

RURAL NON-FARM EMPLOYMENT IN INDIA- A REVIEW BASED ON RECENT EVIDENCE

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ABSTRACT

The evidence of diversification of rural employment structure away from farm to non-farm activities has generated a lot of interest among researchers. The available literature on the subject, however, presents a mixed pattern of empirical evidence related to both prosperity-induced and distress-push factors in the growth of rural non-farm employment. It records also impact on rural non-farm employment, of various factors such as education and literacy, urbanisation, caste and gender. The present study takes into account the latest data available on the subject to review the nature of employment in the rural non-farm sector. It examines the sectoral distribution of employment, employment status (whether self-employed or wage earners and the expected rewards, self-employed workers, employment distribution between organised and unorganised sectors and investigating the productivity levels of the latter which accommodated the most of the non-farm employment. The investigation carried out from various perspectives led to conclusive evidence showing that distress-push factors were predominant in driving workers to non-farm employment. Low level of their education and their status as landless earners devoid of capital resources had driven them to a situation from which there is no escape.

Introduction

The key to India's development lies in the development of its rural areas. There are as many as six lakh villages where about 70 per cent of the population live. The agricultural sector occupies a pivotal place in the national economy both in terms of its contribution to the gross domestic product and employment generation. However, segmenting rural employment growth into the farm and non-farm sectors would demonstrate that non-farm employment growth had been significantly higher than farm sector employment growth throughout the period 1972-73 to 2004-05. In this background, present study attempts to assess trends in the level and nature of employment in the rural non-farm sector over this period.

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Size of the Rural Non-Farm (RNF) Sector

Table 1 shows that the proportion of non-farm employment in total rural employment has risen from 16.6 per cent in 1977-78 to 18.5 per cent in 1983; 21.7 per cent in 1987-88; 23.7 per cent in 1999-00 and finally to 27.6 per cent in 2004-05. It must be noted that but for a brief period of stagnation between 1987-88 and 1993-94, the figure rose consistently to record a total increase of 11 percentage points between 1977-78 and 2004-05. The Table further reveals a much higher rate of increase in male workers than the female counterparts in non-farm employment. The percentage of males rose from 16.7 per cent in 1972-73 to 33.5 per cent in 2004-05 whereas that of females registered a rise from 10.3 per cent to no more than 16.7 per cent. The increase in both categories was noticeably sharper during the period 1999-00 to 2004-05 than in earlier periods. Quite significantly, the male workers increased by 4.9 percentage points while the females by only 2.1 percentage points.

Table 1: Share of non-farm activities in rural workforce

(in percentages)

Year	Persons	Males	Females
1972-73	N.A.	16.7	10.3
1977-78	16.6	19.3	11.8
1983	18.5	22.2	12.5
1987-88	21.7	25.4	15.3
1993-94	21.6	26.0	13.8
1999-00	23.7	28.6	14.6
2004-05	27.6	33.5	16.7

Source: Various relevant NSSO rounds.

Given the wide *class-wise* and *region-wise* differences in the level, rate of growth and pattern of rural employment, the question which naturally arises is the degrees to which this diversification of rural employment is a result of *distress-push* as opposed to *demand-pull* factors. We hold the view that it is not feasible to answer the question on the basis of data on the aggregate level. But the all-India and state-level data are bound to point to tendencies that are indicative of which one of these two sets predominantly influence employment growth in the rural sector.

The aggregate all-India figures on non-farm employment since 1993-94 can, however, be taken to suggest that demand-pull has played a greater role in the more

recent periods. The sharp rise in such employment in the last two of these sub-periods occurred in a context of extremely high rates of expansion of the manufacturing and services sectors. This suggests that the increase in non-farm employment was being driven by demand-pull factors, though prevailing unemployment and underemployment meant that this was not accompanied by substantial improvements in the quality of and earnings associated with such employment.

Industrial Distribution of the Workforce

An analysis of the industrial division of the workforce could help us assess whether this indication of a greater influence of demand-pull factors in the 1990s and after is valid. Table 2 essentially reviews the compositional importance of the sub-sectors in rural India at the one-digit level. The Table shows that while agricultural activities continue to be the mainstay for the rural workers, their relative importance declined substantially by nearly 11 percentage points between 1977-78 and 2004-05 starting from 83.4 per cent in 1977-78. Their proportional share declined to 72.7 per cent of total workers in 2004-05. A closer perusal of the Table reveals that primarily, it is the withdrawal of male workers (14.2 percentage points) rather than the female workers (5 percentage points) from agricultural activities which was responsible for the fall in the share of agriculture in rural employment.

In the non-farm sector, the manufacturing sector is the largest source of non-farm employment in rural India. Its proportion rose from 6.2 per cent in 1977-78 to 8.1 per cent in 2004-05. This kind of diversification does seem to tally with conventional expectations of diversification away from agriculture to more productive manufacturing, supporting the role played by demand-pull factors representing a degree of dynamism.

Till 1999-00, the second largest non-farm employment source was *other services* sector. While this could include some modern services, many of these activities may be in the nature of residual opportunities exploited when employment in the commodity producing sectors is not growing fast enough. The relative share of these services in total employment stood at 5.0 per cent in 2004-05 against 4.5 per cent in 1977-78. However, it is notable that their employment contribution registered a decline of 0.7 percentage points during the nineties, from 5.7 per cent in 1993-94 to 5.0 in 2004-05. That is when the proportion of employment in *manufacturing* sector was growing, that of *other services* was stagnant or on the decline supporting the perception of a degree of dynamism.

**Table 2: Sectoral distribution of the workers in rural India:
1977-78 to 2004-05**

(in percentages)

Sectors	1977-78	1983	1987-88	1993-94	1999-00	2004-05
Rural Persons						
Agriculture & Allied	83.4	81.5	78.3	78.4	76.3	72.7
Mining & Quarrying	0.4	0.5	0.6	0.6	0.5	0.5
Manufacturing	6.2	6.8	7.2	7.0	7.4	8.1
Electricity, gas & water	0.1	0.1	0.2	0.2	0.2	0.2
Construction	1.3	1.6	3.3	2.4	3.3	4.9
Secondary Sector	8.0	9.0	11.3	10.2	11.4	13.7
Trade, hotels and restaurants	3.3	3.4	4.0	4.3	5.1	6.1
Transport and communication	0.8	1.1	1.3	1.4	2.1	2.5
Other Services	4.5	4.9	5.1	5.7	5.2	5.0
Tertiary Sector	8.6	9.4	10.4	11.4	12.4	13.6
All	100	100	100	100	100	100
Rural Males						
Agriculture & Allied	80.7	77.8	74.6	74.0	71.4	66.5
Mining & Quarrying	0.5	0.6	0.7	0.7	0.6	0.6
Manufacturing	6.4	7.0	7.4	7.0	7.3	7.9
Electricity, gas & water	0.2	0.2	0.3	0.3	0.2	0.2
Construction	1.7	2.2	3.7	3.2	4.5	6.8
Secondary Sector	8.8	10.0	12.1	11.2	12.6	15.4
Trade, hotels and restaurants	4.0	4.4	5.1	5.5	6.8	8.3
Transport and communication	1.2	1.7	2.0	2.2	3.2	3.9
Other Services	5.3	6.1	6.2	7.1	6.1	5.9
Tertiary Sector	10.5	12.2	13.3	14.8	16.1	18.1
All	100	100	100	100	100	100
Rural Females						
Agriculture & Allied	88.2	87.5	84.7	86.2	85.4	83.3
Mining & Quarrying	0.2	0.3	0.4	0.4	0.7	0.3
Manufacturing	5.9	6.4	6.9	7.1	7.6	8.4
Electricity, gas & water	-	-	-	-	-	-
Construction	0.6	0.7	2.7	0.8	1.1	1.5
Secondary Sector	6.7	7.4	10.0	8.3	9.4	8.3
Trade, hotels and restaurants	2.0	1.9	2.1	2.1	2.0	2.5
Transport and communication	0.1	0.1	0.1	0.1	0.1	2.0
Other Services	3.0	2.8	3.0	3.4	3.7	3.9
Tertiary Sector	5.1	4.8	5.2	5.6	5.8	8.4
All	100	100	100	100	100	100

Source: As in Table 1.

The share of the next most important sector *trade, hotels and restaurants* rose consistently from 3.3 per cent in 1977-78 to 6.1 per cent in 2004-05. *Construction and transport, storage and communications* were also emerging as important sectors in the provision of non-farm employment particularly in the nineties. These are sectors in which the growth of employment at the aggregate level may be the result of either distress-push or demand-pull. What needs to be noted, however, is that these were sectors whose share in GDP was rising during this period. On the other hand, employment in *mining and quarrying and electricity, gas and water supply* was static at a low level of employment.

In sum, trends in the sectoral distribution of non-farm employment at the national level do not help clearly identify whether *distress-push* or *demand-pull* factors dominated the direction of change. However, taking everything into consideration, it appears that at least since the mid -1990s demand-pull factors have played an important role.

**Table 3: Distribution of rural workers (PS+SS) by activity status
between 1983 and 2004-05**

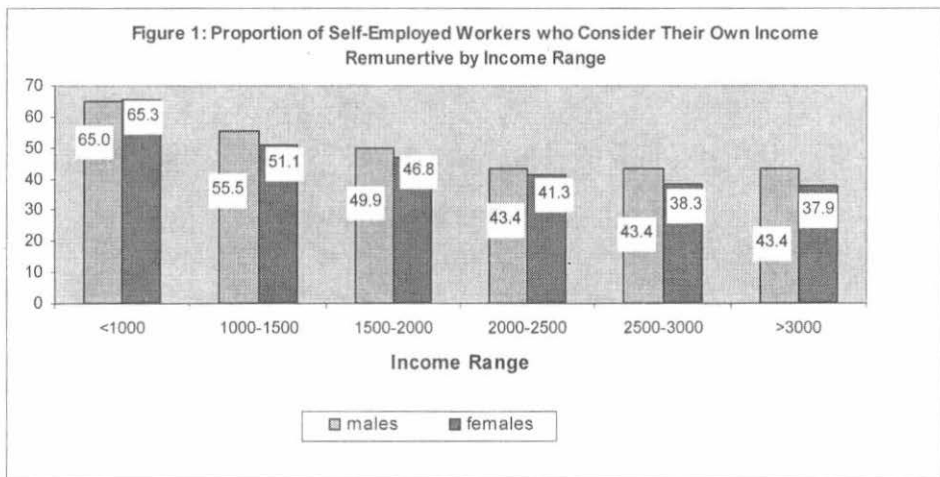
(in percentages)

NSSO's Survey Years	Rural Males			Rural Females		
	Self- employed	Regular employees	Casual labour	Self- employed	Regular employees	Casual labour
1983	60.5	10.3	29.2	61.9	2.8	35.3
1987-88	59.6	10.0	31.4	60.8	3.7	35.5
1993-94	57.7	8.5	33.8	58.6	2.7	38.7
1999-00	55.0	8.8	36.2	57.3	3.1	39.6
2004-05	58.7	9.0	32.9	63.7	3.7	32.6

Source: As in Table 1.

Given this growing significance of self-employment, it is important to consider in greater depth the precise nature of self-employment, and to what extent it is a positive move of workers away from domination and control by employers, or a *refuge* form of employment forced upon workers by the inadequacy of generation of paid employment. However, this is a phenomenon to be welcomed, if it does indicate a shift to more productive and better remunerative activities than are to be found with casual contracts.

The 61st Round of the NSSO provides a clue to the answer that asked the question whether those in self-employment found their own activity to be sufficiently remunerative, by expected income category. Responses elicited from the NSSO survey (represented in Figure 1) are of interest because they provide pointers to the actual income obtained through self-employment. It turns out that just under half of all self-employed workers do not find their work to be remunerative. Significantly, more than one-third of self-employed workers fail to get even the lowest of the low-prescribed wage. Female workers found self-employment less rewarding than their male counterparts. This is a clear evidence of low expectations of workers, especially women, with regard to their labour in self-employment. Predictably, the level of satisfaction falls as the required level of income increases.



Source: Computed from the unit level Employment and Unemployment data on CD-ROM supplied by the NSSO, Government of India, 2004-05.

There is ample evidence in the literature to suggest that various factors, both internal and external to the rural economy, influence the level and pattern of rural non-farm employment. These factors could go beyond the purview of agricultural linkages.

Determinants of the RNFS: A Static Analysis

The literature on determinants of non-farm employment is focussed on probing certain broad relationships. A key question looked into is whether growth in rural non-farm employment is a consequence of distress-driven diversification, or the result of prosperity-induced processes; and the role of exogenous factors in this diversification.

On the basis of various studies on rural non-farm employment, we have been able to identify a number of factors that exercised their impact on non-farm

employment. Some of these factors are land ownership pattern, educational/skill level of workers, age, caste, religion and gender. The inter-relationship of some of these factors with rural non-farm employment at an all India level is studied in the following sub-sections.

Land Ownership Structure : *A priori* access to land can influence non-farm employment in two diverse ways. Those endowed with land may not be driven to take up non-farm employment if such employment offers low returns and earnings. On the other hand, for rural landless households, income from agriculture is largely in the form of wage payment, and due to seasonal uncertainty and wage rate fluctuations, the workers may have to continually hunt for non-agricultural jobs, either inside or outside the village, for short or long duration. Similarly, the sub-marginal, marginal and small farming households are also likely to pursue non-farm activities, in varying forms and to different degrees of intensity because of inadequacy of farm income from their limited land base in comparison to the households who have a higher arable land base. Thus, Bhalla and Chadha (1983) remarked that *the network of non-farm jobs had the effect of mollifying the highly inequitable distribution of income arising out of farming and its related activities.*

A second way in which land ownership can affect participation in non-farm activities is that surpluses earned from land could finance diversification into lucrative non-farm activities. The evidence seems to indicate, however, that it is the former role that land ownership predominantly plays, pointing to the role of distress in being the predominant influence on non-farm employment.

Table 4 presents data on non-farm employment of rural households belonging to the six farm size categories from 1977-78 to 2004-05. It shows that in 2004-05, around one-third of the rural households were engaged in non-farm activities for the major part of households' income. Available evidence suggests that as the size of the landholding became smaller, the proportion of non-farm households increased consistently, from 8.7 per cent for larger sized to 44.6 per cent for the sub-marginal cultivating households and further to 45.9 per cent for the landless. In other words, there existed an inverse relationship between farm size and the proportion of rural households mainly engaged in non-farm activities. An inverse relationship was clearly evidenced in earlier years too. For instance, in 1983, the percentage of rural households mainly engaged in non-farm activities varied between 6.2 and 43.4 per cent for larger and sub-marginal cultivating households, respectively; in 1993-94, the figures were 7.1 per cent for the large cultivating households, 32 per cent for the sub-marginal cultivating households, and 52 per cent for the landless. The noted decline of landless non-farm households, from 52.7 in 1999-00 to 45.9 per cent in 2004-05 is because of the fact that the production of petty goods and services (which is essentially what self-employment is) requires either some control over assets, however small, or access to credit which these households lacked.

Table 4: Distribution of households in non-farm employment by size of land owned

Size class of land Owned (in hectares)	Percentage of households in non-farm employment				
	1983	1987-88	1993-94	1999-00	2004-05
Landless	52.0	51.5	52.0	52.7	45.9
0.01-0.40	43.3	33.5	32.0	36.0	44.6
0.41-1.00	20.4	20.2	19.0	18.6	21.4
1.01-2.00	12.0	13.6	11.2	13.0	13.0
2.01-4.00	12.2	10.2	8.3	10.9	9.9
4.01 and above	6.2	8.0	7.1	9.0	8.7
All	28.6	31.6	31.9	35.1	33.7

Source: As in Table 1.

It is also noted that landless workers in rural areas generally opt for work rather than pursuit of studies, particularly in a higher grade. To make the Indian situation clearer, we cross-tabulated the land ownership data *vis á vis* the workers' level of education for the year 2004-05. The results, presented in Table-3 suggest an important feature of non-farm activities in rural India. They show that the majority of the landless non-farm workers were either illiterate or educated only up to the primary level (47 and 32.6 per cent, respectively). The situation is somewhat better for those who possess good piece of land. For instance, the corresponding illiteracy among the big and medium landowners was 31 and 32 per cent, respectively (Table 5). As per the Table, the proportion varies from 29.1 to 34.3 per cent for those who were educated up to the primary level amongst all the landownership categories.

Table 5: Percentage distribution of rural non-farm workers by their education level

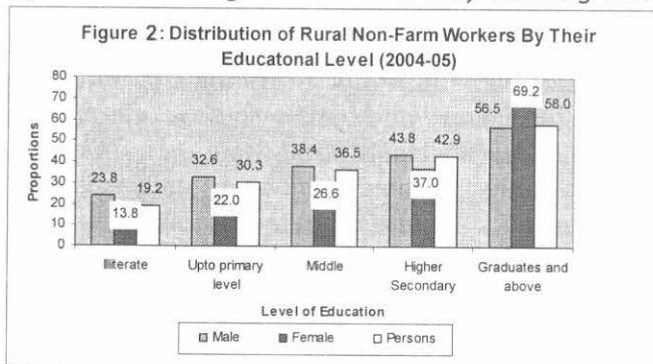
Land Ownership	Illiterate/ Primary	Up to Secondary and above	Middle	Higher	Graduate
Landless	47.0	32.6	10.7	4.8	4.8
Sub-marginal	40.4	34.3	13.0	6.2	6.0
Marginal	38.1	32.3	13.7	7.6	8.4
Small	33.1	30.2	13.8	9.5	13.4
Medium	31.0	29.1	14.2	9.6	16.1
Big	32.0	29.8	11.4	9.1	17.7

Source: As in Figure 1

Understandably, the medium and large landowners were better educated. The proportions of those who had studied up to the higher secondary and graduate level and above were 9.6 and 16.1 per cent, respectively. The proportions improved amongst the big landowners. However, the corresponding proportions amongst the landless and sub-marginal landowners were small.

Among the landless, the respective figures were 4.8 and 4.8 per cent and amongst the sub-marginal landowners, it was 6.2 and 6.0 per cent, respectively. Thus, a high incidence of participation of the landless, illiterates or just literates and the rising incidence of sub-marginal and marginal non-farm households is indicative of the resort to non-farm jobs under duress. The reasoning is that these workers were driven to non-farm sector because of the increasing vogue of the process of farm mechanisation resulting in declining levels of employment elasticity in individual crop enterprises. But this did not mean that land ownership did not help diversifying into non-agricultural activities. The entry of only a few large households into non-farm activities appears to be a favoured transition as there was no compulsion to leave farm jobs, unless and until investment and/or employment in non-farm enterprises secured higher incomes than in agriculture. Land ownership does help, but it is the lack of land that seems to be predominantly responsible for the shift to non-agricultural activities. Distress, it appears, dominates over the push of prosperity in the move towards non-agricultural activities.

Education and Skills : Education does help overcome constraints set by economic and social endowments. But access to education may be biased towards those better endowed, closing access to better non-farm jobs to the less well endowed. Education tends to help movement into non-farm employment, especially into better non-farm jobs. Better-educated individuals possess skills which facilitate successful involvement in non-farm activities, including the ability to manage the business, process relevant information and to adapt to changing demand patterns. Education also generates aspirations to explore the wider world outside the farm sector for a better quality of life. A positive association between education levels and non-farm employment is empirically established. Figure 2 confirms it by showing that as the education



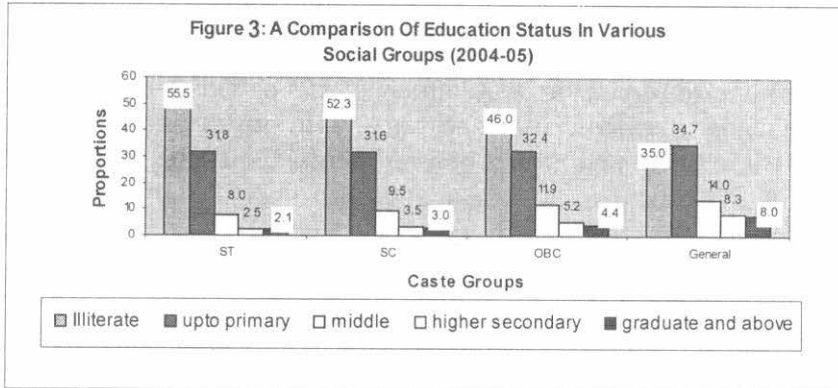
Source: As in Figure 1.

level increases, it results in greater leaning towards non-farm activities among the rural workers- amongst both men as well as women. For example, among the illiterates, only 23.8 per cent of male workers took up non-farm activity, while proportions of non-farm workers who had studied up to the primary, middle, higher secondary and the degree level rose successively and were 32.6, 38.4, 43.8 and 56.5 per cent, respectively. The proportions of female non-farm workers of different educational levels also showed a similar structure. The corresponding proportions of female workers engaged in non-farm activities were 13.8 per cent (illiterates); 22.0 per cent (up to primary); 26.6 per cent (middle); 37.0 per cent (higher secondary) and 69.2 per cent (graduates and above). Significantly, amongst graduates and above, the number of female workers increased to a larger extent than that of men. The number of such better-qualified women was however, very small. In 2004-05, there were nearly 25 and 15 per cent of the male and female workers, respectively who had education at the secondary level and above. The low educational level of non-farm workers is indicative of distress factors at work.

Social Stratification : Social stratification in terms of caste is an important *enabling* and/ or *constraining* factor on participation in rural non-agricultural activities. Despite considerable changes over the past decades, the caste system remains a major stratifying force in participation, particularly in rural areas. However, when assessing the relative shares of those in different castes participating in non-farm activities, we must remember that the proportion of those in the low castes is high when compared to the upper castes. A smaller share of lower castes participating in non-farm activities need not conflict with lower castes accounting for a larger number and a higher proportion of those in non-agricultural activities. This does seem to be the case. The empirical evidence suggests that the proportion of those participating in rural non-farm activities was low in households who are lower in the social hierarchy compared to the *other caste* household workers. In 2004-05, the proportions of scheduled tribe and scheduled caste households in non-farm activities were 6.8 and 23.1 per cent, respectively. The participation was substantially higher in *other backward classes* and *other castes* households, respectively at 42.7 and 27.4 per cent.

Several field studies have also shown that members of the upper castes dominate local power dynamics and enjoy better asset endowments, higher social status and capital and have favourable access to education and information. In contrast to this, persons from lower castes are devoid of such privileges and are a vulnerable lot. Furthermore, the socially downtrodden workers are also poorly educated. The latest available NSSO data affirm this position. In 2004-05, nearly half of the non-farm workers of SC, ST and OBC categories were illiterate in comparison of 35 per cent among the *other castes* (Figure 3). Of the remaining non-farm workers, though most of them were just educated up to the primary level, the *others* category workers were better educated in comparison to SCs, STs and OBCs. Nonetheless, the opportunities over the years are widening up for these oppressed workers. The technological changes, for

example, are gradually reducing the status and psychological barriers to entry into many economic activities which were previously undertaken by other castes people only. Nevertheless, the overall evidence tends to suggest distress-induced circumstances of non-farm workers.



Source: As in Figure 1.

Summary and Conclusions

It was observed that during the 1972-73 to 2004-05 in rural India, the total number of workers expanded more in the non-farm sector than the farm sector. The gender specific count showed that the rise in male workers was larger than the rise in female workers. The foregoing review led us to conclude that *distress induced* shift to non-farm activity predominated over the *pull* generated by economic prosperity.

Looking at the sector-wise employment situation, it was found that the manufacturing units in the non-farm sector continued to absorb the highest number of workers. These units absorbed most of the increase in employment in the non-farm sector. While this suggests the presence of *demand-pull* factors at work, the expansion of employment in *construction, trade-hotels, restaurants, transport* and *communications* sectors could be due to both the *push* and *pull* factors. However, gender-wise distribution gives a clear impression of *distress-driven* employment. A decline in earnings in the farm sector appeared to force rural women, in order to sustain family income, to take up non-agricultural activities, particularly in a self-employed capacity. Significantly, the earnings from these activities are far below the minimum acceptable to male workers. Even the male workers in the non-farm sector had a very low expectation about the reward of their work. They feel satisfied if only they could earn no more than even the minimum prescribed wages.

A survey of available literature on the subject was conducted in order to verify our perception of distress-induced growth of employment in the non-farm sector. A comprehensive view of the scenario led us to believe that both *demand* and *distress* as well as other external factors were at work in the generation of non-farm

employment. One significant fact revealed during investigations was that non-farm activities were carried out predominantly in the unorganised sector. They were carried out on a small scale and, in terms of gross value added, they were not highly productive, yet at least some of them comprised last resort sources of income to those who were unable to access agricultural sources. This analysis strengthened our perception of *distress-induced* growth of employment in the non-farm sector.

Thirdly, coming to the factors that influenced the participation in non-farm activities, the analysis supported the theoretical assumptions showing the inter-relationship of these factors with rural non-farm employment. It also provided evidence to suggest broad distress-induced circumstances of non-farm workers. We have noted that the poor are not particularly well placed to benefit from expansion of this sector. Low educational levels, wealth and social status, all appear to restrict the access of the poor to the relatively more attractive non-farm occupations. A very significant expansion of the non-farm sector might be expected to dilute the nature of handicap that these characteristics impose on the poor.