and village industries’, and within agricultural policy, strategies promoting agro-processing activities. However, since such policy is not integrated, and owing to the diverse nature of the non-farm sector, they have often had contradictory impacts on the sector. Further, they argue that most policies (such as IRDP and *khadi* and village industries) which have been explicitly directed at parts of the non-farm sector have had the objectives of preserving employment and requiring subsidies rather than increasing productivity.

The authors analyse promotional activities concerned with traditional rural industries, technologies and skills, and development of infrastructure, raw materials and marketing. As with the regulatory framework, they find a number of sub-sectors have received promotional attention, whilst others have been largely neglected (notably service sub-sectors). They argue that resource allocation to certain sub-sectors are not a result of economic assessment, but often based on the sector’s political significance,

export potential, regional importance and locational concentration. They identify six reasons for the failure of many promotional strategies. Firstly, policy has sought to protect, rather than develop the non-farm sector, particularly in traditional sub-sectors, as the sector is often seen as traditional, backward, and without potential for economic growth. The focus has therefore been on individual village artisans rather than more dynamic sub-sectors often found in clusters and small rural towns. Secondly, government has often intervened to become directly involved in a sub-sector (such as provision of inputs) with all the shortcomings of government promotional agencies, rather than facilitating growth (by, for example, creating an environment for private initiative). Third, a number of promotional strategies have not been suitably focused, leading to rigid schemes which cannot be adapted to local conditions. Fourth, insufficient attention has been paid to the linkages between the RNFE and the primary sector. For example, in rice, fruits, spices and floriculture, more support has been given to production rather than processing or marketing. Fifth, insufficient attention has been paid to infrastructure and its necessary maintenance. Finally, education and health indicators remain low, reducing the potential for skill building and thus promotion of dynamic sub-sectors. Fisher *et al.*, however, cite examples (notably the development of the rural non-farm sector in Gujarat) where promotional policies have considered these problem areas and as a consequence have been successful.

Credit policy

Fisher *et al.* identify four general strategies which characterise the development of rural credit in India: the expansion of bank branch networks to rural areas; the provision of low, subsidised credit; direct lending to priority sector activities; and sponsored lending for selected groups, such as the rural poor (1997: 176-7). The expansion of access to credit can be seen as the Indian government's largest promotional activity in rural development, and because of its grassroots access, exceeds the reach of all other promotional activities combined.

However, like other promotional policies, it is characterised by government intervention and direction. As a consequence, whilst policy has succeeded in expanding the number of bank branches, expansion has been accompanied by features which "maintain distance between formal lenders and borrowers, in spite of their physical proximity...which undermine the financial sustainability of the rural financial sector." (1997: 176). Formal sector banks have been driven by government regulation and targets, resulting both in bankers' poor lending policies, and standardised lending policies inflexible to meet primary needs of borrowers. Subsidised credit targeting the poor has been appropriated for its potential political capital, increasing transaction costs for borrowers. Mahajan and Ramola (1996) (cited in Fisher *et al.*, 1997) calculated that such transaction costs ranged from 17 to 22 per cent of the loan value from commercial banks, in addition to the substantial amount of time it took (six months in one Rajasthan district) between loan application and disbursement. Chadha (1995) identifies high transaction costs and cumbersome procedure in addition to the inhibiting nature of collateral and the low share of credit for tiny, artisanal and village industry as key limiting factors for the non-farm sector.

Further, subsidies, which are generally available only once per household, are consequently often seen as one off handouts rather than entry points into a wider credit system, encouraging widespread loan defaulting. This 'culture of default' has been encouraged by a series of government-mandated loan waivers in addition to

imprudent lending under political pressure, which has further damaged the creditworthiness of rural producers and the rural poor (Fisher *et al.*, 1997; Vyas and Bhargava, 1995; Saith, 1991).

Mahajan and Ramola (*ibid.*) drew similar conclusions in their analysis of access of the rural poor and women to financial services, notably the IRDP and DWCRA schemes, large anti-poverty, part loan, part subsidy programmes with the objectives of promoting income-generating assets and thus livelihood diversification. During their survey, they found that over 50 per cent of borrowers had failed to retain assets acquired through the loan, which were either never purchased in the first place, sold under distress, or broke (or died in the case of cattle). They further concluded that two thirds of the poor's use of credit was for consumption, not provided for by the private sector, whilst assets only served as additional debt burden if they were inappropriate, or failed to generate income in the absence of additional support. Fisher *et al.* cite the Reserve Bank of India (RBI) 1989 All-India Debt and Credit Investment Survey which finds that for the poorest households, up to 80 per cent of credit was used for consumption, 60 per cent of credit for rural households in general was utilised in agricultural activities whilst only 8.9 per cent was used for non-farm business.

As a consequence, Fisher *et al.* conclude that the RNFE is poorly served by the formal credit sector, citing figures generated by the RBI, which when compared to the census data suggests that in 1992 only one sixth of all rural manufacturing enterprises had access to bank finance. Fieldwork further demonstrated that supply fell well short of demand in many sub-sectors, in among those targeted for direct lending, and was particularly acute in failing to meet working capital needs of non-farm enterprises. Lack of timely credit for working capital was found to be a complaint of nearly all seasonal rural enterprises. Similarly Eapen (1996), based on field work in Kerala, found that despite a high degree of ingenuity and entrepreneurial spirit among tiny enterprises (the growth of which has largely resulted from a lack of alternative employment opportunities) lack of credit was identified as a key limiting factor. Despite an increase in institutional credit to the small-scale industrial sector, the rural segment was largely neglected. Priority-sector lending attempted to meet the needs of rural producers under IRDP and by schemes under the industries department, but overall impact was considered negligible. NABARD (1995) (cited in Eapen, 1996) records that between 1985-90 advances by commercial banks to the SSI sector rose by 100 per cent, but only 4.5 per cent of the share went to petty producers; while even advances from regional rural banks to this sector accounted for only 8 per cent of total lending.

In his study of a tribal block in Western Orissa, Samal (1998) finds that among small and marginal farmers, and small RNF entrepreneurs, there was demand for timely, but not necessarily subsidised credit. However, directed lending programmes have focused on low interest rates and subsidies rather than accessibility and availability.

Papola (1992) cites the RBI, arguing that according to the Nayak Committee, in 1990 advances outstanding to rural industries accounted for only 0.7 per cent of the total outstanding, although the rural sector accounted for more than half of all industrial units in India. Fisher *et al.* argue that the bulk of rural credit supplied by nationalised commercial and co-operative banking systems has traditionally gone to the

agricultural sector, whilst the refinance agencies of first NABARD (from 1982), and then SIDBI from 1990 failed to suitably target small rural enterprises. Based on RBI data Fisher *et al.* found that larger manufacturing units and traders received the bulk of credit available to rural industry, even though other sub-sectors employ the majority of RNF workers. Case studies further revealed that certain sections of the rural non-farm sector had better access to credit than others, explained in terms of lender confidence. These included larger enterprises, modern sub-sector enterprises such as power looms, manufacturing enterprises in general, and enterprises which fell under categories specifically targeted by the formal lending sector.

Fisher *et al.* also found that, based on aggregate data sources, bank lending exhibits strong gender bias against non-farm activities commonly engaged by women. Women receive fewer and smaller loans than men and also face higher transaction costs. Further, they found that owing to the diversity of the RNFE, many small producers did not fall into the standardised categories utilised by formal lenders, whilst producers in emerging sub-sectors were not yet identified as official targets. As a consequence, many rural producers were found to rely on sources of informal credit, benefiting from availability and lower transaction costs.

However, they argue that such sources are insufficient to fuel the growth of the rural non-farm sector, and thus explore the potential of more recent, alternative development-finance agencies. Such agencies have demonstrated the market opportunities for rural lending by learning from the informal credit sector and adapting their products to specific markets. They often act as intermediary between rural saving and credit, thus reducing the need for external funds, whilst charging market rates to remain financially sustainable. Examples include the Gujarat Rural Housing Finance Corporation, the SEWA Bank, and numerous self-help groups promoted by NGOs such as the Co-operative Development Foundation, MYRADA and PRADAN.

Additionally, they point to the potential positive impact of government reforms in the rural financial sector since the mid 1990, including the establishment of private sector 'local area banks' (LABs) serving a predominantly rural population, restructuring Regional Rural Banks (RRBs), and the deregulation of lending rates.

Rural industrialisation policy

The RNFE and rural industrialisation have been viewed as recent policy instruments for the alleviation of rural unemployment and poverty. However, Saith (1991) argues that this new found emphasis in promoting rural industrialisation is particularly related to a favourable coincidence of interests of governments, private industrialists, TNCs and international development agencies and NGOs. He identifies four factors that have promoted this policy:

- i. The projected success stories of SE Asia which used rural industrialisation as a key element to development strategies;
- ii. An increasing awareness of the relative failure of previous industrialisation-led development strategies to alleviate rural poverty and underemployment. High capital intensity of such industrialisation has meant that it has not been able to absorb sufficient labour, while absorption capacities of intensified agricultural strategies are limited by the rate of technological change in the

- sector (see also Nair, 1995 who argues that organised sector industry could only meet 5 to 10 per cent of employment demand)⁶;
- iii. The recognition of an instrument of employment and income generation for the rural poor as an alternative for redistributive land reform, which is no longer considered a realistic policy. Both rich and poor are seen to benefit from rural industrialisation and is thus considered an easier policy to implement.
 - iv. The policy of rural industrialisation sits comfortably with developed country and international agency strategies of international structural adjustment, in addition to dovetailing with industrial relocation strategies of TNCs and national industrialists.

Saith emphasises the key underlying cause of the failure of rural development and poverty alleviation programmes to be the “facile assumption of any automaticity between the implementation of a policy package and the transmission of hypothesised benefits to the target groups”(1991: 461). In the same way, he indicates the risk of over emphasising the employment generation objective of rural industrialisation to the exclusion of other potential implications. While employment generation is stated as a key objective of rural industrialisation policy, Saith argues that this is not sufficient. The RNFE and rural industrialisation are viewed as policy instruments for the alleviation of rural unemployment and poverty. Yet Saith points out that high levels of poverty co-exist with a high degree of non-farm employment, thus the policy issue is not how to increase the RNF sector, but how to establish conditions within which specific policy intervention regarding the RNF economy might enable it to perform its poverty alleviation objectives. He thus argues for a fuller list of objectives to include employment, higher productivity, wages, welfare and participation, internal accumulation, skill formation, agricultural development, and positive spin offs for the agricultural population not directly involved in rural industry.

Saith defines two approaches to rural industrialisation. Firstly, in the locational approach, the primary criterion for the definition of rural industry is its location in a designated rural area. Thus policy is an instrument primarily to further objectives related to physical and spatial planning, and is often used as a safety valve for controlling problems of urban industrial concentration. Regional or rural dispersal is encouraged by objectives of urban planning, including the relocation of urban industries to lower-urban, and ultimately rural centres. In contrast is the linkage approach, where the rural industrial sector is viewed from the rural end, and defined by its ability to generate development linkages with the rural sector. Such approaches can yield different profiles of rural industry. Not all industries located in designated rural areas would generate local linkages, such as the case of large-scale industries being coaxed through incentives to relocate plants, leaving strong urban linkages. Likewise, the generation of rural linkages is not dependent on a deep rural location, and can be developed through a high dependence on rural labour and raw materials within production processes that are labour and raw-material intensive.

Harris (1987), based on in depth research in Tamil Nadu, argues that with the exception of paddy production, agricultural and small industry policies consistent with local growth linkage thinking have been vulnerable to capture by urban, rarely

⁶ Nair (1995: 366) also lists a range of organisational, administrative and fiscal measures aimed to promote village and small-scale industry, although no assessment is made.

local, capital intensive, large-scale productive and mercantile activities. She finds that the policy of encouraging non-farm activity in backward taluks through the development of industrial estates has proved not to be the same as encouraging rural industry. New industry has tended to locate itself in urban centres of such taluks, and large-scale rather than intended small-scale industry has captured government subsidies. Infrastructure on industrial estates, whether in backward or forward taluks has involved the provision of both physical and social infrastructure. However, the latter has always been behind the former creating supply constraints that greatly increase the cost of living in the immediate locality of the estate.

In backward regions, financial incentives for industrial rural relocation have included:

From central government

- Exemption from import duty for plant and machinery
- Deductions from income tax
- priority in licensing
- Central Scheme of Investment Subsidy – 15% subsidy of all fixed investment up to 15 lakhs.

From state government

- Bans on industrial investment in major cities, supported by the availability of medium and long-term loans elsewhere in the state;
- Concessions on high-tension electricity (which favours large industry as small industry uses low tension)
- Interest-free sales tax loan scheme, subsidised loans equivalent to the sales tax. Penalises small industries as only available to ‘small industries’ with sales tax obligations of over Rs10,000

Harris argues that financial incentives have been biased against labour-intensive, small-scale industry. Large differences in initial investment between medium to large and small industries means that subsidies flow disproportionately to large industries. Further, subsidies on capital investment which favour capital investment industry in areas of cheap labour (since backward regions) hinders the generation of income likely to be spent locally, thus limiting local linkages. She continues to argue that mercantile households hold a diverse portfolio of activities that allow them to appropriate priority sector credit. In this way, priority and backward taluk subsidies can be easily diverted into forms of non-agricultural activity which do not necessarily nurture rural growth linkages.

Nair (1995) emphasises the role of The National Bank for Agriculture and Rural Development (NABARD), which is charged with the task of accelerating the flow of credit to agriculture and other important rural activities. It is also concerned, to an extent, with development of essential infrastructure and linkages to facilitate growth. It has thus taken various promotional measures, including training and skills upgrading, promotional support to production (targeting mother units and rural industries development centres), marketing support, and improving credit flow to the poor. Such activities often act through development centres and clusters of economic activity. No assessment, however, is made.

Key rural development (employment generation and skills training) schemes

Rural public works schemes and rural special employment programmes address the alleviation of rural poverty through income generation based on participation in sponsored non-farm economic activities. Rural employment schemes are either based on the generation of wage-employment (rural public works programmes including food-for-work schemes) or self employment, essentially credit-cum-subsidy programmes to produce the creation of skills and assets, which are intended to generate a permanent flow of income. Saith (1991) argues that while small and marginal farmers are frequently entitled to participate, they do not gain any resource for farming. Such schemes also bypass the issue of agrarian reform, and thus serve as a less confrontational alternative to land reform.

Vyas and Bhargava (1995) explore the reasons for variation in the impact of poverty alleviation programmes across states, including growth-inducing measures, direct poverty alleviation programmes and indirect subsidisation. They conclude:

- i. Success in poverty alleviation was not affected by the professed political ideology of ruling parties of different states. Poverty alleviation has been adopted as a political objective, comprising of 'soft' measures such as subsidies and distribution of renewable resources.
- ii. Faster economic growth does not automatically impact on poverty alleviation as targets can be missed, whilst slow growth is associated with low impact.
- iii. All relatively successful states have made sizeable financial investments in poverty alleviation programmes, despite records of misallocation of funds.
- iv. Larger investments in infrastructure, facilitating the 'spread effect' of growth, has aided states in their attempts to alleviate poverty, even when rate of growth of states GDP was low.
- v. Concentration of ownership of assets, possibly reflecting lack of access to the poor (including access to education and training) is associated with slower rates of poverty alleviation.
- vi. In some cases, high investment in human development (e.g. Kerala) can compensate for slower economic growth.
- vii. In rare cases, such as Gujarat, progress in poverty alleviation can be made despite several unfavourable factors, by more efficient implementation of PAPs and involvement of grassroot organisations in programme formulation and implementation.

Jain (1995) argues that some of the problems identified above can be corrected by political-administrative measures, such as the use of the more transparent decentralised Gram-Sabha mechanism, but warns that such problems are inherent in the basic approach of state paternalism. Rural development action should not be simply equated with the transfer of funds and management tasks to Panchayat bodies, since while such a decentralised approach increases local responsiveness, it suffers from political partisanship and vested interests.

While a number of assessments of individual programmes in the literature simply record the creation and disbursement of programme resources as indicators of success or failure (e.g. numerous chapters in Raghavan and Sekhar eds., 1995), others make a more critical evaluation based on actual access to such resources and programme

impact on livelihoods. Key points are detailed below under different development programmes.

NREP, EGS and JRY

Waged employment programmes are expected to provide relief to the unemployed poor and have an impact on aggregate unemployment as well as on the labour market. An expected secondary effect is the increase in labour absorption capacity through investment in durable and income-generating public assets such as the creation of rural infrastructure and civic amenities intended to raise agricultural productivity. Such programmes were not perceived as major instruments of poverty alleviation until the 1980s in most states, and were expanded in the Sixth Plan period under the National Rural Employment Programme (NREP) and the Rural Landless Employment Generating Programme (RLEGP), which were later codified and combined into the Jawahar Rozgar Yojani (JRY) in 1989-90. In Maharashtra, the Employment Guarantee Scheme is evident (Vyas and Bhargava, 1995; Saith, 1991). Jain (1995) concludes that the wage employment stream of programmes has since gained ascendancy over the self-employment schemes.

Vyas and Bhargava (1995) find that in general, the extent of employment provided is insufficient to allow households to cross the poverty line. Based on 1981-2 figures, Saith (1991) approximates that the NREP reaches 1 per cent of the poor per year. He argues that the impact of the programme is controversial as it depends on the benefits derived from such waged work in relation to the initial position of the beneficiary with respect to the poverty line. Regardless, he argues that even if target groups were beneficiaries (possible since programme is self-selective), very few would have crossed the poverty line as a consequence.

Regarding the distribution of benefits, Saith argues that benefits to the poor in the form of wages (50 per cent, argued by the government) has been greatly overestimated on account of massive leakages at every stage of fund allocation between bureaucracy and labour contractor. The programme helps only on a one-off basis, and does not induce the generation of incomes in future years, whilst landed classes benefit on a permanent basis from improved roads, irrigation etc. Saith thus argues that the NREP is a little short of being a subsidy for the land-owning classes based on the low-paid labour of the rural poor.

Vyas and Bhargava (1995) identified a major failing as having a weak organisation base, including weak linkages with other programmes, where agencies take up ad hoc projects and execute them at the minimal possible wages. Thus Basant (1994) argues that public assets created by wage labour generation programmes did not create infrastructural assets in a systematic way to enhance the viability of economic activities in specific regions.

Asset generation programmes

Vyas and Bhargava (1995) argue that case studies examining development programmes promoting access to physical assets demonstrate that they have only been successful in very special circumstances, namely where the asset and employment base of the poor is less insecure. Thus it has performed well in more developed areas (and even then, only for those just below the poverty line), and less so in backward and remote areas. In Gujarat, the poorest of the poor have either never been reached,

or unable to utilise assets made available to them, while in AP, a good number of very poor were able to retain the assets available to them and increase incomes, but not to the extent to allow them to cross the poverty line. In Rajasthan and Karnataka, small and marginal farmers were found to benefit more than the landless.

IRDP

The Integrated Rural Development Programme stands as a massive state sponsored government programme, functioning in all states and commanding vast resources. Beneficiaries are selected target groups consisting of the poorest of the poor. Declines in rural poverty in the 1980s have been attributed to the influence of IRDP, although Saith (1991) argues that this has not been demonstrated to a satisfactory degree and that numerical deductions are contentious. His evaluation from different states reveal that much of the target group has been wrongly identified, with inclusion of non-target beneficiaries up to 42 per cent in Assam and 35 per cent in Punjab. NABARD (the sponsoring government bank) estimated a minimum of 20 per cent leakage (misuse of funds). Saith cites Rath's detailed independent survey that estimated that of the beneficiaries, less than 10 per cent were lifted above the poverty line. He further argues that in the majority of blocks studied, IRDP had become equated with a credit-subsidy programme for the purchase of milch cattle. It had become open for abuse, using subsidies as one off payments that were not invested, while the high risk of raising cattle caused financial loss for would-be beneficiaries.

Vyas and Bhargava (1995) argue that the programme is isolated from the main growth processes in terms of resource allocation, technology, and sectoral development strategy. (see Basant, 1994 above). Faults are that it is not integrated with other programmes, nor with the development needs or resource base of the specific locality. Management is also criticised, responsible for the poor co-ordination of agencies, weakness in finance and credit recovery, poor marketing, raw material supply, training, technical assistance and follow up, in addition to centralised planning, inefficiency and corruption (Jain, 1995; Vyas and Bhargava, 1995).

Basant (1994) suggests that if regional linkages, whether rural-urban or rural-rural, play a significant role in the growth of the RNFE, policies for rural diversification should be area based rather than individual based. He speculates that this may explain the lack of impact of IRDP in rural diversification, since beneficiaries were chosen on an ad hoc manner based on a simple assessment of self-employment opportunities in the area.

TRYSEM

Programmes such as TRYSEM and DWCRA target the development of skill training. However, none of the state case studies examined by Vyas and Bhargava (1995) reported success, usually as a consequence of the absence of linkages, particularly within the demand system – it has neither been linked with industrial policy, nor with the rural industrialisation process. Skills imparted are often at a low level, and trades in which skills are developed are often selected on an ad hoc basis which are not integrated with ongoing development programmes. Vyas and Bhargava conclude that TRYSEM has failed to impart modern skills for employment in the non-farm sector, so that, “instead of supporting the mainstream industrialisation process, it could at best support the informal residual sector” (1995: 2569).

5.3 Target state profiles

Aside from the impact of natural disasters (flood and cyclones) in the region on transient hunger, Samal (1998) details programmes targeting chronic poverty in Orissa. These include:

- i. in agriculture, the consolidation of holdings, supply of inputs, marketing of products and irrigation extension;
- ii. in related sectors through plantation, dairy, poultry etc and necessary infrastructure such as milk chilling plants;
- iii. in the rural non-farm sector through PMRY, DPAP, IRDP etc.;
- iv. family planning programmes – population control;
- v. targeted programmes for the poor through IRDP, TRYSEM, DWCRA, JRY etc.;
- vi. mobile health services;
- vii. education through the mid-day meal scheme and a residential high school in every ITDA block, TLC and DPEP, development of infrastructure through roads to every village, water and electricity provision to SC/STs at concessional rates.

However, Orissa has the second highest poverty ratio in the country, with programmes suffering from uncoordinated policies, neglect of isolated regions and leakages. Samal assesses the impact of such programmes in a tribal block of western Orissa, based on both primary and secondary data. Employment generation schemes such as JRY and MWS were characterised by under-utilisation of funds and under-achievement of targets, having no impact on the intensity of poverty. He finds that only six per cent of IRDP beneficiaries crossed the poverty line, whilst an increase in the intensity of poverty is observed in the block. The impact of MADA (Modified Area Development Approach – similar objectives to IRDP targeting tribals) on the tribal population was marginal. No visible impact on poverty was observed as the programme did not take into consideration local resources with which tribals were familiar (e.g. MFP, NTFP), while high transaction costs limited access to credit. DWCRA was found to have little impact on extent of poverty, but increased inequality among beneficiaries. This is evident as overall, average family incomes increased by 13 per cent among beneficiaries, but this reflected only half of all beneficiaries with the remainder not enjoying any rise in incomes.

5.4 Summary

The history of public action against poverty can be traced through three phases. A strategy of land reform followed independence, which, barring a few exceptions, proved largely ineffective. In response, the government initiated a number of less confrontational rural development programmes which targeted rural poverty through the alleviation of rural under-employment. However, such programmes were also largely unsuccessful due to inefficiencies of implementation, incorrect identification of beneficiaries, inflation of person-days of employment generated and major leakages. Against this background, RNF employment has been seen as a strategy to alleviate rural poverty by reducing rural unemployment, when efforts from the early 1990s have sought to accelerate economic growth and create an environment to nurture a 'spread effect'.

Rural industrialisation policies have either been locational, encouraging regional dispersal, or aimed to generate development linkages with the rural sector. Case

studies differ, however, as to the effect of such policy on the development of the local RNFE.

Literature examining the impact of government policies on the RNFE are limited. A key failure of government initiatives has been identified as its narrow perspective of the RNFE. A number of failings of government regulation and promotion policies of the RNFE have been identified. Objectives have often failed due to a corrupt, inefficient and inflexible bureaucracy incapable of adapting to local conditions. Policies have been found to be complex, superfluous and outdated, with much disparity in the regulation of different sub-sectors. Promotional policy, it is argued, has often sought to protect, rather than develop the non-farm sector, particularly in traditional sub-sectors, and has paid insufficient attention to the linkages between the RNFE and the primary sector. Subsequently, Fisher *et al.* advocate a shift in the role of government from regulator, to the provider of an enabling, market-friendly environment, of a more developed infrastructure, and focused promotional inputs.

The literature argues that the RNFE has also been poorly served by the formal credit sector, which is again characterised by government intervention and direction. Despite an expanding number of bank branches, distance between formal lenders and borrowers has been maintained through high transaction costs and cumbersome procedures. The impact of rural credit has been further hindered through imprudent lending under political pressure, and untimely and insufficient supply. In terms of access, small rural enterprises have lost out to larger manufacturing units and gender bias against non-farm activities commonly engaged by women has been recorded.

6. DECENTRALISATION, GOVERNANCE AND ECONOMIC CHANGE

6.1 Objectives of decentralisation

Decentralisation in India from federal to state level follows the pattern of democratic decentralisation or devolution (Manor, 1995). This involves the “transfer of resources, tasks and decision-making power to lower-level authorities which are (a) largely or wholly independent of the central government, and (b) democratically elected” (1995: 81-2). Based on an analysis of unpublished work he concludes that many Indian states represent relatively successful examples of devolution.

In his review of international empirical studies (including India, namely Karnataka) on decentralisation, Manor (2000) concludes that decentralised authorities require three essential components to ensure successful decentralisation, reflecting the objectives of decentralisation: sufficient funding; sufficient decision-making powers; and reliable accountability mechanisms, both to ensure effective accountability of elected representatives to citizens, and of bureaucrats to elected representatives.

In the literature, the objectives of decentralisation are described both in terms of empowerment of local levels of society, continuing the theme of the Independence movement, and the benefits to society enhanced local participation is believed to foster, including more efficient and equitable use of resources, improved social and economic development, and poverty reduction.

Crook and Manor (1998) review the decentralisation experiment of Karnataka, which ran from 1987 before being suspended by a new state government in 1991. They describe it as a system of ‘mixed’ authority combining the deconcentration of central ministries with democratic control by an authority with devolved revenue-raising powers. Karnataka District Councils (*zilla parishads*) were authorities for populations of approximately two million people, and were the superior tier of a two tier-based system based on local councils (*mandal panchayats*) with an average of eight to twelve thousand people. Rural society was well organised, politically conscious, rooted in relatively prosperous peasant agriculture, with a long history of experienced liberal, stable multi-party politics.

Vyasulu (1995) details how Karnataka’s experience of decentralised local self-government was meant to make improvements to development programmes by assessing local needs and to foster planning from below to enable citizen’s views to shape official policy. However, Crook and Manor argue that the key goal of planning from local levels was largely unsuccessful (as was found in other countries studied in the book), resulting from lack of personnel at the village-level, and pressures to implement politicians’ plans at the district and state level. As a result, district plans were selected for political rather than developmental reasons, resulting in plans becoming a fragmented list of proposals rather than an integrated package, and often resulting in project failure.

Crook and Manor (1998) also suggest political motivations for decentralisation in the state. The newly elected Janta state government wanted to demonstrate that they were more imaginative and democratic than their Congress rivals to revive national strength of the party. Further, they had no party organisation in the state, thus

believed that a new system of elected councils at a district level and below would provide a framework for party building.

Karnataka is considered a success story, and reflects many of the benefits of decentralisation. However, Crook and Manor argue that many of the gains resulted from externalities, largely pre-existing socio-political conditions which are often absent elsewhere, such as a lively civil society and organised interests with experience with democratic environment, free of extreme socio-economic inequality, and strong representation of both main parties and effective competition which contributed to greater transparency and impeded corruption of District Councils. Party competition was also found to have such positive effects at the lower Mandal Councils too, as Party connection integrated many Mandal Councils with higher levels in the political system in creative ways, which proved to be beneficial especially when formal institutional links between the Mandal and higher levels were inadequate.

Inter-state variation

Harris (1999) notes a relative lack of comparative political analysis between states in the literature. He recounts the debate over the influence of different political regimes, citing Kohli (1987) who argues that the political nature of a state significantly impacts on the adoption of pro-poor policies, whilst Vyas and Bhargava (1995) conclude on the basis of a comparative study over nine states that poverty alleviation is not significantly affected by the political ideology of state ruling parties (see Section 3). Harris concludes that when states are differentiated by caste/class power and the nature of party organisation, differences are shown to influence policy formulation and performance of states, particularly concerning the decentralisation of power to lower caste/class groups and poverty alleviation. The latter processes are shown to be more effective where locally dominant castes and classes are challenged. However, in a footnote, he comments that there is wide variation in the quantity and quality of literature regarding different states, which makes comparison difficult. He particularly emphasises the absence of literature concerning state politics for the districts of Madhya Pradesh and (to a lesser extent) Orissa. Both are classed as 'low income states' where upper caste/class dominance has persisted and Congress has remained strong in the context of a two party system "reflecting traditional dominance rather than politics of accommodation vis-à-vis lower classes" (1999: 3371).

6.2 Impact of decentralisation on economic development and poverty reduction

Literature on the implications of decentralisation, such as the detailed account of Karnataka in Crook and Manor (1998) is largely concerned with the impact on participation and institutional performance rather than measures of economic development. Studies concerned with poverty alleviation (Vyasulu, 1995 for Karnataka; and Dasgupta, 1995 for West Bengal) consider how decentralisation has improved the implementation of such programmes, while economic development is not specifically referred to.

Economic development

Manor (2000) reports the impact of decentralisation on social and economic development to be ambiguous. He finds that it can enhance the uptake on (and thus the impact of) health, education and environmental programmes by making it possible to adapt programmes to local conditions and preferences, and also helps in the process of replicating development successes from one local arena to another. However, he

further argues that decentralisation rarely contributes to the alleviation of poverty when poverty is a reflection of local inequality (see below).

Manor (2000) finds that while technocrats largely assume that growth will be aided by decentralisation, empirical evidence suggests that the impact on growth is largely neutral, except in large urban conurbations where the development of industrial infrastructure may help. Further, democratic decentralisation (devolution) may hinder the mobilisation of local economic resources (financial capital). This is often due to the reluctance of elected representatives to levy new taxes, fearing local unpopularity, although Manor argues that this puts devolved activities at risk by under-funding them.

In her assessment of international literature (including India), Klugman (1994) also finds ambiguity in the assessment of the impact of governmental structure upon economic activity. She finds that it is hard to determine given the multitude of associated variables such as macro economic policy, development strategies and ideology. She concludes that there is little evidence to suggest whether the decentralised provision of economic infrastructure actually promotes or hinders local economic activity. She finds that a general assumption in much of the literature on decentralisation is that decentralisation promotes economic development.⁷ In theory, decentralisation may promote local economic activity through several means, including an increased infusion of capital and other resources, the more extensive provision of infrastructure, and a more effective 'enabling environment'. Thus, it has been claimed that countries with effective local government systems have been much more dynamic and successful economically than those under centralised control.

Klugman cites potential positive implications for the private sector to include:

- When decentralisation is accompanied by increased public resource availability and capital inflows, this will have direct and secondary stimulative multiplier effects. For example, the construction and maintenance of local infrastructure, such as roads, water supply and electricity, is likely to involve local contractors and wage labour;
- A more appropriate selection of the type and location of facilities, and better long term maintenance. Decentralisation can contribute to improved physical conditions (transportation, energy sources, communications etc.) which reduces rural isolation and improves the profitability of local enterprises, stimulating local economic activity;
- Local governments may be more supportive of 'endogenous entrepreneurial development'. Governments at the local level may be better able to formulate policies that are appropriate to local conditions.
- Devolution of decision making power to the local level may also benefit local entrepreneurship by helping to overcome structural constraints. Dispersed rural enterprises are relatively isolated and have poorer knowledge of the economic activities in their immediate environment and beyond, thus local governments may be well positioned to formulate and implement policies that are supportive of local business including such services as management assistance and market information.

⁷ She cites Olowu, 1987; Olowu and Wunsch 1990, in addition to finding a casual correlation between decentralisation and increased economic activity in Allen (1997).

Klugman cites case studies from Taiwan, Tanzania, and Indonesia where decentralisation has stimulated local economic activity following the construction of economic infrastructure or the injection of capital through transfers to impoverished localities under a decentralised system. However, she notes that positive economic consequences do not flow automatically.

Equity

Manor (1995) argues that while extremely complex, democratic decentralisation rarely contributes to the alleviation of poverty when poverty is a reflection of local inequality. Representatives of poorer, marginalised groups usually have more influence at higher, rather than lower levels of political systems. In many Indian states, electoral considerations compel political parties to provide significant numbers of leaders from such groups at the state level with ministerial posts, resulting in a degree of power-sharing between elites and poorer groups. At the local level however, local elites often capture power during the decentralisation process, and are often more uncompromising towards the poor than elites at higher levels. Thus ironically, inequality may increase through decentralisation. However, Manor points out that such processes do not occur where poorer groups at the local level are organised and politically active. Conversely, when poverty is a result of inequality between regions or localities to which power is devolved, decentralisation may help to reduce poverty by giving deprived areas more equitable representation within national systems, and ensuring fairer distribution of resources.

While Manor argues that decentralisation cannot be expected to produce social transformation (since elites commonly capture power during the early stages of devolution), he finds that political participation is greatly enhanced, and both civil society and social capital is strengthened as disadvantaged groups learn to assert themselves. However, in social environments that are initially highly inequitable, power captured by elites hinder this process.

Klugman draws a distinction between inter- and intra-district equity. In her survey of the literature, she finds that intra-district equity is likely to improve, following increased expenditure on basic social services. Conversely she finds that the prevailing fiscal arrangements under decentralisation typically fail to enhance inter-district equity.

Representation and organisation of producers and workers

Related to local empowerment, Fisher *et al.* examine the representation and organisation of producers in the non-farm sector (1997: 180-203). They conclude that policy making and its application is considered the prerogative of the state, with no effective framework to ensure representation of the RNFE. The state has played an influential role in producer and worker organisation both directly through the promotion of thousands of co-operatives and indirectly by generating a rigid policy environment that encouraged producers to organise and fight harassment and capture benefits.

The majority of RNF producers and workers remain unorganised. Such groups include women, emerging sub-sectors, small producers and workers who are dispersed, poor, and not integrated into the rest of their sub-sector.

Additionally, industrial associations that do exist were often found to be appropriated by strong entrepreneurs not accountable to members, who may have conflicting interests. However, successful examples were found, especially in those found in dynamic clusters and sub-sectors among larger producer-entrepreneurs. NGOs and external agents have also been able to mobilise exploited worker and producers to take collective action that often generated positive externalities beyond group membership.

IDS (1996) cited in Fisher *et al.* suggests ways in which the government can create a more supportive environment by allowing associations play a more central role in economic development by allocating such groups more responsibility and resources without controlling them. Further, DUBS (1996), Mathew *et al.* (1995), Sanket (1996) and IDS (1996) cited in Fisher *et al.* suggest the limited, but significant role donors can make in strengthening business associations through capacity building promoting accountability, professional management and financial transparency.

6.3 Local good governance and economic performance

Literature is largely silent on the issue of good governance and returns to economic activity. Manor (2000) records three overall positive contributions of effective decentralisation: improved governance, benefits to society, and positive impacts on development, all of which may have indirect benefits to economic development. Good governance is promoted through improvements in transparency, responsiveness (in terms of speed, quantity and quality) and accountability of government for the people at the local level (Manor, 1995, 2000; Crook and Manor, 1999). The Karnataka experience is cited, where money stolen from local development funds reportedly fell from a maximum of 40 per cent to 5 per cent as a result of increased transparency through democratic decentralisation. Examples from a few Indian states (only Karnataka identified) describe how decentralisation has reduced corruption resulting from increased transparency. Manor argues that decentralisation also makes the government more open to influence from local people, and greatly enhances the flow of information between government and local people. He cites evidence from one state in India (Bangalore) where bureaucrats described a ten-fold increase in information available to them from the establishment of new local level councils with fully 55,000 elected councillors who served as an ‘army of information-gatherers’ feeding reports, complaints and demands to officials at sub-district and district levels (Manor, 1995).

Case studies which assess the impact of decentralisation on poverty reduction draw similar conclusions. Regarding Karnataka, Vyasulu (1995) describes how developmental possibilities have been transferred to the *panchayat raj* tier, along with rural development and poverty alleviation programmes. In contrast to Crook and Manor (1999) Vyasulu finds evidence of willingness to mobilise local resources, both physical and financial. As a consequence of improved governance, the operation of schools and health facilities improved considerably, and development works were executed more speedily under better control of field staff. Poverty alleviation programmes underwent improvement in selection of beneficiaries and implementation, and local preferences were promptly identified and resources allocated. Initiatives were also taken to direct labour under wage employment schemes towards much-needed infrastructural development such as schools and health centres.

An assessment by Dasgupta (1995) of panchayat reforms in West Bengal and its impact on poverty alleviation made similar conclusions. In comparison to other states, panchayats were considered to:

- be more accountable;
- open the inflow and outflow of finances to more scrutiny;
- have more stake in local development;
- have greater knowledge of locality, both in terms of ecology and society;
- act as important agents of change in the uptake of new technology, and be more effective in drawing attention to such technology than the work on official 'demonstration farms';
- communicate better with target populations, and thus improve the translation of new ideas;
- operate in an environment of competition for local funds, thus assuring that location decisions and beneficiaries reflected local consensus more than arbitrary BDOs (who are often influenced by the more powerful elements of local society).

Failings included the lack of mobilisation of local resources, a tendency towards localism, giving priority to own villages, and poor performance of co-operatives, which had the believed potential of acting as the economic wing of the panchayat. While the impact of such reforms on local economic activities can be speculated on, no explicit connections are drawn.

6.4 Summary

Decentralisation in India from federal to state level follows the pattern of democratic decentralisation or devolution. The objectives of decentralisation are described in the literature both in terms of empowerment of local levels of society, continuing the theme of the Independence movement, and the benefits to society enhanced local participation is believed to foster, including more efficient and equitable use of resources, improved social and economic development, and poverty reduction. However, explorations of the implications of decentralisation are largely concerned with the impact on participation and institutional performance rather than measures of economic development in general, or the RNFE in particular.

The impact of decentralisation and good governance on social and economic development is found to be ambiguous. It is observed that decentralisation literature in general largely assumes that growth will be aided by decentralisation, while there is little empirical evidence to suggest whether the decentralised provision of economic infrastructure actually promotes or hinders local economic activity. Thus positive benefits to the economy are assumed to accrue indirectly through improvements in equity, transparency and accountability of local government.

7. ACCESS AND BARRIERS TO RURAL LIVELIHOODS

Barriers to rural livelihoods, and the RNFE in particular are categorised in the literature as issues of human capital (health and education), social institutions (culture, particularly for women), financial, and institutional barriers of policy and practice. Macro-level concerns of the nature and rate of growth of the rural non-farm economy as a whole have also been referred to as barriers hindering access to such employment.

The failings of rural development policy to target and further support the rural poor, and institutional barriers they create to rural non-farm livelihoods have been discussed in section 4. Locational barriers, a consequence of poor infrastructure, are also noted as influential factors, particularly for remote rural regions in mediating access to markets. These issues are discussed in Section 8, whilst the role of markets in the RNFE has been documented in Section 3.

Unni (1997) argues that the non-farm sector is heterogeneous in nature consisting of high productivity income opportunities and low productivity residual activities. Her econometric analysis concludes that barriers to entry occur at three levels: firstly, at the entry point into the non-farm sector itself, secondly, at the interface of high-income employment, and finally, into high and low productivity activities.

7.1 Human capital, social institutions and rural non-farm livelihoods

The literature predominantly focuses on education and barriers faced by women in entering RNF employment.

Education is regarded a crucial input for RNF employment. Chadha (1993) demonstrates that the proportion of illiterate workers in the RNFE is far less than that in agriculture. Pal *et al.* (1995) in West Bengal find that between 1981 and 1991 districts with high literacy rates for both males and females have high participation of rural male workers in the RNFE, while Samal (1997b) in Orissa finds a positive correlation between literacy rate and percentage share of rural main workers in the RNF sector. Similar correlations are found between urban population and literacy rate, thus Samal argues that processes of urbanisation positively influence education levels and thus engagement in the non-farm sector.

The positive relation between literacy and the RNFE is also observed in other states by Basant (1993), Jayaraj (1994), and Eapen (1994). It is argued that education and literacy enhances the skills of a worker necessary in RNF employment, and may raise the aspirations of an individual beyond that of a manual agricultural wage worker. More educated and literate individuals have greater access to information and facilities from government institutional systems, including technology transfer. Further, Samal argues that education and literacy help in increasing the productivity and skills of workers, which mostly stimulate the growth of the modern, particularly informal RNFE with new technology.

In their subdivisions of skilled 'non-farm proper' and unskilled 'non-farm migratory' activities of a semi-rural village in Gujarat (detailed above), Shylendra and Thomas (1995) find that access to the former is strongly influenced by education and literacy,

and formal jobs outside the locality in particular were only available to those with educational qualifications.

Samal (1997b), in his examination of the determinants of the level of RNFE in Orissa argues that since education has a strong positive impact on an individual's income, the net effect of the expansion of schooling has been a more even distribution of income. However, the degree of equity depends on the nature of expansion. Chadha (1993) and Sen (1994) argue that as a consequence of differential access to more remunerative activities of the non-farm sector, rising non-agricultural incomes can increase inequality. Samal thus cites Psacharopoulos (1988) in arguing that basic and primary education offers the most favourable distribution of incomes, whilst the expansion at higher levels may have a negative impact on the distribution of incomes.

Chadha (1997) argues that women are culturally less mobile, and are thus disadvantaged in terms of rural non-farm employment because on-farm employment is available closer to their living abodes, and because they are not as well equipped (in terms of education) to compete for the limited, but remunerative, non-farm jobs as men are. This is considered to be particularly evident in 'modern' manufacturing activities which are said to be growing increasingly skill-selective. Lack of education and skills training remains a principle barrier for Chadha, and a key limiting factor for the potential of growth in the rural non-farm economy. In his review of education and employment he identifies the following trends:

- i. In both agriculture and non-agriculture, the proportion of workers declines as the level of educational achievement increases, notably for women;
- ii. The proportion of illiterate workers in non-agriculture is significantly less than those in agriculture, and "thus abundantly clear that educational attainment is a highly facilitating support for a shift from agriculture to non-agriculture" (1997: 207);
- iii. As the level of education improves, the incidence of casual labour employment declines steeply in both agriculture and non-agriculture

He therefore argues that the "urge for decentralising more of modern industrial activity into and around the countryside would, thus, bring limited and highly differentiated employment gains to the rural labour force" (1997: 214). However, he notes that barriers may be differential. For example, while educational qualifications are indispensable for those seeking wage-paid non-agricultural jobs, for self-employing non-farm ventures, capital endowment (in the form of 'family land possession') in agriculture and the capability to raise finances may be more important.

However, he states that no breakthrough in the educational and skills status of rural workers will occur in the near future, so that rural workers will have to remain content with less skill-intensive activities. He concludes that there may be, "no escape route" (1997: 203) until more medium-term policies to improve education and skill capabilities, particularly for women, are addressed.

Fisher *et al.* (1997) finds that according to the 1981 Census, the educational attainment of RNF workers is higher than in the agricultural sector, suggesting that education is an important preparation or precondition for rural workers to enter the RNFE. However, there is variation within the sector. For example, education levels

are higher for manufacturing outside, rather than within the household, suggesting that formal education assists mobility into non-household industry. It was also found that the extent of illiteracy among women in mining and construction was even higher than the agricultural sector.

Other barriers particularly faced by women are also well documented. Based on a study of secondary data from Census reports, NSS and Planning Commission, Srivastava *et al.* (1995) examine the current status of the participation of female workers in rural non-farm employment and the trends, constraints and prospects they face. In terms of total employment, work participation of rural females was higher than that of urban females. 44.23 per cent of female workers worked as agricultural labourers, and 34.57 per cent as cultivators. The remainder were employed in other employment including the RNF sector. Low literacy rate, early marriage, social values against women working, unfavourable attitudes of employers, lack of organisation, establishment of industries and factories in urban areas, absence of legislation in job reservation for women in the government/semi-government/autonomous organisations, and a lack of incentive for self employment among women were given as some of the major constraints responsible for the low participation of rural women in non-farm employment. Srivastava *et al.* argue that such participation in gainful RNFE could considerably increase through education, vocational training, formation of co-operative societies, fuller utilisation of plant capacities in the public and private sector, public investment in infrastructure and provision of incentives for self employment and strict implementation of 'equal pay equal work' policy.

Singh and Kumar (1995) conclude that access to employment for women is unfavourable due to numerous socio-economic factors, including familial responsibilities, poor health, limited access to education, skills development and other factors of production. Vyas and Bhargava (1995) emphasise the social disapproval and family pressures faced by many women discouraging them from economic activity outside the household.

7.2 Financial barriers to rural non-farm livelihoods

Financial capital has been found key in determining access to different types of RNF employment of differing remunerative potential. In a quantitative analysis of household data from villages in Tamil Nadu, Saleth (1996) finds that large landless households with cattle benefit from non-agricultural employment but returns to investment of time in such activities are not as great as wealthier households who are able to invest in better education and thus benefit from access to non-agricultural activities with higher economic returns. Saleth argues that this demonstrates the potential response to growth opportunities available to better-endowed groups, whilst distress factors such as unemployment commonly mediate the poor's non-agricultural activities.

The influential role of credit in rural livelihoods recorded in the literature has been documented in Section 4. Literature examining the disbursal of credit highlight neglect of the rural non-farm sector (Chadha, 1995; Eapen, 1996; Fisher *et al.*, 1997), whilst micro studies identify poor access to formal credit, both for fixed capital and assets, and for working capital, as a major constraint to the development of rural livelihoods in general, and the non-farm sector in particular (Eapen, 1996 in Kerala;

and Samal, 1997b in Orissa). Identified problems include insufficiency of size of loan, inflexibility of loan (e.g. consumption loans largely unavailable), high transaction costs in terms of time taken and extensive paper work, lack of timely credit supply and maintenance of formal distance between borrower and lender, despite an expanding number of bank branches (Vyas and Bhargava, 1995; Chadha, 1995; Eapen, 1996 Samal, 1997b; Fisher *et al.*, 1997). Samal finds that among small and marginal farmers, and small RNF entrepreneurs, there was demand for timely, but not necessarily subsidised credit. However, directed lending programmes have focused on low interest rates and subsidies rather than accessibility and availability. As a consequence, borrowers have remained dependent on various informal sources of credit, including money lenders, which, Fisher *et al.* (1997) argue, is insufficient for the development of the non-farm sector.

Women's access to credit is particularly emphasised. Vyas and Bhargava (1995) find that women may not be viewed as productive enough to be creditworthy. Fisher *et al.* (1997) find that based on aggregate data sources, bank lending exhibits strong gender bias against non-farm activities commonly engaged by women. Women receive fewer and smaller loans than men and also face higher transaction costs.

7.3 Macro-level processes and barriers to rural non-farm livelihoods

The growth and decline of sub-sectors of the non-farm rural economy and its potential determinants have been discussed in sections 1, 2 and 3. Determinants have included linkages through agricultural growth (or lack of), various 'prime movers', market forces and government macro-economic and rural industrialisation policies. Where such factors, or their absence, have been seen to hinder growth in the RNFE, they have been considered as constraints to access to rural non-farm livelihoods. For example, Chadha (1997) identifies macro processes in addition to education as barriers to access to rural non-farm employment. Based on NSS data, he argues that employment for rural workers has grown sluggishly since 1987-8 compared to previous periods, and has decreased, particularly for female rural workers. This, he argues, is evident in almost every sector, notably construction, transport-communication-storage and manufacturing, thus reducing job opportunities in the non-farm sector.

7.4 Improving access to rural livelihoods and rural development

Efforts to improve the rural poor's capacity to enter into different non-agricultural livelihoods can be seen as attempts to remove or reduce access barriers, such as through education, training, better health, micro-credit etc.

For example, based on a sample of female TRYSEM beneficiaries and non-beneficiaries in Haryana, Vidyulata *et al.* (1995) assesses the skills possessed by rural women, barriers to entry for adoption of self-employment, and the nature of their employment. They found that equal proportions of both beneficiaries and non-beneficiaries possessed traditional skills (food preservation and processing, sewing, cotton spinning, crochet, fan making), whilst more 'modern' activities (typing, machine knitting and hosiery, dyeing and printing, brassiere manufacturing and handloom) were mainly found among TRYSEM beneficiaries. Self-employment and skilled waged employment was found to be higher among beneficiaries than non-beneficiaries.

However, only 14 per cent of beneficiaries were self-employed, and 1.45 per cent earned a waged income from TRYSEM-trained activities. Further, self-employed beneficiaries worked more person-days / year than non-beneficiaries (202 and 133 days respectively) which, the authors suggest, may be at the expense of other activities or leisure time.

Reasons for not starting their own enterprises after training among beneficiaries were investigated. 94 per cent reported that follow-up work was insufficient, that they were not asked or contacted by anyone to start work. Another major barrier included poor access to financial resources, and lack of interest in the skill they were trained in. Major barriers faced by the self-employed included poor remuneration, inadequate finance and inadequate skills.

However, the identification of the significance of connections between improvements to these 'barriers to entry' and overall rural development in general are not referred to, and have not been explored in this review beyond the efforts of rural development measures detailed in section 4. This remains an important field of knowledge relevant to the development and role of the RNFE to be further explored.

7.5 Summary

Barriers to rural livelihoods, and the RNFE in particular are categorised in the literature as issues of human capital (education and health), social institutions (culture, particularly for women), financial, and institutional barriers of policy and practice. Locational barriers, a consequence of poor infrastructure are also noted as influential factors, particularly for remote rural regions in mediating access to markets. Women face greater barriers than their male counterparts in all categories.

The literature predominantly identifies education and skills training as a key barrier for women and the rural poor to gainful non-agricultural employment, particularly for 'modern' manufacturing activities which are said to be growing increasingly skill-selective. Education and training is thus identified as a principle target area for policy and developmental action. However, investment in basic and primary education is found to stimulate the most equitable distribution of incomes, whilst the expansion at higher levels may have a negative impact.

Financial capital is identified as the second key limiting factor, where growth opportunities are available only to better-endowed groups whilst distress factors tend to mediate the poor's non-agricultural activities. Access to effective credit is therefore considered a key policy issue for favourable market ventures.

8. SMALL TOWN GROWTH

8.1 Role of rural towns in rural development and the RNFE

The role of urbanisation and its impacts on the RNFE has been partly outlined above in Section 3. Numerous studies at the state level emphasise the positive role of urbanisation on the growth of the RNF sector (Jayraj, 1994; Unni, 1990; Shukla 1991, 1992; Bhalla, 1993, 1997; Papola, 1992; Eapen, 1995).

Samal in Orissa (1997b) records a positive correlation between the percentage of urban population and percentage of rural workers in RNF employment. In Madhya Pradesh, based on a sample of marginal farmers selected from four villages of Raipur District, Gauraha (1995) considered the effect of urbanisation on employment, income and expenditure patterns of marginal farmers between 1993-94. Villages within a ten-kilometre radius of Raipur town were considered urban villages, whilst those within a 20-kilometre radius were classed as rural. It was found that an equal proportion of employment was generated from agricultural and non-agricultural activities in urban villages, while more than 70 per cent of employment was generated from agricultural works in rural villages. This distinction was explained in terms of higher wages, less physical exertion, shorter distance to town and longer employment duration for urban villages. Conversely, long distances, lack of transportation, and fewer opportunities for non-farm employment were the major reasons for lower proportions of non-agricultural employment in rural villages, particularly for female labour.

Visaria and Basant (1994) in their much cited examination on literature on RNFE detail various ways in which urbanisation can influence the sector, summarised into four points:

- i. Over time, rural localities become classified as towns, although few former towns become classified as urban. Additionally, boundaries of cities expand to include surrounding 'rural areas'. Such urban expansion is likely to generate an apparent decrease in the magnitude of RNF employment (or at least limit the apparent growth of RNF employment).
- ii. Urbanisation and associated improvements in infrastructure render certain rural manufacturing industries non-viable through competition of better quality and / or cheaper products
- iii. Urbanisation and growth of infrastructure may expand the market for rural enterprises, and also encourage non-agricultural activities in secondary and tertiary sectors in neighbouring rural areas to meet non-local demand. Rural enterprises may therefore benefit from economies of scale, resulting in decreased costs and increase efficiency. Decreased transport costs open up rural resources and markets to exploitation, and facilitate movement to a more specialised productive rural economy. Such processes can be encouraged by policies of industrial relocation to backward areas (see below).
- iv. Improved transport facilities allow many rural households to shift to non-agricultural occupations without necessitating a change in residence, by commuting.

Shukla (1991, 1992) argues that urbanisation influences the RNFE both through the non-farm supply side by providing location and through the provision of markets for RNF activity. He finds that benefits from agglomeration, i.e. regional industrialisation at large, translate into broad localisation benefits for similar activities

in rural areas through a greater ease of technology transfer, input availability and business sophistication, which enhances productivity and induces demand for labour in non-farm activities. He argues that processes of urbanisation may have differential impacts on different types (secondary / tertiary) and forms (household / non-household) of non-agricultural activities, as does the effects of different sized towns and the regional spread of towns. He finds that the distribution of small towns in urban populations has a particularly positive effect on the magnitude of the RNFE (Shukla 1994). Likewise, Papola (1992) found that the productivity and incomes of non-farm enterprises were higher in regions where rural towns were more evenly spread than where there were only a few concentrated settlements, which he attributes to the action of forward and backward linkages. Analysis of district level data (Bhalla 1993b) also suggests that certain cities have begun to emerge as focal points of diversification of the rural workforce.

However, Basu and Kashyap (1992), Vaidyanathan (1986) and Basant and Kumar (1998) argue that data limitations at the regional level prevent a true measurement of the significance of urbanisation. Over time, rural areas become classified as urban, as a consequence of changing economic structure. They argue that if such a process is driven by agricultural prosperity, then bias is introduced. Further, workers classified in the rural non-farm sector may commute to urban centres, determined by urban accessibility, a process which is not captured in NSS or Census data. Basu and Kashyap thus argue for a redefinition of units of analysis emphasising the rural-urban continuum over discrete villages and urban centres, as rural studies emphasise push factors emanating from agriculture, while urban studies inevitably emphasise the pull factors of urban employment potential.

Harris and Harris (1984), based in the North Arcot district of Tamil Nadu, examined the growth of the market town Arni and diversification of rural employment and depict a more 'parasitic' role of urban centres. They conclude that growth of economic activity of the market town was a result of both growth in the silk industry, as well as that of agriculture. Neither through inputs nor outputs was the industry linked to local agriculture, and its growth is neither directly nor indirectly due to expansion of the local agricultural economy. Significantly, they found little evidence that business people of the market town of Arni invested in a way so that the town functioned as a generator of growth. Rather, evidence found a drawing of financial resources from agriculture for business investment (urban property, money lending, and increased linkage with metropolitan centres). They describe an economy in which there is a concentration of wealth amidst general poverty, shared among a few rich farmers in villages and a few businessmen in the market town. As a consequence of this inequality, linkage effects of recent agricultural growth have been weakened and diversification limited.

8.2 Spatial distribution of RNF sub-sectors

Basu and Kashyap (1992) in their assessment of a series of micro studies commissioned the Agro-Climatic Regional Planning Unit of the Planning Commission found that agro-processing units were more often located in small and medium rural towns than in villages. Papola (1987) is cited in explaining location of units as a function of the nature of the product, the size of the market and the role played by scale and agglomeration economies. Similarly, Shukla (1991, 1992) finds that many such processing units are located in consumption, rather than production

centres. He, however, explains this in terms of historical processes and infrastructural bottlenecks preventing processing activities from realising transport cost and scale advantages.

8.3 Growth of rural towns: government initiative vs. private sector catalyst

In her assessment of international literature (including India), Klugman (1994) finds that there has been considerable research and debate on the nature of industrial decentralisation, and the role of the government therein.⁸ Decentralisation refers to the relocation of industry from the metropolitan areas to the periphery. She finds that dominant opinion is that it is primarily a result of government intervention in the provision of incentives and development of infrastructure while an alternative view is that industrial decentralisation is largely a spontaneous response to market forces.

The role of industrial relocation to rural and backward areas in India is well recognised. The objectives, policies, benefits and limitations of rural industrialisation have been documented in Section 4. Rural industrialisation remains a popular policy. The 1995 National Conference on Poverty and Employment recorded in Raghavan and Sekhar (1995) concluded with the recommendation of the creation of growth centres where small and tiny industries could be established in rural areas to enable a balanced growth of both small and large-scale industry. The creation of adequate infrastructure was considered the most important move in the development of rural industrialisation, including transport, marketing, health and educational facilities. It was argued that these could be developed either through departmental efforts of the government or the private sector, along side the identification of places and types of industry suitable for expansion.

Indian literature suggests that the state has played a particularly significant role in rural industrialisation and small town growth in remote rural, and agriculturally backward regions. Shukla (1991, 1992) in his analysis of Maharashtra argues that the government's policy of industrial dispersal of urban-based industries (such as agro-processing) into rural areas has focused more on the distribution of "inefficient subsidies rather than on engendering local environments conducive to generating rural industrialisation indigenous to these areas through natural incentive structures or appropriate investments in socio-economic infrastructure" (1992: 1486).

Eapen (1996) notes the development of industrial belts in Kerala. Eapen argues that regions set in the rural interior have been served by poor infrastructure, and have thus offered little scope for the establishment of medium or large-scale non-farm enterprises. This has therefore necessitated rural households to migrate where job opportunities are available. However, through government interaction, an industrial belt has been developed with the establishment of both private and public medium and large-scale industries, taking advantage of cheap land and labour. Some units promoted ancillarisation, encouraging the growth of small-scale engineering units nearby. The area has since been the focus of state-led rural industrialisation, providing infrastructure and thus inducing private investment. Eapen states that it is too early to assess the impact of this development on the rural hinterland, but argues that since such industrialisation strategies have favoured location rather than rural linkages, only a portion of the local rural sector have been able to benefit, potentially

⁸ Klugman refers to Bell 1987; Wellings 1988; World Bank Spatial Policies Programme as examples.

marginalising the poor. Most of the inputs are brought in from outside the state, likewise final destination of products. Rural links are therefore in terms of rural local employment.

Samal (1997b) examines an industrially developed region in Orissa. He recounts that industrialisation in the Talcher-Angul region of the undivided Dhenkanal district has occurred as a consequence of major public sector undertakings. Development of coal mine activities in the 1930s led to the establishment of the Talcher Thermal Power Station in 1964 and one of the two Indian FCI coal-based fertiliser plants near Bikrampur in 1971 and its parasite plant and heavy water plant of the Atomic Energy Commission. With the envisaged expansion programme of the coal industry and location of a thermal power project in Kaniha, rapid industrialisation is impacting on both the urban and rural periphery. Growth in RNFS incomes are due to exogenous factors such as displacement and subsequent employment in PCUs, and overall industrialisation of the region is due to the availability of coal rather than agricultural development or distress. Samal observes that the major change in sample villages of the region was the shift from near total dependence on agricultural livelihoods to non-farm activities, particularly services in PCUs, and service holders in both private enterprises and the government sector. However, most of the increased incomes have been spent on the construction of new houses and urban-produced consumer goods.

Harris (1987) however, in her study in Tamil Nadu state demonstrates how such industrial centres do not necessarily create such livelihood opportunities. She describes four industrial estates in North Arcot district which are supposed to act as growth centres for rural backward regions. However, only a small proportion of industry is located there. There is a notable absence of local linkages where even agro processing industry is not linked to local agriculture. She finds that:

- i. The location of industries is overwhelmingly urban (85 per cent), meaning in towns of more than a population of 20,000 rather than in designated industrial centres. Such industries include machinery and repairs industry for agriculturally and non-agriculturally based goods and transport, agricultural input industries, non-grain food processing and manufacture of non-agricultural consumer goods;
- ii. The age structure of the population of industries demonstrates the persistence of old established industries which tends to be rurally located;
- iii. There is a weakness in local commodity linkages;
- iv. Capital investment is predominantly in large scale, rather than small-scale industry; and small-scale industry as a whole is a diverse size category;
- v. Labour intensity varies greatly both between and within industries.

She concludes that most firms do not have the characteristics specified by Mellor (1976) desirable for local growth linkages, namely rural location, small size, high labour intensity and prevalence. Those with the characteristics (silk and leather) are agricultural but not local, and heavier industry with local linkages are neither small scale nor labour intensive.

Commodity flows (in and out) are more integrated with national and regional markets, rather than local. Net financial flows move generally from less-developed rural areas, to more developed urban centres (resulting in a parasitic rather than generative urban centre). Finally, regarding consumption demand, Harris concludes that demand growth is not only affected by the increased incomes of a few large farmers, but also

of urban merchants and industrialists, government officials and employees of urban-sector corporations. New wage work however has not been created in local consumer goods manufacture but in activities with no local linkages (silk). Harris argues that increasing integration, penetration and concentration of the national market and independent mobilisation and allocation of public sector resources can be seen as the important engine of growth.

8.4 Promotion of rural livelihoods: small town growth vs. village RNF enterprise

Evidence, while somewhat limited, is not conclusive in determining whether there is a significant role for rural small town growth development, over that of the development of village-based industry, in enhancing the opportunities and number of rural non-farm livelihoods. Aside from the positive effects on rural-urban migration, a number of studies have identified a positive influence of rural urban growth on that of the rural non-farm economy (see above), largely attributed to the action of forward and backward linkages (e.g. Papola, 1992). Bhalla (1993, 1997), for example, has argued for the importance of the proximity of urban markets as 'modern' centres for rural livelihood diversification, but only in regions of high agricultural activity.

As detailed above, Shukla has argued that the benefits of a centralised rural industry can lead to growth in the regional non-farm economy, although he notes that its impact may be differential. Harris (1987) and Harris (1991) in Tamil Nadu, however, have found that small industry policies captured by urban activities have had little, even detrimental impacts on rural development as they are often capital intensive, do not nurture local linkages and absorb rural capital for urban, non-productive investment, resulting in a small concentration of wealth among urban and rural elites.

Meanwhile, Gupta (1995) emphasises that development of small scale / cottage industries established at the village level will be particularly beneficial to female labour, whilst Chadha (1997), among others, argues the converse, that the development of rural non-farm employment opportunities away from the village of residence will have a detrimental effect on female workers, who experience greater immobility compared to their male counterparts. As a consequence, women's share of on-farm employment will increase as men travel to take advantage of non-farm opportunities. Such an argument can be extended to the rural poor in general whose lack of financial and social capital may disproportionately hinder their access to employment opportunities in urban centres.

8.5 Summary

Numerous studies have identified the positive role of small town growth and proximity to urban centres for the growth of the RNFE, through the provision of local and non-local markets, infrastructure, inputs and technology, in addition to sources of employment. Conversely, it is also found that such advantages may render certain rural manufacturing industries non-viable in the face of competition of better quality or cheaper products, while 'parasitic' urban centres may draw on financial agricultural resources for business investment with limited benefits accruing locally.

Subsequently, the debate between small town growth development and village rural enterprise development, both of which has been targeted by government policy, remains ambiguous. Other literature, meanwhile, argues that rural-urban commuting, and analytical definitions of rural and urban render the measurement of the significance of urbanisation on the RNFE problematic.

REFERENCES

- ACHARYA, B.T. (1995) Rural Industry Expansion: Some Issues, in Raghavan, K. and Sekhar, L. (eds.) op cit., pp 335-342.
- BASANT, R. (1993) Diversification of Economic Activities in Rural Gujarat: Key Results of a Primary Survey, *The Indian Journal of Labour Economics*, 36(3), pp 361-86.
- (1994) Economic Diversification In Rural-Areas - Review Of Processes With Special Reference To Gujarat, *Economic And Political Weekly*, 29(39), pp A107-16.
- BASANT, R. and B.L. KUMAR (1989) Rural Non-Agricultural Activities in India: A review of Available Evidence, *Social Scientist*, 17 (1 and 2), pp 13-71.
- BASANT, R., B.L. KUMAR and R. PARTHASARTHY (1998) Non-Agricultural Employment in Rural Gujarat. Rawat Publications, Jaipur.
- BASU, D.N., KASHYAP, S.P. (1992) Rural Non-agricultural Employment In India - Role Of Development Process And Rural-Urban Employment Linkages, *Economic and Political Weekly*, 27(51-52), pp A178-A189.
- BHADURI, A. (1996) Employment, Labour Market Flexibility and Economic Liberalisation in India, *The Indian Journal of Labour Economics*, 39(1), pp 13-22.
- BHALLA, S. (1993) Patterns of Employment Generation, *The Indian Journal of Labour Economics*, 39(1), pp 1-12.
- (1993) Test of Some Propositions about the Dynamics of Changes of the Rural Workforce Structure, *The Indian Journal of Labour Economics*, 36(3), pp 428-39.
- (1994)Poverty, Workforce Development and Rural Labour Markets, *The Indian Journal of Labour Economics*, 37(4), pp 609-22.
- (1997) The Rise and Fall of Workforce Diversification Process in Rural India, in G K Chadha and Alakh N Sharma (eds), op cit., pp 145-183.
- BHATTACHARYA, B.B., and MITRA, A. (1993) Employment And Structural Adjustment - A Look At 1991 Census-Data, *Economic And Political Weekly*, 28(38), pp 1989-1995.
- BHATTACHARYA, S.N. (1986) *Rural Economic Growth in Indian Theory and Practice*, Metropolitan, Delhi.
- BREMAN, J., and S. MUNDLE (eds.) (1991) *Rural Transformation in Asia*, Oxford University Press, Delhi.
- CHADHA, G.K. (1993) Non-Farm Employment for Rural Households in India: Evidence and Prognosis, *The Indian Journal of Labour Economics*, 36(3), pp 296-327.
- (1994) *Employment, Earnings and Poverty: A Study of Rural India and Indonesia*. Sage Publications, New Delhi.
- (1997) Access of Rural Households to Non-Farm Employment: Trends, Constraints and Possibilities, in G K Chadha and Alakh N Sharma (eds), op cit., pp 184-215.

- CHADHA G.K., and ALAKH N. SHARMA (eds) (1997) *Growth, Employment and Poverty: Change and Continuity in Rural India*. Vikas Publishing House. New Delhi. 470 pp.
- CHADHA, K.M. (1995) Unemployment and Poverty in Rural Areas, in Raghavan, K. And Sekhar, L. (eds.) pp 292-295.
- CHAKRAVERTY, M.L., and P. MISHRA (1995) Non-Farm Employment Pattern of the Bauris (Scheduled Caste Community) of Puri District (Orissa), *Indian Journal of Agricultural Economics*, 50(3) pp 292-293.
- CHANDRASEKHAR, C.P. (1993) Agrarian Change And Occupational Diversification - Nonagricultural Employment And Rural-Development In West-Bengal, *Journal Of Peasant Studies*, 20(2), pp 205-270.
- CROOK, R.C and MANOR, J. (1998) *Democracy and Decentralisation in South Asia and West Africa: Participation, Accountability and Performance*. Cambridge University Press, Cambridge. 335 pp.
- DASGUPTA, B (1995) Institutional Reforms and Poverty Alleviation in West Bengal, *Economic and Political Weekly* 30(41, 42), pp 2691-2702.
- DATT, G. and M. RAVALLION (1996) *Why have some Indian states done better than others at reducing poverty?*, World Bank Research Working Paper 1594, Washington DC.
- DESHPANDE, S., and L. DESHPANDE (1998) Impact of Liberalisation on Labour Market in India. What to Facts from NSSO's 50th Round Show?, *Economic and Political Weekly*, 33(2), L31-40.
- DEV, S.M. (1990) Non-agricultural Employment In Rural India - Evidence At A Disaggregate Level, *Economic And Political Weekly*, 25(28), pp 1526-1536.
- (1996) Experience of India's (Maharashtra) Employment Guarantee Sceme: Lessons for Development Policy, *Development Policy Review*, 14(3), pp 227-53.
- DREZE, J. and A. SEN (1989) *Hunger and Public Action*, OUP, New York.
- EAPEN, M. (1994) Rural Non-agricultural Employment In Kerala - Some Emerging Tendencies, *Economic And Political Weekly*, 29(21), pp 1285-1296.
- (1995) Rural Non-agricultural Employment In Kerala - Inter-District Variations, *Economic And Political Weekly*, 30(12), pp 634-638.
- (1996) Rural non-farm employment - Some reflections on petty production, *Economic And Political Weekly*, 31(26), pp 1673-1675.
- FISHER, T., MAHAJAN, V and A. SINGHA (1997) *The Forgotten Sector*, Intermediate Technology Publications, London. 274 pp.
- GAURAHA, A.K. (1995) Pattern of Non-Farm Employment of Marginal Farmers in Raipur District of Madhya Pradesh, *Indian Journal of Agricultural Economics*, 50(3) pp 450-451.
- GHOSH, JAYATI (1995) Employment and Labour under Structural Adjustment – India Since 1991, *The Indian Journal Of Labour Economics*, 38(4) pp 567-76.
- GUPTA, S.P. (1995) Possibilities of Income and Employment in On-Farm and Non-Farm Activities: An Economic Evaluation, *Indian Journal of Agricultural Economics*, 50(3) pp 456-457.
- (1995) Economic reform and its impact on poor, *Economic And Political Weekly*, 30(22), pp 1295-1320.

- HAGGBLADE, S., C. LIEDHOLM and D. MEAD (1990) The Effect of Policy and Policy Reforms on Non-Agricultural Enterprises and Employment in Developing Countries: A Review of Past Experiences, in Stewart, F., H. Thomas and T. de Wilde (eds) *The Other Policy: The Influence of Policies on Technology Choice and Small Enterprise Development*, Intermediate Technology, London. pp 58-105.
- HARRIS, B. (1987) Regional Growth Linkages from Agriculture and Resource Flows in Non-Farm Economy, *Economic and Political Weekly*, 22(1,2) 31-46.
- HARRIS, B. and HARRIS, J. (1984) "Generative" or "Parasitic" Urbanism? Some Observations from the Recent History of a South Indian Market Town, *Journal of Development Studies*, 20(3), pp 82-101.
- HARRIS, J. (1991) Agriculture-Non-Agriculture Linkages and the diversification of Rural Economic Activities: A South Indian Case Study, In J. Breman and S. Mundle (eds). pp 429-458.
- (1999) Comparing Political Regimes Across Indian States: A Preliminary Essay, *Economic and Political Weekly*, 34(48), pp 3367-3377.
- HAZELL, P.B.R and S. HAGGBLADE (1991) Rural Growth Linkages in India, *Indian Journal of Agricultural Economics*, 46(4), pp 515-29.
- JAIN, S.C. (1995) General Review and Appraisal of Ongoing Poverty Alleviation and Employment Generation Programmes and Strategies, in Raghavan, K. And Sekhar, L. (eds.) pp 170-190.
- JAYARAJ, D. (1994) Determinants of Rural Non-Agricultural Employment, in P. Visaria and R. Basant (eds.), op cit.
- KAKWANI, N. (1995) Structural Adjustment And Performance In Living Standards In Developing-Countries, *Development And Change*, 26(3), pp 469-502.
- KANNAN, K.P (1990) Towards Understanding the Dynamics of Rural Labour Markets: An Approach Based on Indian Evidence, *The Indian Journal of Labour Economics*, 33(3), pp 200-16.
- KLUGMAN, J. (1994) Decentralisation: A Survey Of Literature From A Human Development Perspective, Occasional Paper 13, Human Development Report Office, UNDP.
- KUMAR, A. (1993) Rural Non-Farm Employment: A Static and Dynamic Study of Inter-State Variations, *The Indian Journal of Labour Economics*, 36(3).
- LANJOUW, J.O and P. LANJOUW (1995) Rural Non-Farm Employment: A study, *Policy Research Working Paper* 1463, World Bank, Washington.
- MANOR, J. (1995) Democratic ecentralisation in Africa and Asia, *IDS Bulletin* 26(2), pp 81-88.
- MANOR, J. (2000) *Decentralisation and Sustaible Livelihoods*, IDS (draft paper).
- MATHEW, E.T. (1995) Unemployed And Self-Employed - Job Preferences And Employment Perspectives, *Economic And Political Weekly*, 30(44), pp 2815-26.
- MATHUR, A. and P.K. PANI (1993) The Character of Rural Industrialisation and its Employment Impact in India: An Inter-Regional Perspective, *The Indian Journal of Labour Economics*, 36(3).

- MELLOR, J (1976) *The New Economics of Growth: A Strategy for India and the Developing World*, Cornell University Press.
- MITRA, A. (1993) Rural Non-Farm Employment, Poverty and Women, *The Indian Journal of Labour Economics*, 36(3) pp 455-69.
- MUKHERJEE, A. (1995) Liberalisation, Rural Wages and Employment in India, in K. Raghavan and L. Shekhar (eds), *Poverty and Employment*, New Age International Publishers, New Delhi, pp 54-71.
- MUKHOPADHAY, SWAPNA and C.P. LIM (1985) *Development and Diversification of Rural Industry in Asia*, Asian and Pacific Development Centre, Kuala Lumpur.
- MUNDLE, S. (1992) The Employment Effects of Stabilisation and Related Policy Changes in India, 1991-92 to 1993-94, in ILO-ARTEP, *Social Dimensions of Structural Adjustment*. New Delhi.
- NACHANE, D.M., SAWANT, S.D. and C.V. ACHUTHAN (1989) Agriculture and Industry: A Study of Selected Villages, *Indian Journal of Agricultural Economics*, 44(2), pp 140-47.
- NAIR, P.K.K. (1995) Promotion of Rural Employment: An Indian Experience, in Raghavan, K. And Sekhar, L. (eds.) pp 349-365.
- PAL, K.P., PAL, G.P, and D.P. PAL (1995) Non-Farm Employment and Rural Economic Transformation in India, *Indian Journal of Agricultural Economics*, 50(3), pp 456.
- PAPOLA, T.S. (1992) Rural Non-Farm Employment: An Assessment of Recent Trends, *The Indian Journal of Labour Economics*, 35(3), pp 238-45.
- (1994) Structural Adjustment, Labour Market Flexibility and Employment, *The Indian Journal of Labour Economics*, 37(1), pp 3-16.
- RAGHAVAN, K. AND SEKHAR, L. (eds.) (1995): *Poverty and Employment: Analysis of the Present Situation and Strategies for the future*, New Age International (P) Limited, New Delhi, pp 481.
- RANIS, G. and F. STEWART (1993) Rural Nonagricultural Activities in Development: Theory and Application, *Journal of Development Economics*, 40(1), pp 75-1101.
- RAVALLION, MARTIN (2000) What is Needed for a More Pro-Poor Growth Process in India?, *Economic and Political Weekly*, 35(13), pp 1089-1093.
- RAVALLION, MARTIN and G. DATT (1995) Growth and Poverty in Rural India, *Working Paper Series 1405*, World Bank, Washington, DC.
- RAY, S (1997) Globalisation, Structural Change and Poverty: Some Conceptual and Policy Issues, *Economic and Political Weekly*, 32(33-34), pp 2117-35.
- SAITH, A. (1991) Asian Rural Industrialisation: Context, Features, Strategies, in Breman and Mundle (eds.) op cit.
- SALETH, M.R. (1996) Rural Non-Farm Employment in Tamil Nadu: A Quantitative Analysis at the Household Level, *The Indian Journal of Labour Economics*, 39(2), pp 335-51.
- SAMAL, K.C. (1997a) Rural Non-Farm Activities in Specific Regions of Orissa, *Journal of Rural Development*, 16(3), pp 457-464.

- (1997b) Features and Determinants of Rural Non-Farm Sector in India and Orissa, *Journal of Indian School of Political Economy*, 9(1), pp 65-93.
- (1998) Poverty Alleviation After Post-Liberalisation: Study of a Tribal Block in Orissa, *Economic and Political Weekly*, 33(28), pp 1846-51.
- SARDANA, P.K., MANOCHA, V., and A.C. GANGWAR (1995) Nature and Pattern of Changes in Rural Non-Farm Employment in Haryana, *Indian Journal of Agricultural Economics*, 50(3).
- SARSWAT, S.P., SINGH, R., and P.S. DAHIYA (1995) Structural Changes in Farm and Non-Farm Employment in Himachal Pradesh: A Case Study of Kot Village, *Indian Journal of Agricultural Economics*, 50(3).
- SEN, ABHIJIT (1994) Rural Labour Markets and Poverty, *The Indian Journal of Labour Economics*, 37(4), pp 575-607.
- (1996) Economic Reforms, Employment and Poverty, *Economic and Political Weekly*, 31(35-37), pp 2459-77.
- (1997) A Structural Adjustment and Rural Poverty: Variables that Really Matter, in G.K. Chadha and A.N. Sharma (eds.) op cit.
- SHRIVASTAVA, N. (1995) Rural Non-Farm Employment in Madhya Pradesh, *Indian Journal of Agricultural Economics*, 50(3) pp 463-464.
- SHRIVASTAVA, A., ATHAVALE, M.C., and S.K. GUPTA (1995) Impact of Non-Farm Employment on Income Generation in Smaller Farms: A Case Study in Two Districts of Madhya Pradesh, *Indian Journal of Agricultural Economics*, 50(3) pp 448-449.
- SHUKLA, V. (1991) Rural Nonfarm Activity - A Regional Model And Its Empirical Application To Maharashtra, *Economic And Political Weekly*, Vol 26, Iss 45, pp 2587-2595.
- (1992) Rural Nonfarm Employment In India. Issues And Policy, *Economic And Political Weekly*, Vol 27, Iss 28, pp 1477-1488.
- SHYLENDRA, H.S. and P. THOMAS (1995) Non-Farm Employment: Nature, Magnitude and Determinants in a Semi-Arid Village of Western India, *Indian Journal of Agricultural Economics*, 50(3), pp 410-16.
- SIMMONS, COLIN and S. SUPRI (1994) Participation in Rural Non-Farm Activity in India: A Case Study of Cultivating Households in Jalandhar District, Punjab, *Salford Papers in Economics* 94-4, Department of Economics, University of Salford.
- SINGH, A.K. (1994) Changes in the Structure of Rural Workforce in Uttar Pradesh: A Temporal and Regional Study, in P. Visaria and R. Basant (eds.) op cit.
- SINGH J.P. and MOHANTY, T. (1995) Employment Pattern of Tribal Labour Force in Non-Farm Activities: A Study in Keonjhar District, Orissa, *Indian Journal of Agricultural Economics*, 50(3), pp 440-441.
- SINGH, D.K. and S.P. TRIPATHI (1995) Factors Affecting Shift of Occupations from Agriculture to Non-Agriculture at Farm Level (A Case Study in Allahabad District) *Indian Journal of Agricultural Economics*, 50(3), pp 463-464.
- SINGH, L and KUMAR, T (1995) Unemployment and poverty Issues Relating to Women, in in Raghavan, K. And Sekhar, L. (eds.) pp 319-335.

- SINGH, S. (1993) Some Aspects of rural Non-Farm Sector Development in developing Countries, *The Indian Journal of Labour Economics*, 36(3).
- (1996) Rural non-Farm Sector in Rajasthan: Some Empirical Findings, Institute of Development Studies Working Paper 71, Jaipur.
- SRIVASTAVA, S., PRAKASH, B., and S. LAL (1995) Participation of Female Workers in Rural Non-Farm Employment – Trends, Constraints and Prospects *Indian Journal of Agricultural Economics*, 50(3), pp 442-443.
- THORAT, S. (1993) Land Ownership Structure and Non-Farm Employment of Rural Households in India, *The Indian Journal of Labour Economics*, 36(3).
- UNNI, J. (1988) Agricultural Labourers In Rural Labour Households, 1956-57 To 1977-78 - Changes In Employment, Wages And Incomes, *Economic And Political Weekly*, 23(26), pp A59-68.
- (1991) Regional Variations In Rural Non-agricultural Employment - An Exploratory Analysis, *Economic And Political Weekly*, 26(3), pp 109-22.
- (1996a) Diversification of economic activities and non-agricultural employment in rural Gujarat, *Economic And Political Weekly*, 31(33), pp 2243-2251.
- (1996b) Non-Agricultural Employment and Rural Livelihoods: Macro *vis-à-vis* Micro View, *The Indian Journal of Labour Economics*, 39(4), pp 795-808
- (1997) Non-Agricultural Employment, Livelihoods and Poverty in Rural India, Working Paper 89, Gujarat Institute of Development Research, Ahmedabad.
- (1998) Non-agricultural employment and poverty in rural India - A review of evidence, *Economic And Political Weekly*, 33(13), pp A36-A44.
- VAIDYANATHAN, A. (1986) Labor Use In Rural India - A Study Of Spatial And Temporal Variations, *Economic And Political Weekly*, 21(52), pp A130-A146.
- (1986) Report on the Workshop to Evolve an Agenda of Research on Rural Non-Agricultural Employment, *Indian Journal of Agricultural Economics*, pp 151-57.
- (1994) Employment Situation - Some Emerging Perspectives, *Economic And Political Weekly*, 29(50), pp 3147-3156.
- VYAS, V.S. and P. BHARGAVA (1995) Public Intervention for Poverty Alleviation: An Overview, *Economic and Political Weekly*, 30(41-42), pp 2559-72.
- VERMA, B.N and N. VERMA (1995) Distress Diversification from Farm to Non-Farm Rural Employment Sector in the Eastern Region, *Indian Journal of Agricultural Economics*, 50(3).
- VIDYULATA, PUNIA, R.K., and V.P. CHQNAL (1995) Non-Farm Employment Among Rural Women (A Case Study of TRYSEM), *Indian Journal of Agricultural Economics*, 50(3) pp 458-459.
- VISARIA, P. (1991) Evolving An Employment Policy For The 1990s - What Do The Data Tell Us, *Economic And Political Weekly*, 26(15), pp 969-979.
- (1995) Rural Non-Farm Employment in India: Trends and Issues for Research, *Indian Journal of Agricultural Economics*, 50(3) pp 398-409.
- VISARIA, P. and R. BASANT (1994) *Non-Agricultural Employment in India: Trends and Prospects*, Sage, New Delhi.

- VON BRAUN, J. and R. PANDYA-LORCH (1992) Income Sources and Diversification Strategies of the Malnourished Rural Poor, *Quarterly Journal of International Agriculture* 31(1), pp 36-54.
- VYAS, V.S. and P. BHARGAVA (1995) Public Intervention for Poverty Alleviation. An Overview. *Economic and Political Weekly*, 30(41, 42), pp 2559-72.
- VYAS, V.S. and G. MATHAI (1978) Farm and Non-Farm Employment in Rural Areas: A Perspective for Planning, *Economic and Political Weekly*, 13(6,7), pp 1369-74.
- VYASULU, V. (1995) Management of Poverty Alleviation Programmes in Karnataka. An Overview. *Economic and Political Weekly*, 30(41, 42), pp 2635-2650.
- WALKER, T.S. and J.G. RYAN (1990) *Village and Household Economies in India's Semi-Arid Tropics*, John Hopkins University Press, Baltimore and London, 394 pp.



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