

Changing Pattern of Rural Non-Farm Employment

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Preface

Employment in non-farm activities has become an important aspect of the lives of a large number of people in the rural areas of India, as in several other developing countries. While this is basically an economic phenomenon, it has an important social aspect because those affected are mostly the rural poor. For the growing numbers of these people, who are not being absorbed fast enough in agriculture or in urban based industry, and are actually obliged to leave the land partially or fully, non-farm activities are performed as part of their personal survival strategies.

Rural labour markets are in general a less important source of income for women than off-farm self employment. Almost universally, it is seen that within the non-farm sector wage employment is dominated by men and self-employment by women. Non-farm wage employment is gender segregated by sector, with men working in construction, transportation and manufacturing and women in domestic service. Most rural self employment is undertaken by women with relatively low level of educational attainment. Evidences suggest that with the rural non-farm sector, women are likely to engage in low productivity, low return activities.

Skills are underlying driver of economic growth and social development. Even as India is experiencing the economic growth, in part due to increasing skill level of our human capital, much of our growth is concentrated in urban areas, with the associated skill centre (IITs, IIMs, NITs, NIFTs, etc.) centralized around large cities.

To address the needs of non-farm employment in rural areas, cost-effective, efficient and sustainable skill centre must be made available.

The main objective of this study was to examine the rural transformation, changing employment situation, growth of rural non-farm employment and skill base of different occupation in rural areas along with gender aspect.

This study attempts to assess the non-farm activity, particularly some villages of Ghaziabad district. The study finds that majority of household, those who are doing farm activity, want to shift in non-farm activity. But those household which are engaged in non-farm activity are due to one of the most vital cause of landless labourer.

It is hoped that the present study will prove to be useful to all those concerned with rural transformation issue and will help researchers and policy makers in some way to design policy and programmes for the generation of employment opportunities in non-farm sector.

Kanwar Manjit Singh
Director

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Shashi Bala

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I

INTRODUCTION

Prologue

Agriculture has been providing employment to an overwhelming majority of people from time immemorial. However, in course of time, the employment potential in agriculture has declined to a great extent. In its place, non-farm activities have been increasing substantially thereby providing employment to an ever-increasing number of people across countries and regions. This shift in employment has led to new technological innovation and application in production, thus simultaneously leading to development of new skills in different occupations and operations. In India, still a vast majority of workers are working in agriculture and an overwhelming number of people are dependent on agriculture for their livelihood. Nevertheless, despite this dependence on and involvement with agriculture, non-farm economic activities have also been increasing, both in volume and in diversities. This has resulted into complex process of production. In addition, skill requirement of different occupations are also undergoing changes in term of use of new techniques. All these have triggered changes not only in the employment pattern in non-farm sector but in agriculture sector as well.

The changes in employment pattern are quite visible in the diversified activities, which are carried out to meet people's evergrowing needs. The large number of National Industrial Classification of different occupations is an indication. The number is likely to increase in the area of non-farm activities (NSSO, 2001).

In India, urbanization has been expanding and, simultaneously, the country's population is growing. A part of the growing population is either being pushed out of agriculture, as there is no further opportunity for them, or is being pulled in by the lucrative prospect in non-farm sector. There are many factors responsible for this pattern of growth of non-farm sector. The present study has been attempted to map out the trend and pattern of non-farm employment.

The importance of the rural non-farm sector is well recognized now. The necessity for expanding the network of non-farm activities for rural development, improvement of employment, productivity and earning and poverty reduction, has been gaining significance over the years. What was once looked upon as a passive side route for employment growth is now advocated as the central plan of rural development strategy (Ho, 1986). It is no more a doubt that in peasant economies, typically characterized by demographic pressures and ever-increasing land-man imbalance, agriculture alone cannot provide the ultimate solution in the rural

under-employment and poverty (Bhalla et al., 1986; Chadha, 1994). Hence, there is a need to reduce the dependence on agricultural sector and expand non-farm sector. This will facilitate the transfer of workforce from agriculture, which is a must for the sustainable growth of employment and earning in the long run. The advocates of the agricultural led growth theories visualize an important role for rural non-farm sector in stimulating agricultural growth through inter-sectoral linkages. Some of the non-agricultural sector may be available in rural areas themselves (Mellor, 1976). However, there are chances that prospects of non-farm growth may hinge on the performance of agriculture (Hazell and Haggblade, 1991). The farm and non-farm linkages can be visualized in four different ways:

- An increase in farm incomes stimulates demand for a variety of consumer goods; some of them may be produced by the local non-farm economy;
- A growing agriculture demands production inputs that are either produced or distributed by local non-farm enterprises;
- Rising agricultural productivity and wage raise the opportunity cost of Labour in non-farm activities, inducing a shift-in the composition of non-farm activities out of every labour-intensive, low return activities into more skilled, higher investment, high return activities (ibid); and
- Moreover, a growing agriculture also includes application of more technology.

Chadha, 2002 emphasizes that for a long time to come, non-farm employment would remain a major source of income for rural households, because the employment problem has continued to be the Achilles' heel of the Indian economy. The Labour absorptive capacity of agriculture has been shrinking. The rural non-farm development may benefit all sections of the rural community. The rural non-farm sector plays significant role towards agriculture development. First, rural non-farm activities utilize local talent and resource, which cannot be easily transferred to urban Industry; second, a planned strategy of rural non-farm development may prevent many rural people to migrate to urban Industry thereby reducing the pressures on scarce urban infrastructure facilities (See also Islam, 1987). Third, it is more likely that rural people can see, assimilate and adopt urban work patterns and higher earnings expectations, when their own non-farm sector is expanding. Fourth, the rural industries are less capital intensive and more labour intensive. Fifth, it has a significant spin-off for agricultural development (Hazell & Haggblade, 1991). Sixth, the rural income distribution is much less unequal in areas where in a wide network of non-farm avenues of employment exists (Bhalla and Chadha, 1983). Seventh, a real dent into rural poverty come more readily through a wide network of non-farm activities, most ostensibly because, in general, for people without a land base of their own, per workers productivity and earning are higher in non-farm than in farm employment (Chadha, 1994). Finally a gender related aspect that usually does not get due recognition is a sizeable involvement of female rural workers in

some of the non-farm sectors' (Grant, et al., 2000). Chadha in his paper looks into vulnerability of rural workers in some non-farm sectors that has surfaced blatantly during the 1990s. He sees how the Rural Non-Farm (RNF) employment scenario of the 1990's contrasts itself with that of the 1980s. He says the poor quality of its workforce is one of the most serious problems of Indian's rural economy. Further Bhalla writes that the burden of providing additional employment to the growing Labour force has taken upon the unorganised non-farm sector, which accounts for only 30 per cent employment in rural and urban areas combined (Bhalla, 2002). Rural non-agricultural employment has increased because of the inability of the agricultural sector to absorb the ever-increasing rural Labour force.

Narayanamoorthy points out that non-farm employment offers better wage rates and working conditions as compared to agricultural employment. He found that some districts having higher percentage of Rural Non-Farm Employment are much better in terms of the value of output per hectare, rural roads and rural literacy (Narayanamoorthy, et al. 2002).

Sidhu and Toor (2002) discuss both pull and push factors, which are responsible for people going in for non-farm activities in rural areas. Among the push factor, inadequacy of land, unequal land or asset distribution, preponderance of marginal holdings, existence of unemployment, caste etc., appear to be the most important determinant factors. Among the pull factors the level of agricultural development, predominance of non-food-grain crops output in the total agricultural output, per capita expenditure of households in the area, cattle wealth, degree of literacy or education standards, nearness to town, degree of urbanization and the role of rural infrastructure are the important determinant factors of rural non-farm employment. They have pointed out that in Punjab, the push factors are responsible for rural non-farm employment. They also point out that in rural areas it is less expensive to settle non-farm employment as compared to urban area.

Rangi, et al. (2002) pointed out that agricultural Labourers, in order to supplement the family income, also avail non-farm employment in the village itself or nearby villages and towns. This shows the importance of non-farm employment in rural areas. Besides, the performance of agriculture has experienced a significant decline since the beginning of the 1990s. The growth of productivity in most crops has declined. This is a serious cause of concern, as it affects farmers' risk and income. To offset this, as Alam (2004) points out, biotechnology, if used cautiously, has the potential to raise agricultural productivity and farmers incomes. This has also been supported by David (1994). In addition, improvement in education, nutrition, or health of farmers clearly increases productivity while perhaps, augmenting capital of land productivity as well. HYV, fertilizers, and pesticides increase land productivity and might also increase capital or labour productivity.

Technical change in Indian agriculture has had very uneven regional effects (Bhalla and Alagh, 1979). Analyzing district level agricultural performance between the early 1960s and early 1970s, they found that all the districts in Punjab and Haryana enjoyed a growth rate of at least 3 per cent per year during this period compared with only 31 per cent of the districts in other states. Looking at 56 agro-climate regions, Mahendra Dev (1985) found that all the four regions that comprise

Punjab and Haryana experienced a very high (at least 4.5 per cent per year) growth rate in agricultural output between the early 1960s and late 1970s. Only five regions in other states fell into this category. Mahendra Dev (1986) found that three of the four regions in Punjab and Haryana enjoyed a high (at least 3 per cent per year) growth rate in yield per hectare between the early 1960s and late 1970s, compared with just nine regions in other states.

Nair (1980) analyzed the pattern of technological progress and its impact on agriculture in the sixties and seventies and the pattern of distribution of GDP and labour force between the agriculture and non-agricultural sectors, in twenty-one countries of the world. He mentioned that technological changes have affected the core of agriculture through different channels, such as mechanization, varieties of seeds, better irrigation facilities, fertilizers and pesticides.

Bhalla and Reddy have held (1994) discussion that very little exists in the nature and extent of the technological transformation in rural areas. Technological change in the Indian rural sector is hindered by a serious lack of qualified work force. This problem has many facets. The problem that Lipton (1972) called the rural skill drain, has occurred partly as a result of the promotion of education and schooling in rural areas. There is need to create more attractive rural employment opportunities in order to mitigate skill drain. Another problem that emerges, as Ranis (1990) pointed out, is that as a result of technology transformations in villages, modern products (being cheaper and capital intensive) are replacing the traditional products. This is because the rural consumption linkages have been established more with urban industry than with rural non-farm production.

Rao (2005) has opined that the share of rural non-farm activities has increased in the post reform period. He discusses the experience of China, India and Thailand and indicates that experiences seem to be country-specific and, therefore, mostly non-replicable, as they depend on the nature of the agriculture growth, as well as the socio-economic conditions prevalent. In terms of India, he showed reasonably high growth in both the farm and rural non-farm sectors during its previous decade of the 1980, but a slowdown in agricultural growth with apparently little change in the growth of the rural non-farm sector during the post reform decade of the 1990's. He has stated that estimates regarding growth in output or income of the rural non-farm sector, are not available: what we have is an indication of the performance of this sector from the changes in its share in employment. Jha and Sen (2005) have focused on rural employment and also on the extent to which dependence on agriculture has changed since the mid 1970s, when agriculture still employed around 70 per cent of the workforce and accounted for over 40 per cent of the gross domestic product. Papola and Sharma (2005) recognized the need of the rural non-farm sector in generating productive employment and reducing poverty in rural areas. To strengthen this sector, there is a need for rural urban linkage, skill development, training as this sector consists of traditional skill based craft, and local resource based products, infrastructure and financial services. Despite these situations, there is still a lack of micro-level studies regarding the trend in rural non-farm employment in India. In this context, the present study has tried to assess change in agriculture and non-farm employment in the study area.

Objective

The main objective of the study was to examine the changing employment situation and growth of rural non-farm employment in rural areas. The study seeks to examine the following issues:

- Growth and diversification of farm and non-farm employment.
- The gender aspect of non-farm employment.
- Reasons for engaged in farm and non-farm employment.
- Mapping emerging non-farm activities.

Study Area and Methodology

The first stage involved selection of a particular region within the State of Uttar Pradesh. Western Uttar Pradesh was consciously selected for this study, since this region has been experiencing very high-level of agricultural growth along with non-agricultural employment. This is a result of comparatively better irrigation facilities and introduction of new farm technology. Green belt of western region of Uttar Pradesh comprises of several districts exhibited in Table 1.1 below:

Table 1.1
Western Uttar Pradesh: Green Belt Districts

S.No.	Districts
1.	SAHARANPUR
2.	MUZAFFARNAGAR
3.	BIJNOUR
4.	MORADABAD
5.	RAMPUR
6.	JYOTIBA PHULE NAGAR
7.	MEERUT
8.	BAGHPAT
9.	GHAZIABAD
10.	GAUTAM BUDH NAGAR
11.	BULANDSHAHR

Source: U.P. Census 2001

Three variables namely *literacy rate, proportion of workers in the household industries to total workers and percentage of other workers to total workers*, in relation to the rural area of the district were selected as indicators for facilitating the selection of a particular district, sub-region within it and villages from the sub-region.

- Literacy rate was considered as an indicator as it is well established that a higher literacy rate would mean higher participation of workers in non-farm activity.
- Proportion of workers in the household industries to total workers could be also considered, as an indicator of employment in non-farm sector.
- Percentage of other workers to total workers is another important measure as it may also indicate the proportion of workers outside the agriculture as self-employed, which is considered as one of the important forms of non-farm employment.

The data relating to these indicators is depicted in Table 1.2.

Table 1.2
Literacy Rate Proportion of Workers in Household in Household Industries to Total Workers Percentage of Other Workers to Total Workers with In District/Sub-District

S. No.	District/ sub- districts	Literacy rate (percentage)	Proportion of workers in household industries to total workers (percentage)	Percentage of other workers to total workers (percentage)
1	SAHARANPUR			
a	Deoband	64.8	3.1	32.0
b	Nakur	56.2	3.3	28.9
c	Saharanpur	66.0	4.4	70.8
d	Behat	52.3	6.6	30.0
2	MUZAFFARNAGAR			
a	Budhana	57.5	3.6	34.4
b	Muzaffarnagar	63.9	3.3	47.6
c	Shamli	63.7	3.9	33.8
d	Kairana	49.6	4.1	28.6
e	Jansath	61.6	3.7	34.4
3	BIJNOUR			
a	Chandpur	56.8	7.4	32.0
b	Dhampur	62.3	9.3	38.2
c	Nagina	56.4	4.7	30.3
d	Bijnour	59.6	4.1	38.8
e	Najibabad	54.3	4.2	43.5
4	MORADABAD			
a	Chandausi	41.6	2.6	36.2
b	Sambhal	37.4	5.7	28.5
c	Bilari	35.1	6.0	32.1
d	Moradabad	51.1	6.7	55.6

S. No.	District/ sub-districts	Literacy rate (percentage)	Proportion of workers in household industries to total workers (percentage)	Percentage of other workers to total workers (percentage)
5	RAMPUR			
a	Malik	41.8	2.4	16.9
b	Shahabad	31.8	5.5	15.3
c	Rampur	41.4	12.7	43.6
d	Bilaspur	43.2	2.8	27.4
e	Suar	35.0	3.1	18.8
6	JYOTIBA PHULE NAGAR			
a	Hasanpur	38.3	2.5	19.5
b	Amroha	53.4	13.5	35.3
c	Dhanaura	56.2	4.7	27.8
7	MEERUT			
a	Meerut	66.7	4.9	74.0
b	Mawana	62.5	4.4	36.1
c	Sardhana	60.8	5.8	42.2
8	BAGHPAT			
a	Khekada	65.6	5.3	41.9
b	Baghpat	64.8	3.8	42.3
c	Baraut	63.4	3.8	34.0
9	GHAZIABAD			
a	Modinagar	69.4	3.9	68.1
b	Ghaziabad	74.4	4.7	86.4
c	Hapur	64.8	4.4	56.4
d	Garhmukteshwar	58.2	6.2	39.2
10	GAUTAM BUDH NAGAR			
a	Dadri	73.9	3.9	77.7
b	Gautam Buddha Nagar	63.2	4.2	39.1
c	Jewar	59.7	3.8	34.4
11	BULANDSHAHR			
a	Khurja	61.4	5.7	47.0
b	Shikarpur	57.3	5.4	32.5
c	Debai	53.6	4.5	27.6
d	Anupshahar	57.8	4.9	42.3
e	Siana	58.9	4.9	37.1
f	Bulandshahr	61.9	7.1	53.2
g	Sikandrabad	63.5	7.7	44.7

Source: U.P. Census 2001

Clearly, Ghaziabad records very high figures in relation to each of these variables, much above the averages of the other districts. Hence, district Ghaziabad was the region chosen for conducting the present study.

The next step involved selection of a sub-region within the district. The data for the sub-regions in relation to district Ghaziabad is presented in Table 1.2. It shows that sub-region Ghaziabad, among four other sub-regions, records very high value in relation to the selected indicators compared to other sub-regions. This sub-region was therefore selected for this study.

With regard to selection of some villages within the sub-region, data was collected for all the rural segments of that sub-region. The total number of villages falling under its jurisdiction was eighty. A similar exercise, as was done earlier, was undertaken and four villages, which recorded values above the averages for the villages as a whole, were chosen for conducting the field survey. These villages were: **Banthla, Mahmoodpur, Tila-Shasbazzpur and Nasratabad Kharkhari.**

Those villages which recorded very high levels of educational attainment, very high level of work force in non-agricultural related activities, were deliberately excluded, as including them might have hampered capturing of the changing dynamics of rural transformation. It has been assumed that by selecting villages where there was coexistence of both agriculture as well as non-farm activities, with predominance for non-agriculture occupation, will definitely be a better site for understanding the changing dynamics in rural society, especially in relation to rural labour and employment scenario.

From each of the selected villages, households have been divided into three categories: (i) **farm**, (ii) **non-farm** and (iii) **mixed**: a sample of 40 per cent of each household category has thereafter been taken. The respondent households for the study were selected on a random basis from among the listed household categories.

Table 1.3 exhibits the number of Farm, Non-farm and Mixed households in the villages.

Table 1.3
Household Classification

S. No.	Villages	Listed Household			
		Farm	Non-farm	Mixed	Total
01	Banthla	33	471	127	631
02	Mahmoodpur	102	38	145	285
03	Tila Shasbazzpur	69	231	177	477
04	Nasratabad Kharkhari	14	44	115	173
	Total	218	784	564	1566

Source: *Field survey*

Forty per cent of farm, non-farm and mixed household were selected on random basis in each of the villages as shown in Table 1.4

Table 1.4
Selected Household

S.No.	Villages	Farm	Non-farm	Mixed	Total
01	Banthla	14	189	51	254
02	Mahmoodpur	41	16	58	115
03	Tila Shasbazpur	28	93	71	192
04	Nasratabad Kharkhari	6	18	46	70
Total		89	316	226	631

Source: *Field survey*

Scope

The present study has primarily focused on the various dimensions of the farm and non-farm employment i.e. occupational activities of the household workers, their income profile, educational level, skill base, etc.

Period of the Survey

The survey was conducted during the months September, 2006 to December, 2006.

Limitation of the Study

- (1) Study period was short.
- (2) The universe was also quite large.

Connotations

Utilities: Includes small shops (glossary, tractor part repair, electrical appliance, utensils, and cloths, ect.) at village level.

Asymmetrical Information: Non availability of adequate information.

Farm Household: Households having farm activity as a main source of earning.

Non-Farm Household: Households having non-farm activity as main source of earning.

Mixed Household: Households having both farm and non-farm activity as a main source of earning.

II

SOME ESSENTIAL CONCEPTS

In this chapter we discuss some essential concepts related to this study. Employment includes both self-employment and wage-earning employment. The meaning of "rural" varies from country to country but in official definition it usually refers to concentration of population under certain threshold, which is generally set at 1,000 to 2,000 individuals.

The definition of "non-agricultural" covers industry and manufacturing (secondary sector) and services (tertiary sector) and excludes primary production, whether in agricultural, minerals or fisheries.

Rural non-agricultural income is income generated by rural inhabitants through self-employment or wage earning work in secondary or tertiary sectors. Many farming households also generate rural non-agricultural income. Wage earning work in primary activities on farming establishments is not included in our definition of rural non-agricultural employment. Off-farm earnings are income generated through Rural Non-Farm Employment (RNFE).

Locative and Linkage-based Definitions of Rural Non-Farm Activities

Saith (1992) proposed two related definitions of Rural Non-Farm (RNF) activities. Since the rural non-farm activities include a range of economic activities, it is hard to define with clarity. The problem is accentuated in cross-country comparisons. Even if data is available, seemingly identical variables may be based on diverse specifications. The question of definition is also important, since it specifies the scope of the sector, of the analysis and, consequently, of policy formulation.

Saith argues that there are several points of consideration, when constructing a working definition of rural non-farm activities:

- i) Should the non-farm sector include such auxiliary activities as fishing and aquaculture, animal husbandry, and beekeeping; bearing in mind that the strategic focus on the non-farm sector derives from the limitations of agricultural land and productivity. Such activities, which are not affected by agricultural constraints, should be included. This is confirmed by the emphasis on these activities in policy packages for the landless poor.
- ii) The confusion over "off-farm" and "non-farm" activities should be avoided. Logically, the "off-farm" category could include straightforward agricultural activities, such as income earned by peasants and workers as hired labour

on farms owned by others. On the other hand, "non-farm" work generally includes a non-agricultural component. "Farm" needs to be understood unambiguously as referring to a set of economic activities, rather than to the location where any particular activity is executed. A distinction between "farm" and "agriculture" would also be appropriate, where the latter refers exclusively to crop cultivation, while the former also includes the auxiliary agricultural activities, mentioned above. The correct category then is all "non-agricultural" activities, irrespective of whether they are conducted on one's own farm or elsewhere. For simplicity, we use "non-farm" as a synonym to "non-agricultural". Non-farm activities include both "on-farm" and "off-farm" activities.

- iii) The rural industrial sector, or rural enterprises, constitutes one part of the rural non-agriculture sector.

The rural non-agriculture sector also includes various services, household-based petty production activities and non-agricultural labour, which in turn includes work on rural public works programmes and creation of public infrastructure.

There are two alternative approaches to define rural non-farm activities: the first is conventional, and may be labelled as the locate approach. The primary criterion for the identification of rural non-farm activities is that it is performed in a location, which falls within a designated rural area. Such a definition seems appropriate with respect to the objectives pertaining to physical and spatial planning, industrial decentralization and relocation, and so on.

The second definition is based on the linkage approach. For this definition, the point is rural. The key test is whether an industrial enterprise, or any other non-farm activity, generates significant developmental linkages with the rural residents. The locative requirement is applied to the population, but not to the activity concerned. The first element in the measurement of the rural linkages of, say, an industrial enterprise could be the percentage of value-added accruing to rural residents.

Principal Sources of Demand for the Products and Services of Rural Non-Farm Activities

Rural Income

A central issue is whether or not the demand for rural non-farm activities should be expected to increase as rural income increases. There have been some divergent views. Some have argued that rural non-farm goods and services are "inferior" and thus the demand for these goods will decline as rural income rises. Others have contended that there is a strong, positive relationship between rural income and the demand for rural non-farm activities. The available evidence, though limited, tends to support this view. Virtually all the standard analyses of rural household expenditure surveys indicate that the income elasticity of demand by rural households for non-food consumption items is positive and, in most cases exceeds unity, and that these activities account for an increasing proportion of a rural household's budget as its income rises.

Consequently, these reveal that rural non-farm goods are not "inferior", and rather than being viewed as an overriding constraint, the demand induced from increasing income should be viewed as a strong force for the growth of rural non-farm activities in developing countries.

Backward and Forward Production Linkages

A second major demand issue centers on the nature and extent of the production linkages between rural non-farm activities and other sectors of the economy, particularly the agriculture and large-scale industrial sector. Specifically, there are the "forward" linkages from the rural non-farm sector, where rural non-farm outputs serve as inputs to other sectors, and the "backward" linkages, where the rural non-farm sector demands the outputs of other sector. Hirschman (1958) contends that the linkages between agriculture and other sectors are quite weak. Mellor (1976) argues that linkages with agriculture are potentially quite significant. These agricultural linkages are an essential ingredient in Mellor's "rural-led strategy of development". The empirical evidence on rural non-farm linkage with agriculture tends to be somewhat limited. The vast majority of the input-output studies fail to include any explicit rural non-farm activities, and thus they mask or understate the rural non-farm linkages with agriculture. The input-output studies that specifically include rural non-farm activities, however, indicate that the "forward" and "backward" production linkages from this sector to agriculture are quite important. With respect to the "forward linkages" from rural non-farm activities to agriculture, the empirical studies indicate that rurally produced agricultural inputs are particularly important, where traditional "intermediate" agricultural technologies are utilized. Johnston and Kilby's analysis (1975) of farm equipment in India, Pakistan, and Taiwan stresses that traditional tools are most often made by rural artisans, while improved implements, and irrigation pumps and motors are likely to be fabricated by light engineering workshops located in rural towns.

The "backward" linkages from rural non-farm activities to agriculture are quite significant, especially the linkages between rural agricultural processing and the agriculture sector, and between rural transport and rural marketing activities. Krishna's (1973) input-output study of India indicates that such activities as the processing of gum, tobacco, sugar, cashew nuts, and flour have the highest inter-sectoral linkages.

Urban and Foreign Demand

The final important demand issue centres on the nature and magnitude of the foreign and urban demand for the products of rural non-farm enterprises. The lack of detailed data on the location of productive activities in most countries makes it difficult to derive any definitive conclusion on this issue.

The available evidence does indicate that rural non-farm products do enter into international markets and that, for some activities, the international market is a major component of the total market. In Iran, handicrafts, including carpets, are the largest export item after oil, and 60 per cent of the handicraft activities are undertaken in the rural areas. In India, handicraft and handloom commodities account for approximately six per cent of the country's value of exports.

Supply of Rural Non-Farm Activities

Labour Intensity

One important supply issue is whether rural non-farm activities are more labour-intensive than other segments of the economy. In developing countries, capital and foreign exchange are relatively scarce and unskilled labour is relatively abundant. Those activities and techniques of production that are more labour-intensive would generate the largest amount of employment per unit of scarce factor and thus appear to be the most appropriate to their factor endowments.

Although some studies reveal that smaller enterprises are more labour-intensive than larger enterprises, they do not differentiate between rural and urban enterprises and thus do not conclusively verify whether rural non-farm activities are more labour-intensive.

Labor Productivity

A second supply issue centres on how the labour productivity of rural non-farm activities compares to that in other segments of the economy. The available empirical evidence generally indicates that the average productivity of labour is lower in small-scale enterprises than in the larger-scale enterprises. Such findings are not surprising in light of the results presented in the previous section that the larger enterprises possess greater amounts of capital per worker.

Capital Productivity of Rural Non-Farm Activities

A third supply issue is whether or not rural non-farm enterprises use capital as efficiently as other enterprises. It has been argued during the 1960s that small-scale, labour-intensive activities would use not only more labour, but also more capital than their larger-scale counterparts. Hence, they argued that these small-scale, labour intensive activities would offer lower output-capital ratios and would be consequently less efficient than the larger, more capital-intensive enterprises.

The majority of the empirical evidence, however, appears to support the view that "the smaller enterprises, with a lower level of investment per worker, tend to achieve a higher productivity of capital than do larger, more capital-intensive enterprises".

III

NON-FARM EMPLOYMENT IN INDIA

Introduction

The steady structural transformation of the economy from predominantly agricultural to increasingly non-agricultural emphasize the need to progressively reduce the number of people wholly dependent on the agriculture sector for employment.

Although the share of agriculture in GDP has been continuously declining (about 25 per cent at present as compared to 40 per cent in 1983), there has been a very slow decline in the percentage of workers employed in it, the proportion being about 58 per cent now as compared to about 63 per cent two years ago. This implies slower growth of labour productivity in the agricultural sector, resulting in the persistence of rural poverty. The growth of the rural economy, though slow, has witnessed increasing diversification. *The rural non-farm sector employment has thereafter increased from 16.6 per cent in 1977-1978 to 23.8 per cent in 1999-2000. The annual increase in employment in the sector was 7.2 per cent.*

Liberalization and globalization of the Indian economy which have brought about drastic changes in the macroeconomic environment bear important implications for the sector as well as state. But the factors behind the growth of rural non-farm sector vary among different regions of the country.

State-wise and Sector-wise distribution of Rural Non-Farm Employment

It is important to appreciate the employment stakes in rural manufacturing, more so in view of the disturbing signals thrown up by some studies, specially the study by public analyst Dubashi (2000). In this context, statewide farm and non-farm breakup of rural workers has been discussed for the years 1983, 1993-94 and 1999-2000, and also their share in the manufacturing sector. In the cross-state comparison, there is steady decline of rural workforce in the agricultural sector in states like Assam, Bihar, Himachal Pradesh, Kerala, Andhra Pradesh and Haryana. In Jammu & Kashmir, Madhya Pradesh, Orissa, Punjab, Rajasthan, Tamil Nadu and West Bengal, this decline was not appreciable. However, in states like Gujarat, Karnataka and Maharashtra, the proportion is in declining trend during the pre-reforms period and continues to increase in post-reforms period.

Table: 3.1
Sectoral Classification of Rural Non-Farm Employment

Sectors		Male				Female			
		1983	1987-88	1993-94	1999-2000	1983	1987-88	1993-94	1999-00
Agricultural	Rural	77.5	74.5	74.1	71.4	87.5	84.7	86.2	85.3
	Urban	10.6	9.1	9.0	6.5	31.5	29.4	24.7	17.6
Mining and quarrying	Rural	0.6	0.7	0.7	0.6	0.3	0.4	0.4	0.3
	Urban	1.2	1.3	1.3	0.9	0.7	0.8	0.6	0.4
Manufacturing	Rural	7.0	7.4	7.0	7.3	6.4	6.9	7.0	7.6
	Urban	26.8	25.7	23.5	22.4	26.7	27.1	24.1	24.0
Utilities	Rural	0.2	0.3	0.3	0.2	NA	NA	NA	NA
	Urban	1.1	1.2	1.2	0.8	0.2	0.2	0.3	0.2
Construction	Rural	2.2	3.7	3.2	4.5	0.7	2.7	0.9	1.1
	Urban	5.1	5.8	6.9	8.7	3.2	3.7	4.1	1.1
Secondary sector	Rural	10.0	12.1	11.2	12.6	8.7	10.0	8.4	9.0
	Urban	34.2	34.0	32.9	32.8	30.8	31.8	29.1	29.4
Trade and hotels	Rural	4.4	5.1	5.5	6.8	1.9	2.1	2.1	2.0
	Urban	20.4	21.5	21.9	29.4	9.5	9.8	10.0	16.9
Transport & communication	Rural	1.7	2.0	2.2	3.2	0.1	0.1	0.1	0.1
	Urban	10.0	9.7	9.7	10.4	0.6	1.2	1.3	1.8
Services	Rural	6.1	6.2	7.0	6.2	2.8	3.0	3.4	3.6
	Urban	24.7	25.2	26.4	19.0	26.7	27.8	35.0	34.2
Tertiary sector	Rural	12.5	13.4	14.7	16.2	4.8	5.3	5.6	5.7
	Urban	55.2	56.9	58.0	58.8	37.7	38.8	46.3	52.9
All non-agricultural	Rural	22.5	25.5	25.9	28.6	13.5	15.3	13.8	13.7
	Urban	89.4	90.9	91.0	93.5	68.5	70.6	75.3	82.4

Source: GOI, *Economic Survey (1990)*, GOI (1997) *Employment and Unemployment, NSS 50th Round July 1993-June 1994, NSS Report No.409, New Delhi*, GOI (2001) *Employment and Unemployment, NSS 55th Round July 1999-June 2000, NSS Report New Delhi*

Interestingly, an emerging trend is discernible for rural male and female workers, especially during the post-reforms period. For males, the states like Assam, Himachal Pradesh, Kerala, Punjab and Uttar Pradesh reflect a greater shift

from agriculture to non-agriculture during the post-reforms period in contrast to pre-reforms. For females, states like Bihar, Jammu & Kashmir, Orissa, Uttar Pradesh and West Bengal also showed the above tendency. On the contrary, in the states like Andhra Pradesh, Gujarat, Haryana, Himachal Pradesh, Karnataka, Maharashtra and Rajasthan, the proportion of rural female agriculture workers has actually increased by differing proportions or remained constant. Above all, the structural transformation of the rural workforce was steadily tilting in favour of non-agricultural jobs during the decade preceding economic reforms; both for male and female workers. In most of the states, it got reversed, while in some states it witnessed a slowing pace. It is only in a few states that the perceptible shift from agriculture has continued even after the reforms arrived.

Table: 3.2
Sectoral Distribution of Usual Status Rural Workers in Indian States by Workers Sex

States	Year	Agriculture			Manufacturing			Non-agriculture		
		RM	RF	RT	RM	RF	RT	RM	RF	RT
Andhra Pradesh	1983	77.1	83.4	80.1	8.0	7.6	7.7	22.6	16.3	19.9
	1993-94	75.6	83.7	79.3	7.1	7.4	7.3	24.4	16.3	20.7
	1999-00	74.4	84.4	78.8	6.2	6.1	6.2	25.6	15.6	21.2
Assam	1983	78.6	79.8	80.0	3.3	9.2	4.4	21.2	18.0	20.0
	1993-94	77.7	82.9	78.7	4.0	10.5	5.4	22.3	17.1	21.3
	1999-00	64.5	79.3	67.7	4.2	10.0	5.4	35.5	20.7	32.3
Bihar	1983	81.2	88.1	83.5	6.3	6.1	6.3	18.6	11.8	16.5
	1993-94	81.9	91.8	84.2	4.2	4.1	4.1	18.1	18.2	15.8
	1999-00	79.0	85.8	80.7	5.8	8.5	6.5	21.0	14.2	19.3
Gujarat	1983	78.9	92.0	84.4	7.4	3.3	5.7	20.3	7.1	15.6
	1993-94	71.0	90.6	78.7	12.9	4.2	9.5	28.8	9.4	21.3
	1999-00	71.9	92.2	80.4	10.2	2.1	6.8	28.1	7.8	19.6
Haryana	1983	71.2	89.5	77.7	7.6	3.8	6.1	28.5	9.9	22.3
	1993-94	60.8	93.0	71.9	6.5	1.5	4.8	39.2	6.8	28.1
	1999-00	59.5	92.7	69.8	10.5	2.1	7.9	40.5	7.3	30.2

States	Year	Agriculture			Manufacturing			Non-agriculture		
		RM	RF	RT	RM	RF	RT	RM	RF	RT
Himachal Pradesh	1983	77.0	97.5	87.6	5.5	1.1	3.3	22.1	2.4	12.4
	1993-94	65.8	95.5	80.2	5.3	1.7	3.5	34.2	4.5	19.8
	1999-00	55.3	95.1	74.8	7.8	1.1	4.5	44.7	4.9	25.2
Jammu & Kashmir	1983	71.7	96.1	79.5	5.9	2.1	4.6	27.9	3.6	19.8
	1993-94	61.3	94.7	75.5	6.5	0.9	4.1	38.6	5.2	24.5
	1999-00	64.1	91.0	73.0	5.6	5.7	5.6	35.9	9.0	27.0
Karnataka	1983	81.6	88.2	84.2	5.6	6.6	6.0	18.2	11.6	15.8
	1993-94	80.4	84.1	81.9	5.9	7.8	6.6	19.6	15.9	18.1
	1999-00	78.5	88.0	82.2	6.0	5.8	5.9	21.5	12.0	17.8
Kerala	1983	57.6	70.4	63.1	12.6	17.7	14.5	42.3	29.5	36.9
	1993-94	52.8	62.8	56.1	10.7	19.4	13.6	47.1	37.1	43.9
	1999-00	43.0	60.6	48.8	11.6	20.2	14.4	57.0	39.4	51.2
Madhya Pradesh	1983	87.3	93.8	90.0	4.4	3.3	3.9	12.5	5.8	10.0
	1993-94	87.2	93.9	89.9	3.7	3.3	3.5	12.8	6.1	10.1
	1999-00	84.2	91.7	87.2	4.3	4.0	4.2	15.8	8.3	12.8
Maharashtra	1983	79.5	92.7	85.6	6.9	2.7	5.0	20.2	7.0	14.4
	1993-94	75.3	91.2	82.6	7.2	3.1	5.3	24.7	8.8	17.4
	1999-00	73.9	94.0	82.8	7.6	2.2	5.2	26.1	6.0	17.2
Orissa	1983	78.1	81.0	79.1	8.0	10.0	8.7	21.8	19.0	20.9
	1993-94	78.8	85.1	81.0	6.3	7.6	6.8	21.2	14.9	19.0
	1999-00	77.0	81.2	78.6	6.2	12.6	8.6	23.0	18.8	21.4
Punjab	1983	77.0	92.1	82.5	7.3	4.2	6.3	22.3	7.2	17.5
	1993-94	68.0	92.7	74.6	7.5	1.3	5.9	31.9	7.3	25.4
	1999-00	64.0	90.7	72.9	10.0	3.0	7.7	36.0	9.3	27.1

States	Year	Agriculture			Manufacturing			Non-agriculture		
		RM	RF	RT	RM	RF	RT	RM	RF	RT
Rajasthan	1983	80.7	94.0	86.7	5.7	2.5	4.2	19.0	6.0	13.3
	1993-94	69.5	93.0	79.8	6.9	1.5	4.6	30.4	7.0	20.2
	1999-00	67.1	92.1	77.9	6.4	2.9	4.8	32.9	7.9	22.1
Tamil Nadu	1983	68.7	81.7	74.6	12.5	9.9	10.9	31.2	18.1	25.4
	1993-94	63.8	78.4	70.4	14.0	13.1	13.6	36.2	21.6	29.6
	1999-00	62.6	76.4	68.3	14.4	14.4	14.4	37.4	23.6	31.7
Uttar Pradesh	1983	78.5	89.5	82.0	8.3	5.4	7.4	21.0	11.1	18.0
	1993-94	76.2	90.0	80.0	7.9	4.8	7.1	23.8	10.0	20.0
	1999-00	71.7	87.7	76.4	9.4	6.5	8.5	28.3	12.3	23.6
West Bengal	1983	73.0	74.8	73.6	9.3	16.6	11.1	26.8	24.8	26.4
	1993-94	64.8	59.6	63.6	12.8	30.3	17.0	35.1	40.4	36.4
	1999-00	66.0	52.6	63.0	11.9	38.0	17.7	34.0	47.4	37.0

Note: RM: rural male RF: rural female RT: rural total

Source: NSSO, Economic Survey (1990)

Besides these structural shifts, agriculture still continues to be the mainstay for the rural female workers. There are 8 out of 17 states, where the share of agricultural employment exceeds 90 per cent and in no fewer than 15 states, their share was not less than 75 per cent in 1999-2000. It is only in West Bengal and Kerala, where rural females command a fairly respectable proportion of non-agriculture employment. In an overwhelming majority of the states not more than 15 per cent of rural females are engaged in non-agricultural activities.

In some states like Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh, Maharashtra, Punjab and Rajasthan, the proportion is exceedingly low, ranging from a low of 4.9 per cent in Himachal Pradesh to high of 9.3 per cent in Punjab. Overall, the post reforms scenario does not present a much brighter picture for female workers. Further, in a majority of the states, rural workers' employment in manufacturing sector has been of a very low order, with no sign of perceptible improvement. During 1999-2000, 10 out of the 17 majority states, about 5-6 per cent of the rural workers were engaged in manufacturing sector. This is true for rural male workers in eight states and rural female workers for 11 states. In the states like Gujarat, Himachal Pradesh, Haryana, Maharashtra, Punjab and Rajasthan, female presence in manufacturing sector is about 2-3 per

cent. On the contrary, the states like West Bengal, Kerala and Tamil Nadu and to a lesser extent in Assam and Orissa, rural workers are engaged in manufacturing sector in sizable numbers which is not declining. In West Bengal and Kerala, the presence of female workers in manufacturing has not only been miles ahead of other states but also on a constant rise. In these states, a large proportion of female workers is engaged in a variety of rural handicrafts. However, their productivity and earning levels are relatively low.

IV

AN OVERVIEW OF THE UTTAR PRADESH ECONOMY

Overview

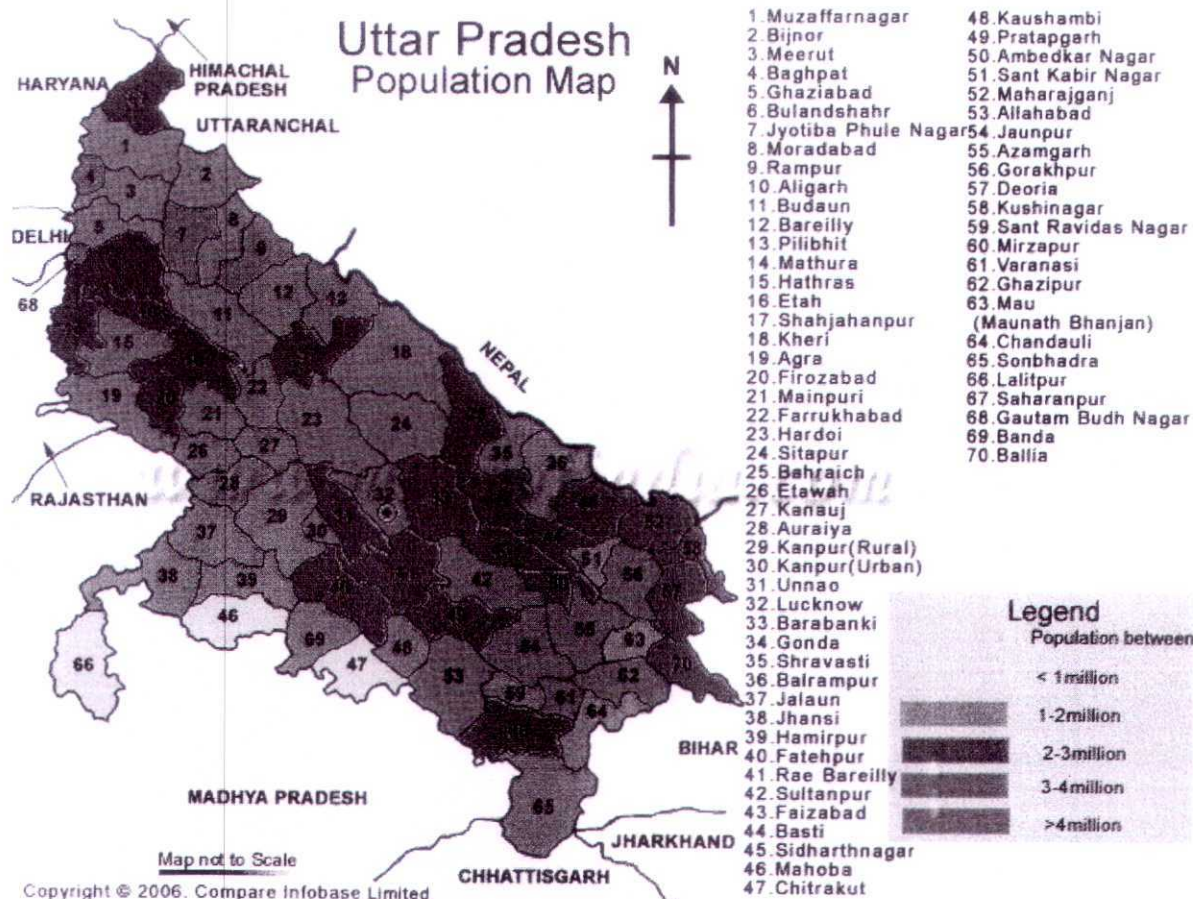
The objective of this overview is to present a background of the present levels of development of the state, economic and social as well as salient demographic features (see Table 4.1 and also Map 4.1).

Table: 4.1
Salient Demographic and Economic Features of U.P.

1.	Population (crore) 2001	
2.	Geographical area (lakh sq. km.) 2001	2.41
3.	Population density (per sq. km) 2001	689
4.	Forest area (lakh ha.) 2001-02	16.9
5.	Cultivable, Waste/User land (lakh. ha) 2001-02	11.1
6.	Fallow land (lakh ha.) 2001-02	16.5
7.	Percentage share in Total Workers (2001)	
	Agriculture	66
	Manufacturing	6
	Others	28
8.	Percentage share in State Income (2002-03)	
	Agriculture	31.8
	Manufacturing	10.9
9.	Irrigation potential created against Ultimate potential (percentage), 2001-02	
	Surface water	64.3
	Ground water	68.9
10.	Village Connectivity (percentage) 31/3/02	51.1
11.	Village Electrified (percentage) 2002-03	56.9

Source: *Statistical Abstracts of the Government of Uttar Pradesh*

Map: 4.1



Source: - U.P. Census-2001

- (1) The decadal growth rate of population was 25.55 per cent for the period 1981-91 and 25.80 per cent for the period 1991-01.
- (2) Literacy in the state as per 2001 census is 56.3 per cent, as against all India average of 64.8 per cent.
- (3) Per capita income (2002-03) in U.P is Rs.10, 289, as against Rs.18, 912 of all India figure.
- (4) Per capita consumption of Electricity (2002-03) is 188 kwh in U.P. whereas all India figure is 373 kwh.
- (5) Road length per lakh population (1998-99) is 63.6 km., whereas all India figure is 85.6 km.
- (6) 75.4 percentage holdings are below one hectare (1995-96) in U.P., the all India figure for this 61.6
- (7) Per capita net area sown is 0.10 hectare in 2000-01 in U.P., against the all India figure of 0.14 hectare.

- (8) In U.P., 15.4 percentage area is under commercial crops in the year 2001-02, against the all India figure for the same period of 24.6 percentage.
- (9) Birth rate (2002) in U.P. is 31.6 per thousand, whereas the all India figure is 25.0 per thousand. U.P. ranks 14th in this field.
- (10) According to the year 2002, the rank of U.P. for the figure of death rate is 12th with the actual figure 9.7 per thousand, as against 8.1 per thousand of all India figure.
- (11) Infant Mortality Rate 2002 for U.P. is 80 per thousand live births whereas the national figure is 63 per thousand live births.

The most important and unique economic indicator which throws light on the effectiveness and impact of different development programmes being implemented in various sectors is income level of a state. The statistics of state income depict that annual growth rate of total income in the Ninth Five Year plan period (1997-2002) in U.P. was 2.3 per cent as against 5.5 per cent in India. Similarly, annual growth rate of per capita income in the same period for U.P. was 0.0 per cent as against 3.6 per cent of all India.

Sectoral Growth

Sectoral distribution of state income and national income reveals that as per quick estimates of Uttar Pradesh for 2002-03 primary, secondary and tertiary sectors have a contribution of 34.9 percentage, 19.0 percentage and 46.1 percentage respectively as against the national figure of 26.4 percentage, 21.3 percentage and 52.3 percentage respectively. It must be very serious concern of the planners and programme implementing agencies that gap in growth rates of income of the state and country is widening year after year. Therefore the investment in the state should be channelled in such a manner as to check the growing imbalance.

Table: 4.2
Comparative Growth Rates in Income (in percentage)

Plan Period Income	Annual Growth Rate of Total		Annual Growth of Per Capita Income	
	India	U.P.	India	U.P.
1	2	3	4	5
Ist FYP*	3.6	2.0	1.7	0.5
IIInd FYP	4.0	1.9	1.9	0.3
IIIrd FYP	2.2	1.6	0.0	-0.2
Three annual plans	4.0	0.3	1.8	-1.5
IVth FYP	3.3	2.3	1.1	0.4
Vth FYP	5.3	5.7	2.9	3.3
VIth FYP	4.9	3.9	2.7	1.5
VIIth FYP	5.8	5.7	3.6	3.3
Two annual plans	2.5	3.1	0.4	1.1
VIIIth FYP	6.8	3.2	4.9	1.4
IXth FYP	5.5	2.3	3.6	0.0

Source: Planning Commission *Five Year Plan

As per census figure of 2001, total workers (main + marginal) are 5,39,83,824 in the State, of this cultivators and agricultural labourers are 2,16,90,990 and 1,34,00,911 respectively, which shows that 65.89 per cent workforce is engaged in agricultural activities, as against 58.4 percentage for all India. This indicates that agricultural and its related activities, which engage the largest workforce, should be given proper attention in the State.

Regional Diversity

Table 4.3 describes farm and non-farm employment in rural areas of Uttar Pradesh by gender and region in western Uttar Pradesh. Percentage of total farm worker in western region was 82.92. Total percentage of non-farm workers was 17.08. During 2002 this number declined to 73.72 per cent in case of farm worker and increased to 26.28 per cent in case of non-farm worker. This shows during 1991-2002 non-farm employment in rural areas of Uttar Pradesh has increased, while farm employment has decreased. Percentage of male and female workers in farm activities has declined and increased in non-farm activities. Both male and female employment in western Uttar Pradesh has declined in case of farm employment and increased in case of non-farm employment.

Table 4.3
Farm and Non-Farm Employment in Rural Areas of
Uttar Pradesh by Gender and Region (Percentage)

Region	1991			2002								
	Farm Non-Farm											
	Male	Female	Total	Male	Female	Total						
Western	83.29	73.76	82.92	16.71	26.24	17.08	75.66	54.35	73.72	24.34	45.65	26.28
Central	88.27	90.46	88.43	11.73	9.54	11.57	82.40	78.72	81.99	17.60	21.28	18.01
Bundel Khand	88.49	95.23	89.70	11.51	4.77	10.30	82.57	88.67	83.71	17.43	11.33	16.29
Eastern	82.70	92.58	84.40	17.30	7.42	15.60	72.68	80.02	74.35	27.32	17.98	25.65
Whole U.P.	84.26	90.53	84.96	15.74	9.47	15.04	76..15	75.71	76.06	23.85	24.29	23.91

Source: Rural Non-Farm employment in Uttar Pradesh Determinants, Dimensions and Regional Pattern, S.P. Singh, The Indian Journal of Labour Economics. Vol.49, No.4, 2006



GHAZIABAD DISTRICT PROFILE

District Profile

Before 14 November 1976 Ghaziabad was a Tehsil of District Meerut. The then chief minister Mr. N.D. Tiwari declared Ghaziabad as a district on 14 November 1976, on the birth anniversary of Pt. J.L. Nehru, the first prime minister of India. Since then Ghaziabad has moved forward by leaps and bounds on the social, economic, agricultural and individual front.

As its boundary is adjacent to Delhi, Ghaziabad acts as the main entrance of Uttar Pradesh and, that is why, it is also called the Gateway of U.P. The place was founded in 1740 by the vizir Ghazi-ud-Din, who called it Ghaziuddinnagar. After the opening of railway line the name of the place was shortened to Ghaziabad.

The district of Ghaziabad is situated in the middle of Ganga-Yamuna doab. In shape it is roughly rectangular; its length is 72 kms and breadth is 37 kms. On the north it is bounded by the district of Meerut, on the south and Bulandshahar and Gautam Budh Nagar, on the south-west by the National capital Delhi state, and on the east by the district Jyotibaphule Nagar.

The Ganga, the Yamuna and the Hindon are the main rivers flowing through the district and they are filled with water throughout the year. Other than these, there are some small rain fed rivers, prominent among which is the Kali river.

The total area of the district (according to 1991 census) was 2,590.0 sq. kms but after the formation of the new district Gautam Budh Nagar it has come down to 1,933.3 sq. kms.

According to the census of 1991 the population of the district is 22,47,434. The density of the population, per sq. km, is 1,127.

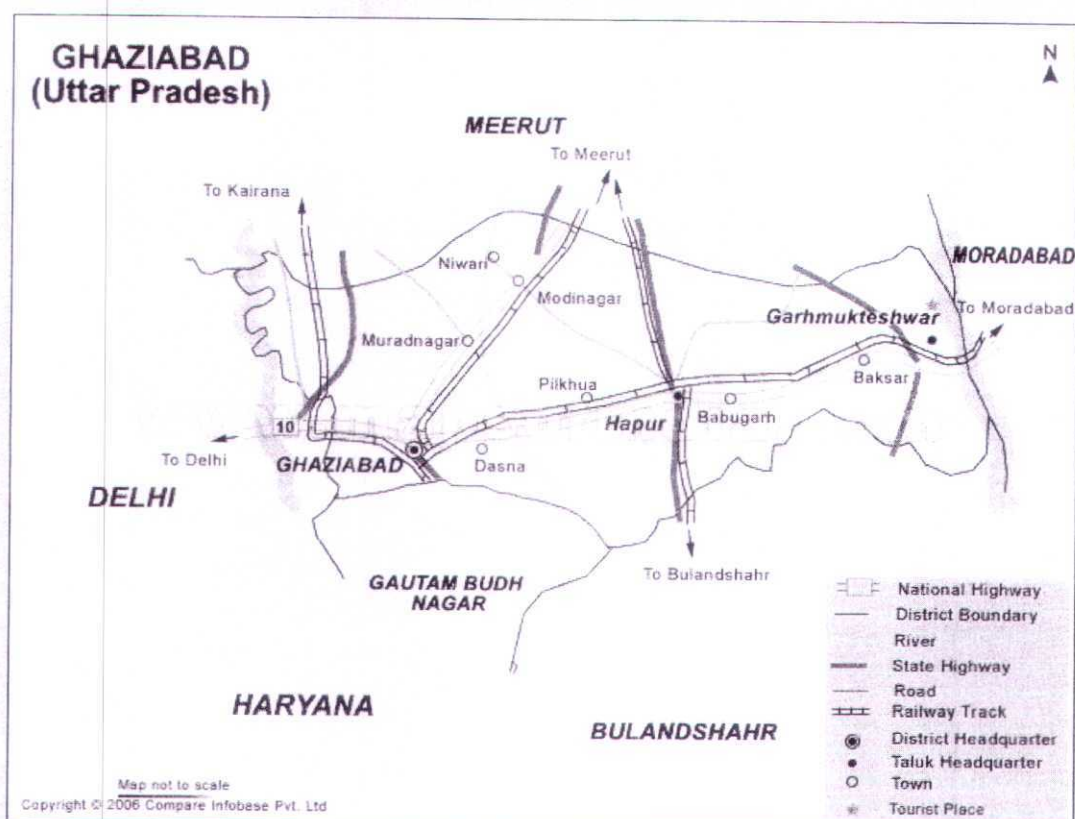
Ghaziabad is a growing industrial city. Its population has increased from 5,81,886 (in 1981) to 32,90,586 (in 2001), mainly on account of its rapid industrialization and its proximity to Delhi.

According to the 2001 census, total population of Ghaziabad district is 32,90,586, out of which 17,69,042 were males and 15,21,544 were females. Of them 14,74,171 people lived in villages and 1816415 people lived in the urban areas.

According to the 2001 census, there are 69.7 per cent literate people in the district out of which 79.8 per cent are males and 58.0 per cent are females. Glancing at the urban population and comparing with the previous census of the

district, it's clear that the rural population has decreased considerably. It seems, rapid establishment of new industrial institutions were the main reason for it. Increase in the urban population of Ghaziabad can be attributed to the influx of the people to the city for the earning their bread and to the increasing residential problem of the Delhi metro policy, a large number of people leaving it to settle in the nearby areas. As Ghaziabad is the most suitable place, its urban population has increased rapidly. (see Map 5.1)

Map: 5.1
Ghaziabad Map



Agriculture and non-agriculture of the selected four villages

All the selected four villages have a different kind of characteristics, which represent population as a whole. In the four villages most prominent feature is their classification of the economy between farm and non-farm sector. But the percentage distribution of farm and non-farm is different among the villages.

Among these, Bantla is a big village. It is very nearer to the main road. Through the industrial development of its surrounding area most of the land has come under the industry setup. That is why, farming is not buoyant. It opens the way for non-farm activity. That is why, utilities are the most democratic action in this village.

Table 5.1 describes demography of Ghaziabad. Out of 33,90,586 persons 14,74,171 are rural persons, number of rural household are 2, 24,275 and household size is 6.6. Literacy rate at Ghaziabad is 63.1 per cent. Total workers in rural area are 4,51,506.

Table: 5.1
Profile of Ghaziabad

Area	Total Population	Male	Female	Sex Ratio	S.C. Population	Percentage	S.T. Population	Percentage	No. of house-holds	House-hold Size
Total	32,90,586	17,69,042	15,21,544	860	5,93,780	18.0	207	0.0	5,38,009	6.1
Rural	14,74,171	7,93,186	6,80,985	859	2,84,949	19.3	14	0.0	2,24,275	6.6
Urban	18,16,415	9,75,856	8,40,559	861	3,08,831	17.0	193	0.0	3,13,734	5.8

Number of Literates			Number of Illiterates			Literacy Rate		Gender Gap in Literacy
Area	Person's	Male's	Female's	Person's	Male's	Person's	Male's	
Total	18,99,735	11,68,462	7,31,273	13,90,851	6,00,580	7,90,271	69.7	79.8
Rural	7,55,060	4,88,692	2,66,368	7,19,111	3,04,494	4,14,617	63.1	75.9
Urban	11,44,675	6,79,770	4,64,905	6,71,740	2,86,086	3,75,654	74.9	82.9
							65.6	17.3

Total Workers (Main + Marginal)				Non- Workers				Work participation rate (Main + Marginal)			
Area	Person's	Male's	Female's	Person's	Male's	Female's	Person's	Male's	Person's	Male's	Female's
Total	9,38,251	8,07,147	1,31,104	23,52,335	9,61,895	13,90,440	28.5	45.6			8.6
Rural	4,51,506	3,65,443	86,063	10,22,665	4,27,743	5,94,922	30.6	46.1			12.6
Urban	4,86,745	4,41,704	45,041	13,29,670	5,34,152	7,95,518	26.8	45.3			5.4

Source: Census 2001

Setting up industries not only hampered farm-activity but also the allied activities. Allied activities are not the lucrative business here. But still some people are interested in farm business. That's why, either they are purchasing land in other villages or shifting to some non-farm area.

Unlike Banthla, Tila Shasbazpur is the most prosperous village among the four, but economic lineaments are the same as above for Banthla. Most of the farmland has gone to industries setup or for some housing schemes. Like Banthla, utilities are the most prominent business here.

Among the four villages, Kharkhari is yet undecided with regard to the extent of its contribution to non-farm activities. Land area of this village is inadequate. As a result, farm as well as non-farm activities are adequately developed. Therefore, the percentage distribution of utilities and community, social and personal services are almost equal.

Like Banthla, Mahmoodpur has the same economic features, because of which the distribution of non-farm activities is the same.

Among these four villages, the villages that had the strong background in farm activity have moved easily to non-farm activity.

Table 5.2 describes distribution of total workers by main workers and marginal workers category. It is seen that out of a total of 3,54,867 rural main workers, 3,13,680 are male main workers and 41,187 are female main workers. Total number of rural marginal workers are 96,639 and of these 51,763 are male marginal workers and 44,876 are female marginal workers. Percentage of main workers exceeds marginal workers both in rural and urban areas.

Table: 5.2
Distribution of total workers by main workers and marginal workers category

Area	Number of Main Workers			Number of Marginal Workers		
	Person's	Male's	Female's	Person's	Male's	Female's
Total	799,884	723,635	76,249	138,367	83,512	54,855
Rural	354,867	313,680	41,187	96,639	51,763	44,876
Urban	445,017	409,955	35,062	41,728	31,749	9,979

Source: Census 2001

Table 5.3 gives percentage distribution to total workers by main and marginal category. Percentage of main workers are more compared to marginal workers both in Rural and Urban areas.

Table: 5.3
Percentage Distribution of total Workers by
Main and Marginal Category

Area	Main Workers (percentage)			Marginal Workers (percentage)		
	Person's	Male's	Female's	Person's	Male's	Female's
Total	24.3	40.9	5.0	4.2	4.7	3.6
Rural	24.1	39.5	6.0	6.6	6.5	6.6
Urban	24.5	42.0	4.2	2.3	3.3	1.2

Source: *Census 2001*

Table 5.4 provides various categories of total workers. In rural areas the total number of cultivators is 1,50,552, for agricultural laborers, it is 62,265, and there are 23,393 workers in household industry. The other workers are 2,15,296. It is seen that proportion of female rural workers are quite low compared to male workers in all categories.

Table: 5.4
Distribution of total Workers by Category

Area	Cultivators			Agricultural Labourers		
	Person's	Male's	Female's	Person's	Male's	Female's
Total	160,566	135,116	25,450	69,775	52,131	17,644
Rural	150,552	126,460	24,092	62,265	46,125	16,140
Urban	10,014	8,656	1,358	7,510	6,006	1,504

Area	Workers in Household Ind.			Other Workers		
	Person's	Male's	Female's	Person's	Male's	Female's
Total	43,934	30,249	13,685	663,976	589,651	74,325
Rural	23,393	14,323	9,070	215,296	178,535	36,761
Urban	20,541	15,926	4,615	448,680	411,116	37,564

Source: *Census 2001*

Table 5.5 describes percentage distribution of total worker in various categories.

Table: 5.5
Percentage Distribution of total Workers by Category

Area	Cultivators (Percentage)		Agricultural Labourers (Percentage)		Workers in Household Ind. (Percentage)		Other Workers (Percentage)								
	Person's	Male's	Person's	Male's	Person's	Male's	Person's	Male's							
Total	17.1	16.7	19.4	19.4	7.4	6.5	13.5	13.5	4.7	3.7	10.4	10.4	70.8	73.1	56.7
Rural	33.3	34.6	28.0	28.0	13.8	12.6	18.8	18.8	5.2	3.9	10.5	10.5	47.7	48.9	42.7
Urban	2.1	2.0	3.0	3.0	1.5	1.4	3.3	3.3	4.2	3.6	10.2	10.2	92.2	93.1	83.4

Source: Census 2001

Table 5.6 gives distribution of total main workers by various categories. Distribution of total main women workers in all categories is quite low compare to total male main workers in all the categories.

Table: 5.6
Distribution of total Main Workers by Category

Area	Cultivators		Agricultural Labourers		Workers in Household Ind.		Other Workers					
	Person's	Male's	Female's	Person's	Male's	Female's	Person's	Male's	Female's			
Total	140,915	129,238	11,677	40,390	34,975	5,415	32,749	26,044	6,705	585,830	533,378	52,452
Rural	131,840	20,873	10,967	35,393	30,644	4,749	15,611	11,755	3,856	172,023	150,408	21,615
Urban	9,075	8,365	710	4,997	4,331	666	17,138	14,289	2,849	413,807	382,970	30,837

Source: Census 2001

Table 5.7 below shows the percentage distribution of total main workers.

Table: 5.7
Percentage Distribution of total Main Workers by Category

Area	Cultivators (Percentage)			Agricultural Labourers (Percentage)			Workers in Household Ind. (Percentage)			Other Workers (Percentage)		
	Person's	Male's	Female's	Person's	Male's	Female's	Person's	Male's	Female's	Person's	Male's	Female's
Total	17.6	17.9	15.3	5.0	4.8	7.1	4.1	3.6	8.8	73.2	73.7	68.8
Rural	37.2	38.5	26.6	10.0	9.8	11.5	4.4	3.7	9.4	48.5	47.9	52.5
Urban	2.0	2.0	2.0	1.1	1.1	1.9	3.9	3.5	8.1	93.0	93.4	87.9

Source: Census 2001

Table 5.8 describes distribution of total marginal workers by category. It is seen that the number of total women marginal workers as cultivators and in household industries is quite high. Women as marginal workers more as compared to women as a main worker.

Table: 5.8
Distribution of total Marginal Workers by Category

Area	Cultivators			Agricultural Labourers			Workers in Household Ind.			Other Workers		
	Person's	Male's	Female's	Person's	Male's	Female's	Person's	Male's	Female's	Person's	Male's	Female's
Total	19,651	5,878	13,773	29,385	17,156	12,229	11,185	4,205	6,980	78,148	56,273	21,873
Rural	18,712	5,587	13,125	26,872	15,481	11,391	71,782	2,568	5,214	43,273	28,127	15,146
Urban	939	291	648	2,513	1,675	838	3,403	1,637	1,766	34,873	28,146	6,727

Source: Census 2001

Table below 5.9 provides percentage distribution of total marginal workers.

Table: 5.9
Percentage Distribution of total Marginal Workers by Category

Cultivators (Percentage)				Agricultural Labourers (Percentage)			Workers in Household Ind. (Percentage)			Other Workers (Percentage)		
Area	Person's	Male's	Female's	Person's	Male's	Female's	Person's	Male's	Female's	Person's	Male's	Female's
Total	14.2	7.0	25.1	21.2	20.5	22.3	8.1	5.0	12.7	56.5	67.4	39.9
Rural	19.4	10.8	29.2	26.8	29.9	25.4	8.1	5.0	11.6	44.8	54.3	33.8
Urban	2.3	0.9	6.5	6.0	5.3	8.0	8.2	5.2	17.7	83.6	88.7	67.4

Source: Census 2001

Table 5.10 shows population and sex ratio among the Scheduled Castes and Scheduled Tribes. Scheduled Castes population is more compared to Scheduled Tribes population. Total Scheduled Castes population in rural areas is 2,84,949 and Scheduled Tribes Population is 14. Sex ratio of Scheduled Castes in rural areas is 852 and Scheduled Tribe is 750.

Table: 5.10
Population and Sex Ratio Among Scheduled Castes and Scheduled Tribes

Area	Population		Sex Ratio	
	S.C.	S.T	S.C	S.T
Total	593,780	207	856	848
Rural	284,949	14	852	750
Urban	308,831	193	860	856

Source: Census 2001

Table 5.11
Farm and non-farm Employment in Rural Areas of Uttar Pradesh by
Gender and Region (Percent)

S. No.	Region	1991						2002					
		Agriculture Non-Agriculture						Agriculture Non-Agriculture					
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Western	83.29	73.76	82.92	16.71	26.24	17.08	75.66	54.35	73.72	24.34	45.65	26.28
2	Central	88.27	90.46	88.43	11.73	9.54	11.57	82.40	78.72	81.99	17.60	21.28	18.01
3	Bundel Khand	88.49	95.23	89.70	11.51	4.77	10.30	82.57	88.67	83.71	17.43	11.33	16.29
4	Eastern	82.70	92.58	84.40	17.30	7.42	15.60	72.68	80.02	74.35	27.32	17.98	25.65
5	Whole U.P.	84.26	90.53	84.96	15.74	9.47	15.04	76.15	75.71	76.06	23.85	24.29	23.91

Source: *Rural Non-Farm employment in Uttar Pradesh Determinants, Dimensions and Regional Pattern*, S.P. Singh, The Indian Journal of Labour Economics. Vol.49, No.4, 2006

VI

A MICRO LEVEL STUDY

The present chapter discusses in detail the study undertaken in the four village of Ghaziabad, namely, **Banthla, Mahmoodpur, Tila Shasbazzpur, and Nasratabad Kharkhari.**

Total numbers of households in Banthla were 631: out of these, 33 were farm based households, 127 were both farm and non-farm based (mixed) households, 471 were only non-farm households. Total numbers of households in Mahmoodpur were 285: out of these, 102 were farm based households, 145 were farm and non-farm (mixed households), and 38 were only non-farm household. Total number of households in Tila Shasbazzpur were 477: out of these, 69 were farm based households, 177 were farm and non-farm based (mixed households), 231 were only non-farm households. Total number of households in Nasratabad Kharkhari were 173: out of these, 14 were farm based house holds, 115 were farm and non-farm based (mixed households), and only 44 were non-farm households.

For the present study, 40 per cent of farm, non-farm and mixed households were selected on random basis in each of the villages, as shown in Table 1.2. Total number of households selected in Banthla were 254: out of these, 14 were farm based house holds, 51 were farm and non-farm based mixed households, 189 were only non-farm households. Total number of households selected in Mahmoodpur were 115: out of these 41 were farm based households, 58 were farm and non-farm based mixed households, 16 were only non-farm households. Total number of households selected in Tila Shasbazzpur were 192: out of these, 28 were farm based house holds, 71 were farm and non-farm based mixed households, and only 93 were only non-farm households. Total number of households selected in Nasratabad Kharkhari were 70, of which 6 were farm based households, 46 were farm and non-farm based mixed households, and only 18 were non-farm households.

Reasons for engagement in farm activity (Farm household)

Following Indicators were chosen for studying farm households:

- (1) *Profitability*: This means that the household are engaged in farm activity, because they have found it profitable, that is, after deduction of all the expenditure, there is still saving;

- (2) *Security*: In rural areas, people perceive security in terms of land; this means that they are engaged in farm activity, only because this provides them sense of security.
- (3) *Opportunities are not available*: This means opportunities in other areas i.e. government jobs, private jobs or other any kind of business facilities other than farm activity are not available.
- (4) *Lack of Skills*: This means, villagers accept that they do not have any skill; therefore they could not get any job other than farm activity.
- (5) *Lack of information*: Lack of information is also reason behind respondents indulgence in farm activity: ignorance regarding type of skills required for getting particular jobs in the private sector, which is booming, in which professional skills are required, etc.

Table 6.1 give the picture of all the four villages engaged in farm activities. Maximum number of respondents cited non-availability of opportunities as a reason for their engagement in farm activity

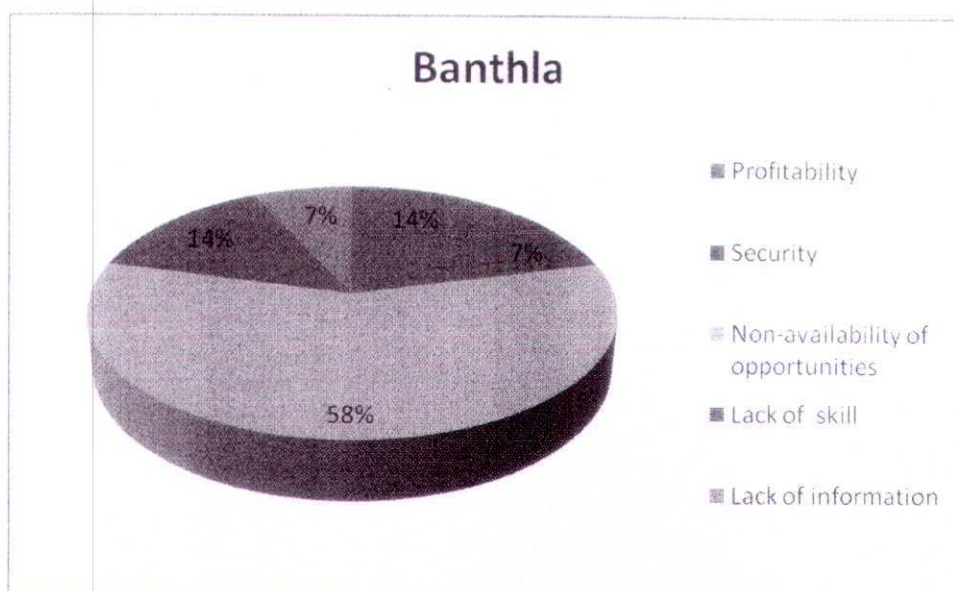
Table: 6.1
Reason for engagement in farm activity (Farm household in %)

S. No.	Reasons	Banthla	Mahmoodpur	Nasratabad Kharkhari	Tila Shasbazpur
1	Profitability	14	0	0	6
2	Security	7	27	17	6
3	Non-availability of opportunities	58	73	83	72
4	Lack of skill	14	0	0	16
5	Lack of information	7	0	0	0
6	Total	100	100	100	100

Source: Field Survey

Figure 6.1 analyses the reasons for population at Banthla village engaging in agricultural activities. Maximum number (58 per cent) said opportunities were not available in other fields, 7 per cent cited security, 14 per cent quoted profitability as a reason for engagement in agricultural activities. 14 per cent of population reported non availability of skill and 7 per cent reported lack of information as a reason for engagement in farm activities.

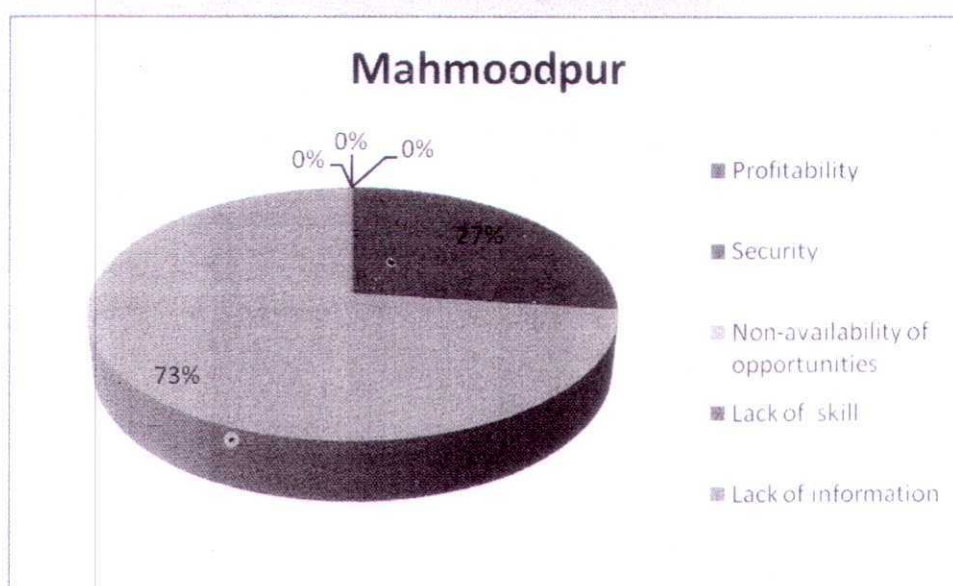
Figure: 6.1
Reasons for engagement in agricultural activities in Banthla village (Farm households)



Source: Table 6.1

Fig. 6.2 analyses the reasons for population at Mahmoodpur village engaging in agricultural activities. Maximum number (73 per cent) said that opportunities were not available in other fields. 27 per cent mentioned security as a reason for engagement in farm activity.

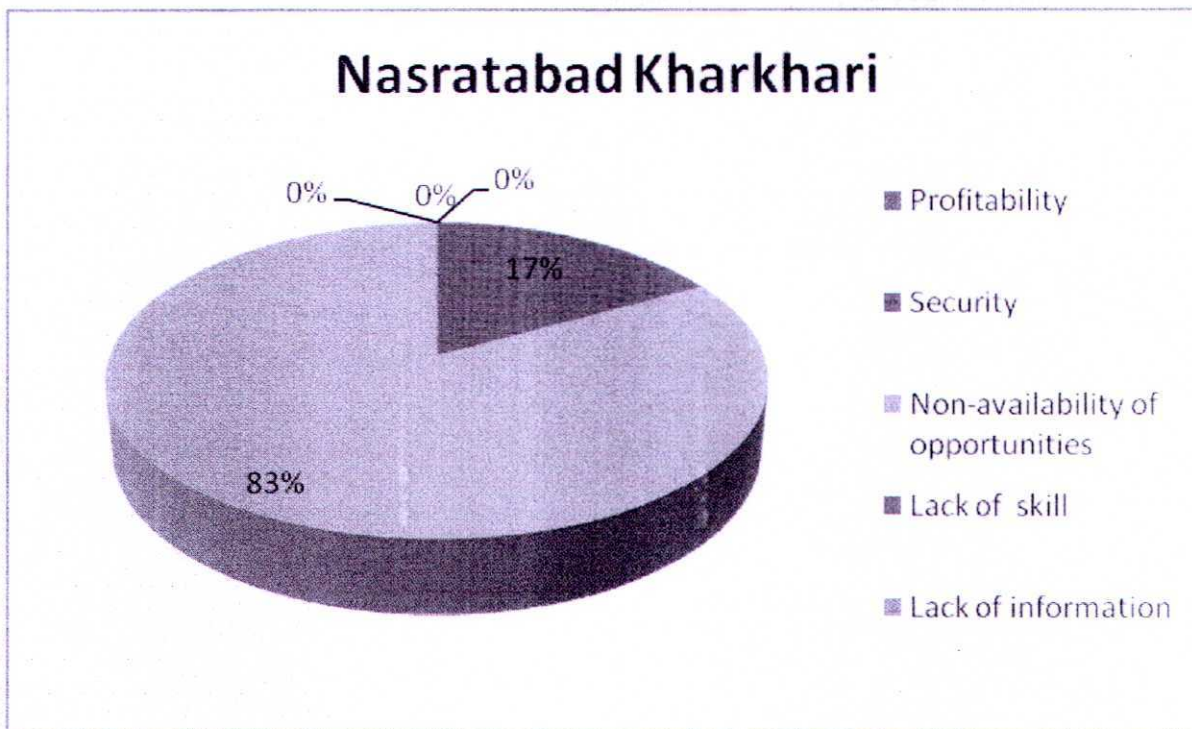
Figure: 6.2
Reasons for engagement in agricultural activities in Mahmoodpur village (Farm household)



Source: Table 6.1

At Nasratabad Kharkhari village as seen below 83 per cent people said that the reason for engagement in farm activities was non-availability. For 17 per cent population, security was the reason for engagement in farm activity (see Fig. 6.3).

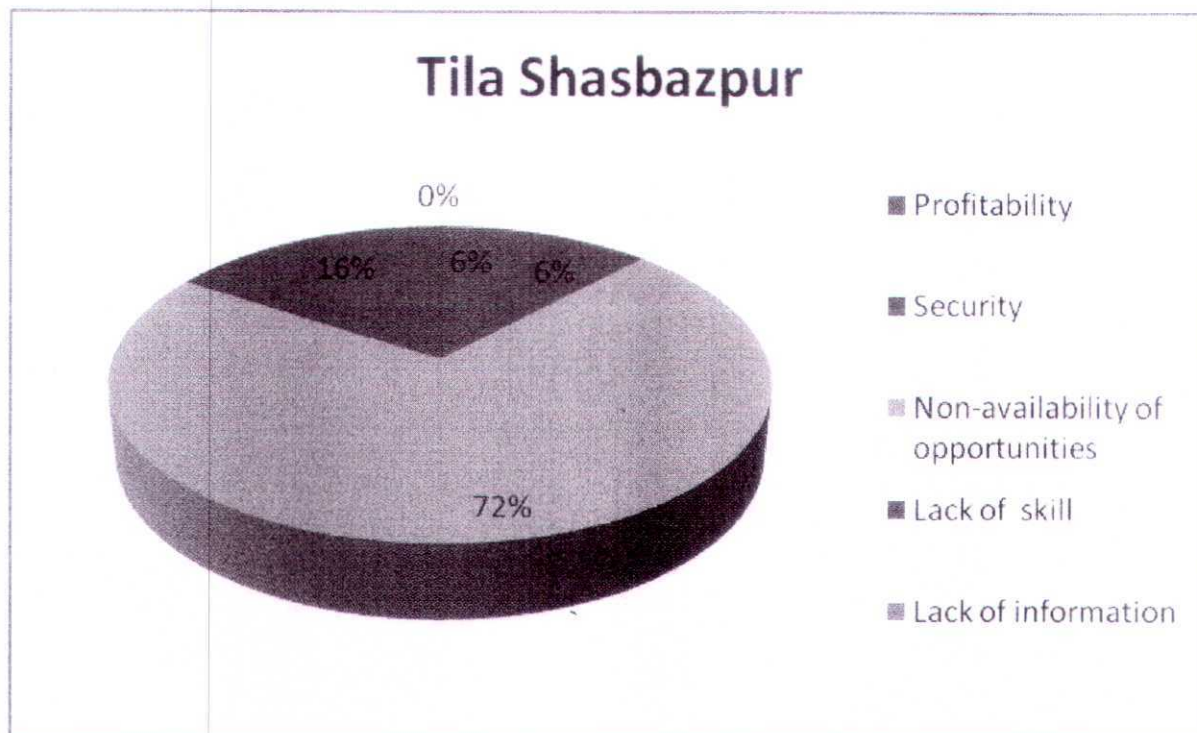
Figure: 6.3
Reasons for engagement in agricultural activities in
Nasratabad Kharkhari village (Farm household)



Source: Table 6.1

At Tila Shasbazpur village (Fig. 6.4) 72 per cent of population said that opportunities were not available, 16 per cent said they do not have any skill, 6 per cent said that agricultural occupation profitable and 6 per cent cited security from land as a reason for engagement in agricultural occupation.

Figure: 6.4
Reasons for engagement in agricultural activities in
Tila Shasbazzpur village (Farm household)



Source: Table 6.1

Occupation of parents: engaged in farm activities

Table 6.2 reflects the occupation of parents in the four villages under the study. The basis objective of this exercise was to determine whether there was any kind of shift in occupation over a period of time. It was seen, there were very few households which were engaged in non-farm activities. Maximum number still preferred to be engaged in farm activities.

Table: 6.2
Farm household: Parents occupation (in %)

S. No.	Category	Banthla	Mahmoodpur	Nasratabad Kharkhari	Tila Shasbazzpur
1	Farm	94.1	97.7	100	90.6
2	Non-farm	5.9	2.3	0	6.3
3	Mixed*	0	0	0	3.1
4	Total	100	100	100	100

Source: Field Survey

*'Mixed' connotes households in which family members are engaged in both farm and non-farm activities.

Reasons for engagement in non-farm activity (Non-Farm households)

For exclusively non-farm activity we had selected four indicators namely:

- i. *Landlessness* i.e., non-farm activity necessitated by non-ownership of land;
- ii. *Lower Income* i.e., non-farm activity taken up to supplement low income;
- iii. *Absence of full time employment opportunities* indicating presence of under employment, disguised employment or seasonal employment;
- iv. *Lack of interest* resulting from increasing literacy level.

Table 6.3 describes reasons for engagement in non-farm activity, for the population engaged in exclusively non-farm activities. It is seen that the main reason for engagement in non-farm activity is landlessness.

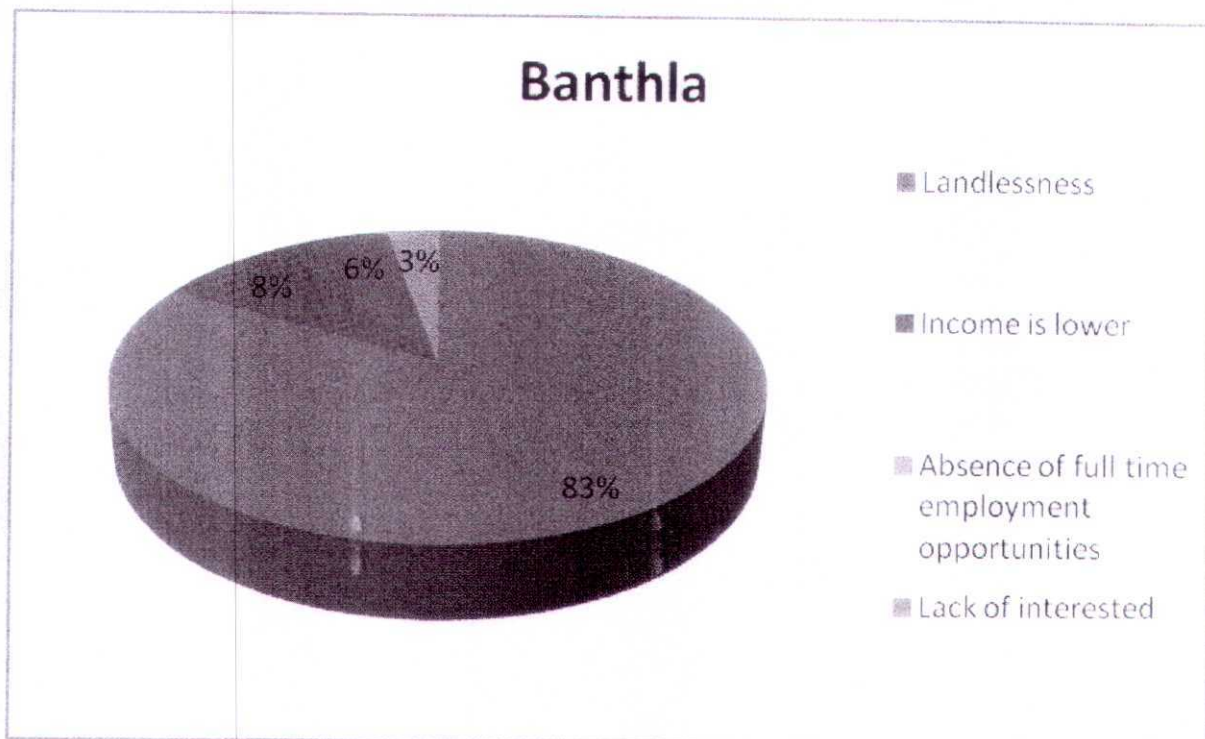
Table: 6.3
Reasons for engagement in non-farm activity
(Non-Farm households in %)

S. No.	Reasons	Banthla	Mahmoodpur	Nasratabad Kharkhari	Tila Shasbazpur
1	Landlessness	83	94	92	66
2	Income is lower	8	6	4	27
3	Absence of full time employment opportunities	6	0	0	5
4	Lack of interest	3	0	4	2
5	Total	100	100	100	100

Source: *Field Survey*

At Banthla village landlessness was the main reason for engagement in non-farm activities as seen in Figure 6.5.

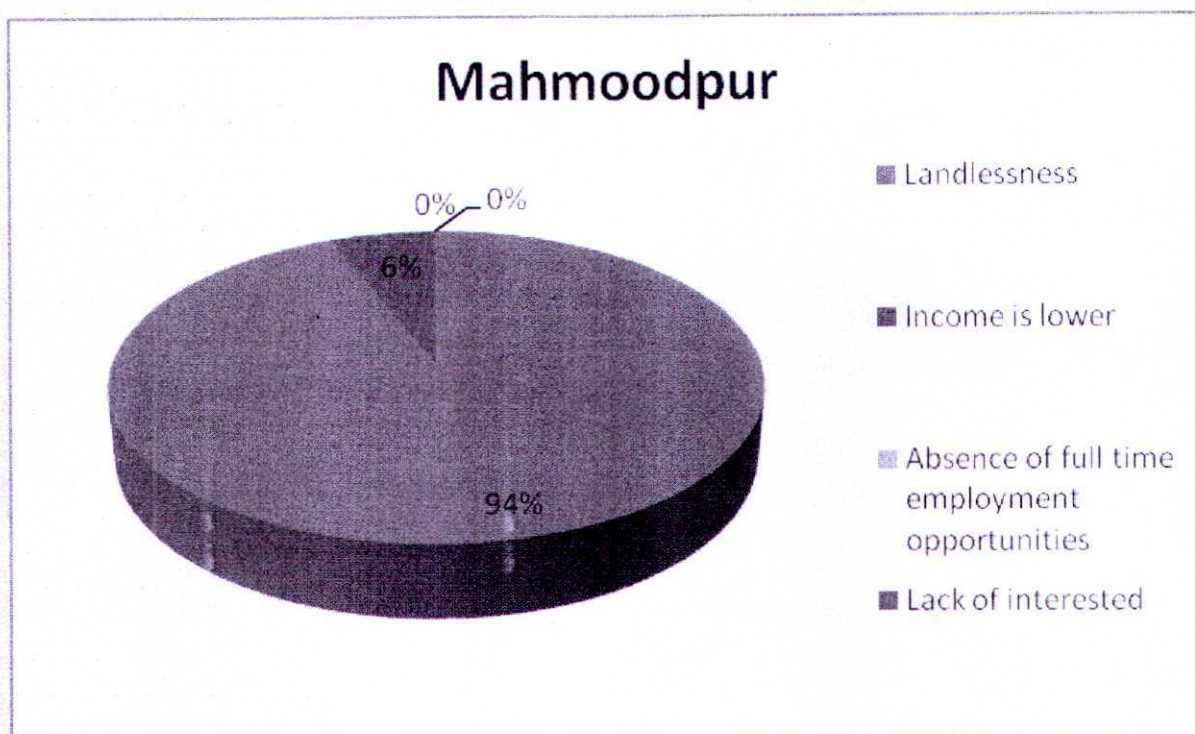
Figure: 6.5
Reasons for engagement in non-farm activity in Banthla village (Non-Farm)



Source: Table 6.3

At Mahmoodpur village also landlessness was the main reason for engagement in non-farm activities as seen in Figure 6.6.

Figure: 6.6
Reasons for engagement in non-farm activity in Mahmoodpur village (Non-Farm)

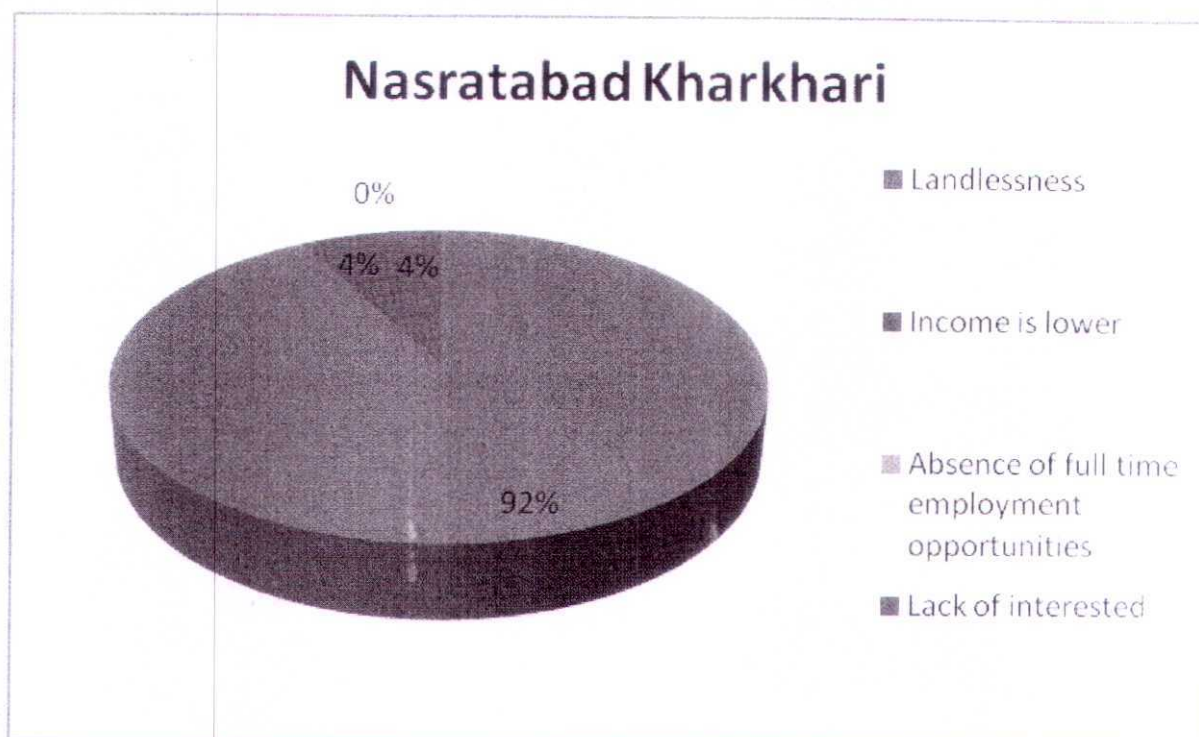


Source: Table 6.3

At Nasratabad Kharkhari village also landlessness was the main reason for engagement in non-farm activities as seen in Figure 6.7.

Figure: 6.7

Reasons for engagement in non-farm activity in Nasratabad Kharkhari village (Non-Farm)

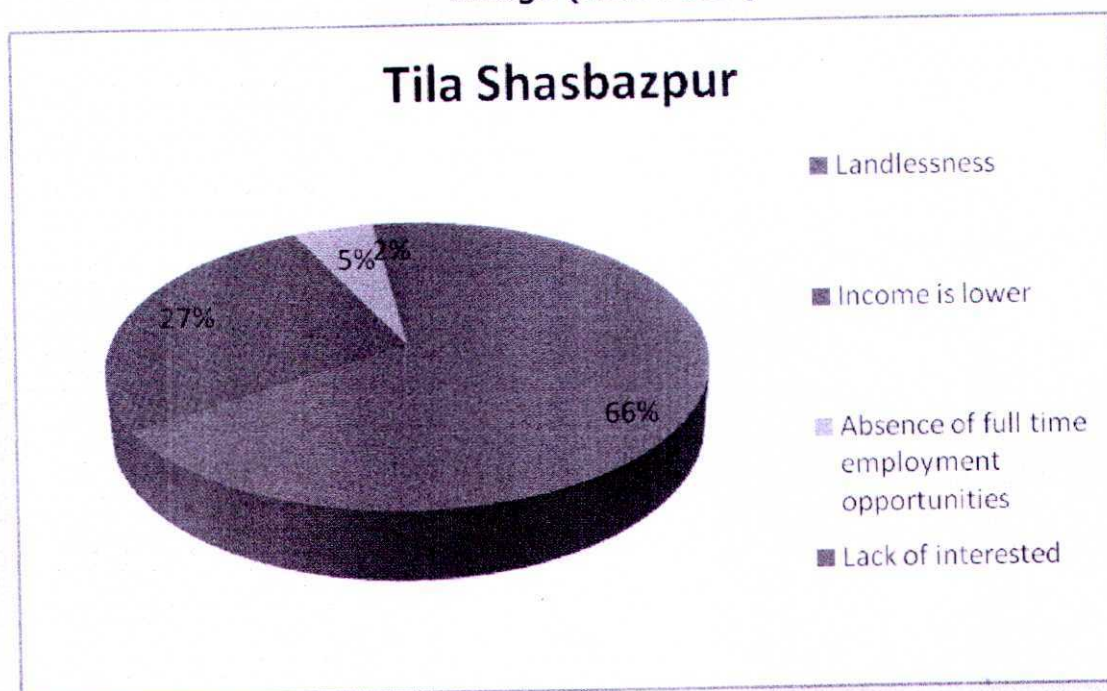


Source: Table 6.3

At Tila Shasbazzpur village also landlessness was the main reason for engagement in non-farm activities as seen in Figure 6.8.

Figure: 6.8

Reasons for engagement in non-farm activity in Tila Shasbazzpur village (Non-Farm)



Source: Table 6.3

Types of non-farm activities: exclusively non-farm household

Table 6.4 describes types of non-farm activities in exclusively non-farm households. The types of activities in which respondents were engaged were utilities, construction, trade, hotels and restaurants, transport, storage, communication, finance, insurance, real estate, community, social and personal services, as well as manufacturing.

Table: 6.4

Type of Non-Farm activity: Exclusively for Non-Farm households (in %)

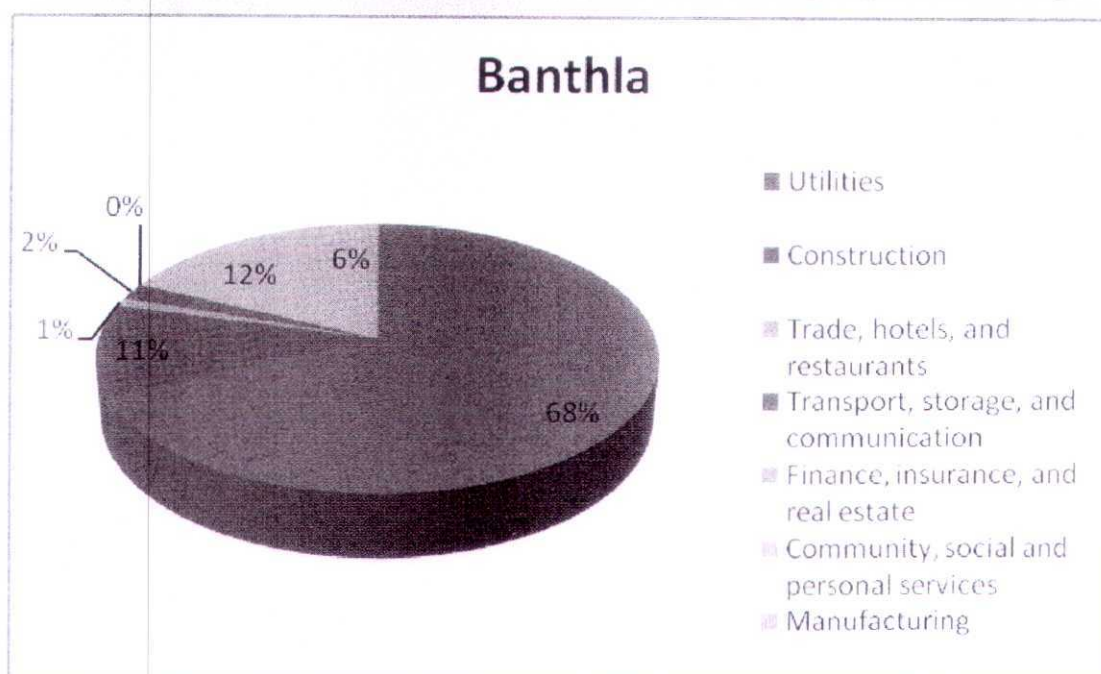
S.No.	Types	Banthla	Mahmoodpur	Nasratabad Kharkhari	Tila Shasbazzpur
1	Utilities	68	76	84	85
2	Construction	11	12	12	5
3	Trade, hotels and restaurants	1	0	0	1

S.No.	Types	Banthla	Mahmoodpur	Nasratabad Kharkhari	Tila Shasbazpur
4	Transport, storage and communication	2	6	0	0
5	Finance, insurance and real estate	0	0	0	1
6	Community, social and personal services	12	6	4	7
7	Manufacturing	6	0	0	1
8	Total	100	100	100	100

Source: *Field Survey*

Figures 6.9, 6.10, 6.11 and 6.12 below respectively explain the types of non-farm activities for both farm and non-farm households. At Banthla village, the maximum number of respondents were engaged in Utilities. This was followed by Community, Social and Personal services, Construction, Manufacturing and Transport, Storage and Communication.

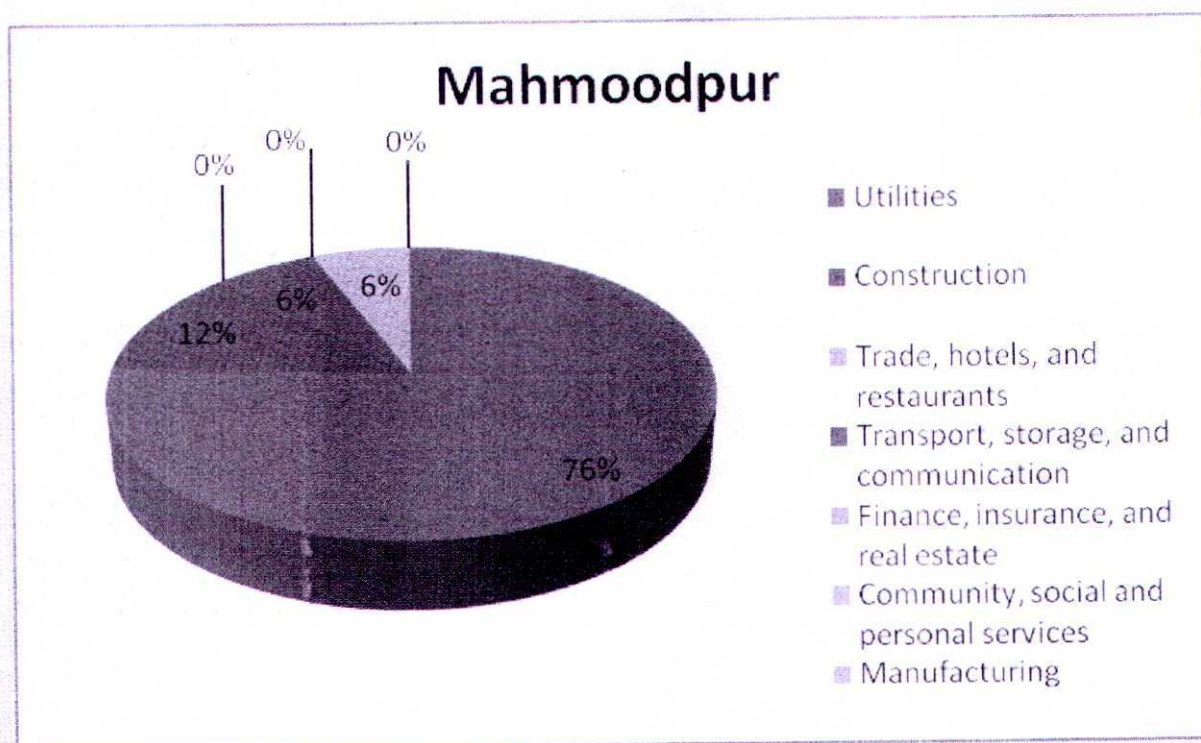
Figure: 6.9
Type of Non-Farm activity in Banthla village (Non-Farm)



Source: *Table 6.4*

At Mahmoodpur village also people were engaged in Utilities followed by Construction, Community, Social and Personal Services and Transport, Storage and Communication.

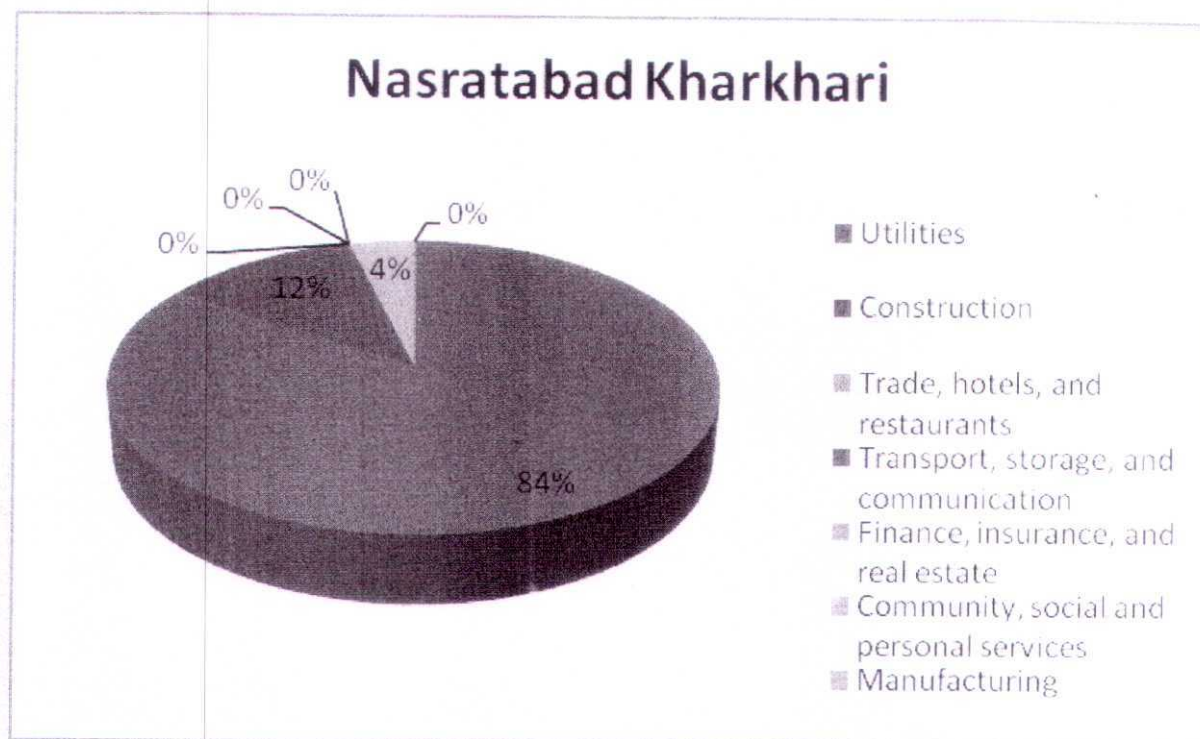
Figure: 6.10
Type of Non-Farm activity in Mahmoodpur village (Non-Farm)



Source: Table 6.4

At Nasratabad Kharkhari village also people were engaged in Utilities followed by Construction and Community Social and Personal Services.

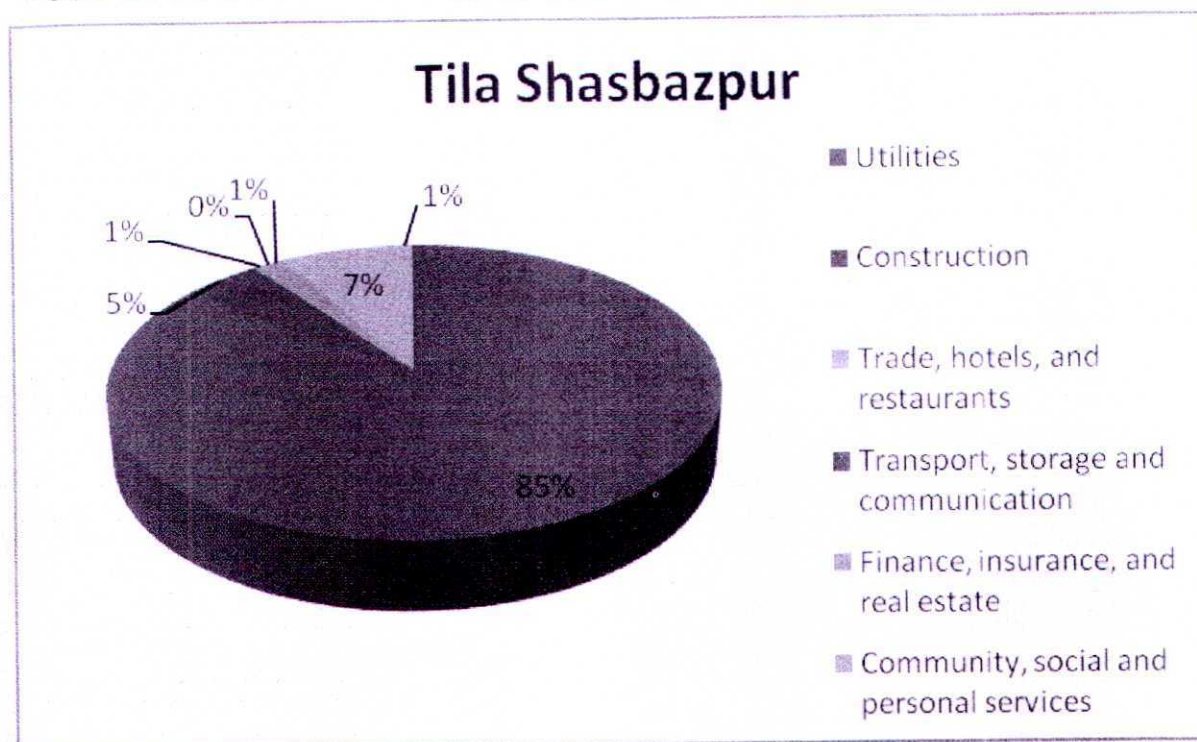
Figure: 6.11
Type of Non-farm activity in Nasratabad Kharkhari village (Non-Farm)



Source: Table 6.4

At Tila Shasbazzpur village also maximum people were engaged in Utilities followed by Community, Social and Personal Services, Construction, Trade, Hotels and Restaurants and Manufacturing.

Figure: 6.12
Type of Non-Farm activity in Tila Shasbazzpur village (Non-Farm)



Source: Table 6.1

Occupation of parents: engaged exclusively in non-farm activities

Table 6.5 show the occupations of parents engaged exclusively in non-farm activities. Maximum numbers of parents were engaged in non-farm activities. For maximum percentage parents provided the base to start non-farm activities.

Table: 6.5
Exclusively Non- Farm household: Parents Occupation (in %)

S. No.	Category	Banthla	Mahmoodpur	Nasratabad Kharkhari	Tila Shasbazzpur
1	Farm	19.4	11.8	38.5	42.6
2	Non-farm	80.6	88.2	61.5	57.4
3	Mixed	0	0	0	0
4	Total	100	100	100	100

Source: Field Survey

Reasons for engagement in farm and non-farm activities (Mixed household)

Reasons for engagement in farm activities (mixed household)

Table 6.6 shows the reasons for engagement in both farm and non-farm activities in four villages under the study. Here also maximum number reported that opportunities were not available in others fields. This was followed by security, lack of skill, profitability and lack of information.

Table: 6.6
Reasons for engagement in farm activities
(Mixed household in %)

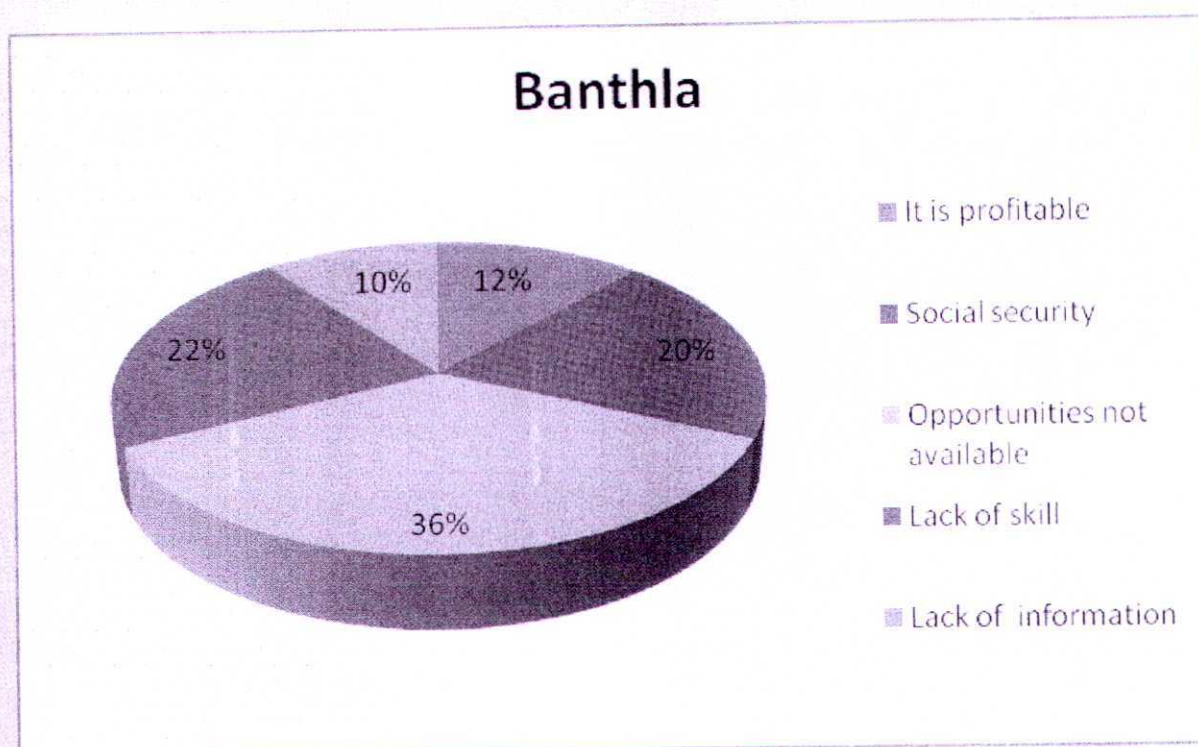
S. No.	Reasons	Banthla	Mahmoodpur	Nasratabad Kharkhari	Tila Shasbazpur
1	It is profitable	12	7	3	17
2	Social security	20	43	47	33
3	Opportunities not available	36	41	43	41
4	Lack of skill	22	7	7	9
5	Lack of information	10	2	0	0
6	Total	100	100	100	100

Source: *Field Survey*

Reasons for engagement in farm activities (Mixed household)

Figure 6.13, 6.14, 6.15 and 6.16 explain the reasons for the engagement in farm activities. At Banthla village absence of full time employment opportunities was the main reason for engagement in farm activity; this was followed by lack of skills, social security, profitability and lack of information.

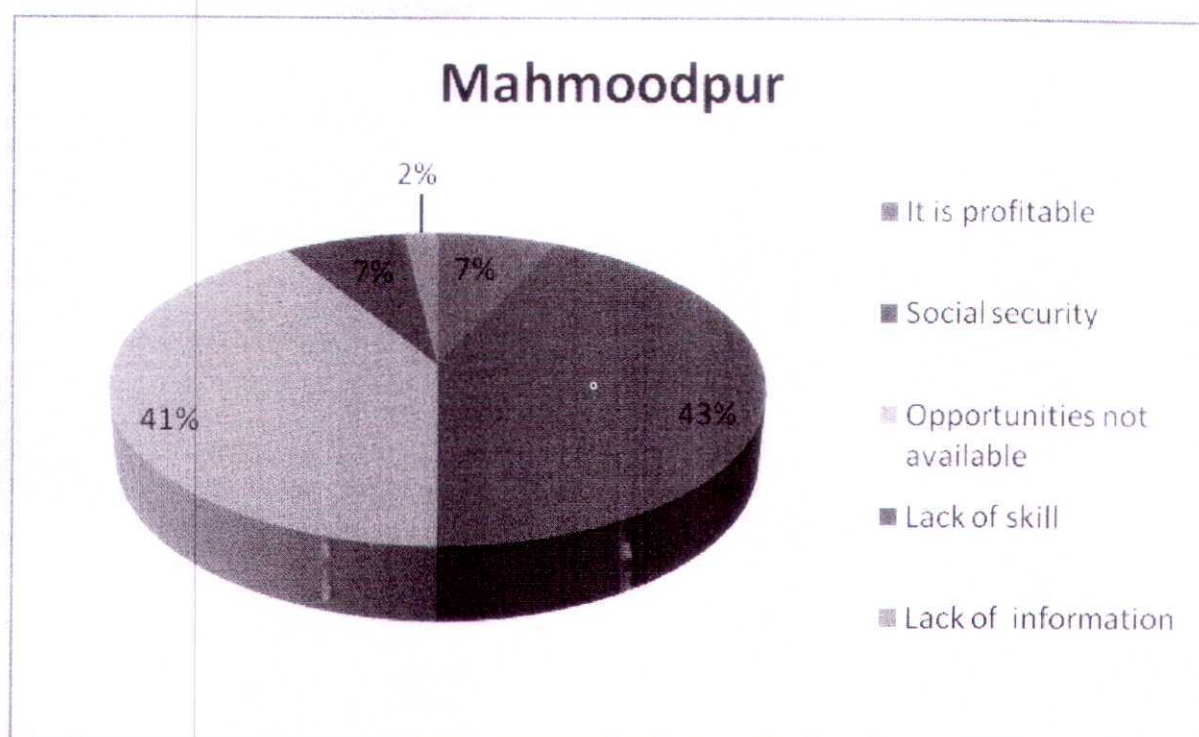
Figure: 6.13
Reasons for engagement in farm activities in Banthla village
(Mixed household)



Source: Table 6.6

At Mahmoodpur village 43 per cent respondents said social security was the main reason for engagement in farm activities.

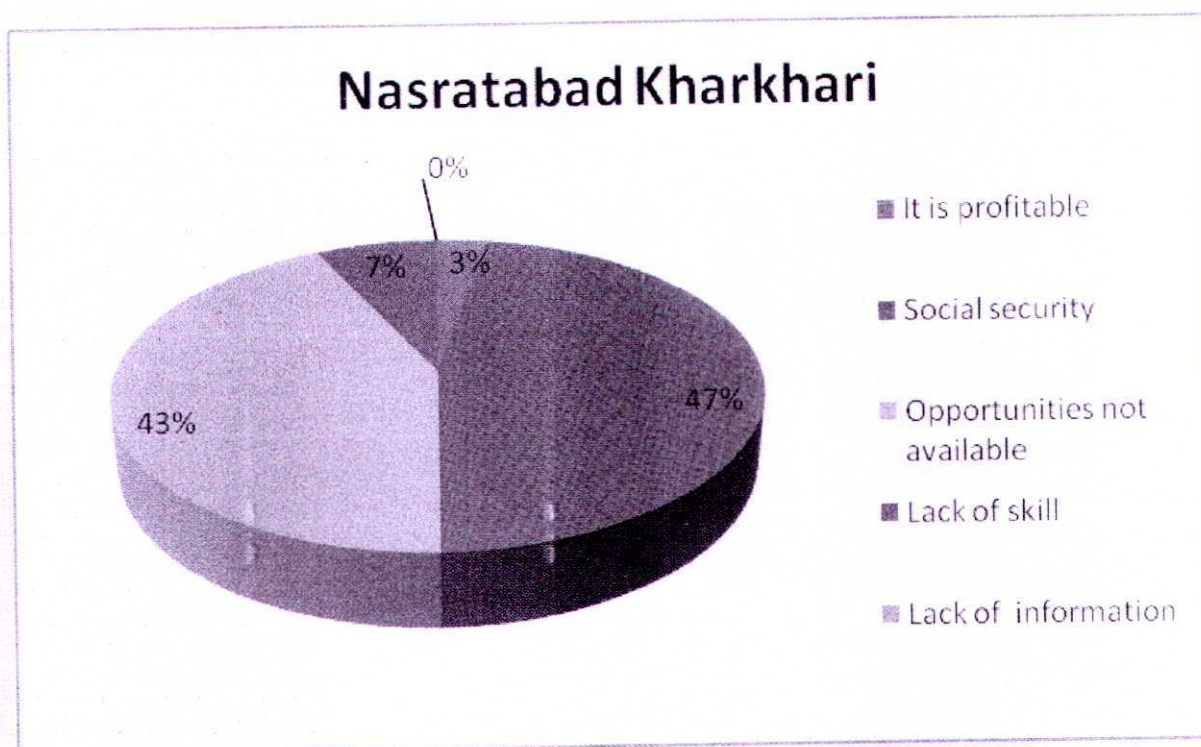
Figure: 6.14
Reasons for engagement in farm activities in Mahmoodpur village
(Mixed household)



Source: Table 6.6

At Nasratabad Kharkhari village, social security followed by opportunities were not available were cited as an important indicators for engagement in farm activities.

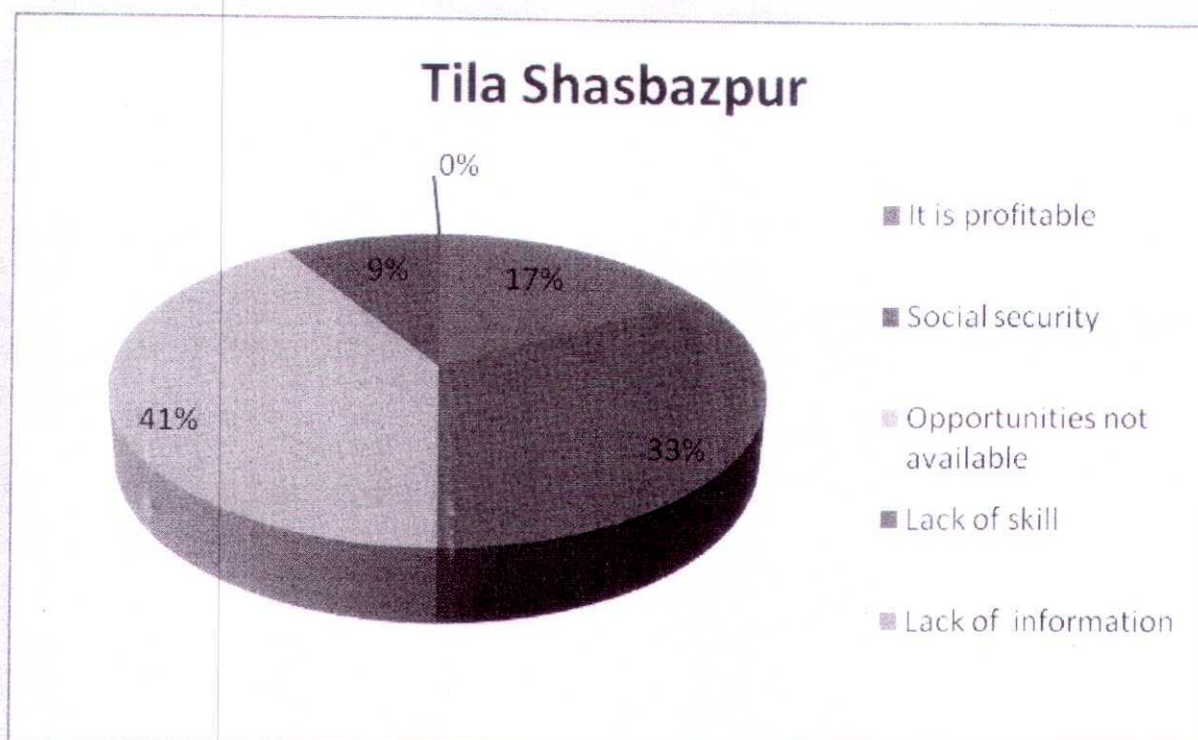
Figure: 6.15
Reasons for engagement in farm activities in Nasratabad Kharkhari village (Mixed household)



Source: Table 6.6

At Tila Shasbazpur village 41 per cent reported opportunities were not available as a reason for engagement in farm activities. This was followed by security, profitability and lack of skills as a reason for engagement in farm activities.

Figure: 6.16
Reasons for engagement in farm activities in Tila Shasbazpur village (Mixed household)



Source: Table 6.6

Reason for engagement in non-farm activity (Mixed household)

Table 6.7 below analyses reason for engagement in non-farm activities for mixed household. 'Landless laborers', 'Income is lower', 'absence of full time employment opportunities' and 'not interested' were the indicators chosen for getting the information on non-farm activities engagement.

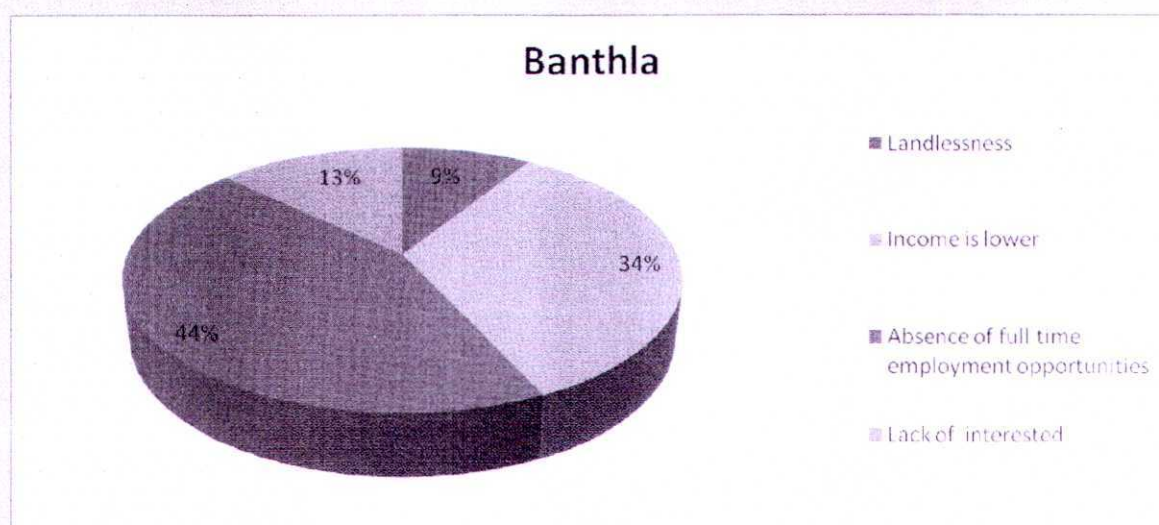
Table: 6.7
Reason for engagement in non-farm activity
(Mixed household in %)

S. No.	Reasons	Banthla	Mahmoodpur	Nasratabad Kharkhari	Tila Shasbazzpur
1	Landlessness	9	4	5	0
2	Income is lower	34	21	26	49
3	Absence of full time employment opportunities	44	25	32	17
4	Lack of interested	13	50	37	34
5	Total	100	100	100	100

Source: *Field Survey*

Figure 6.17, 6.18, 6.19 and 6.20 explain the reasons for the engagement in non-farm activities for mixed households. At Banthla village, absence of full time employment opportunities was the main reason for engagement in non-farm activity. This was followed by lower income, no interest and landlessness.

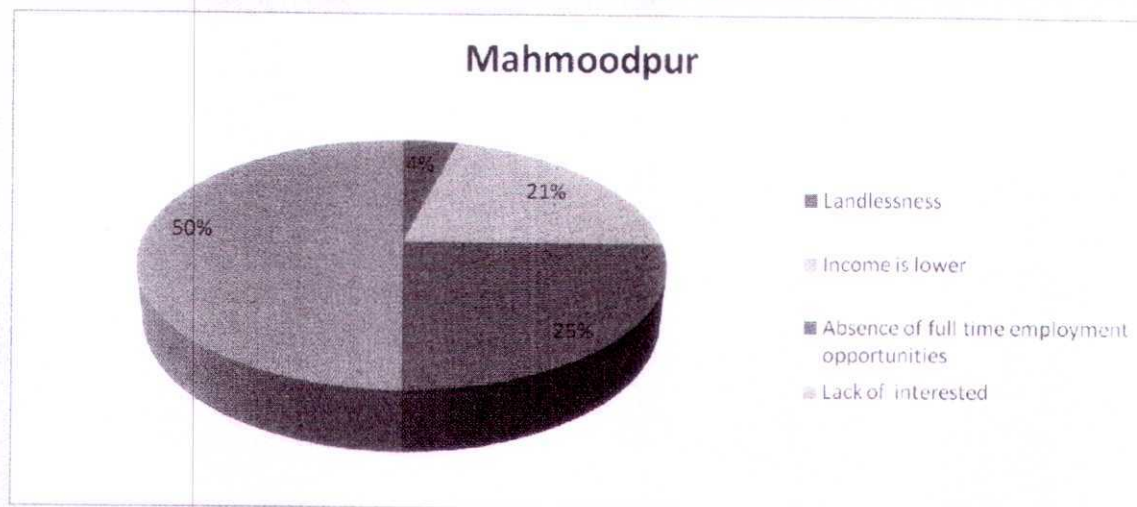
Figure: 6.17
Reason for engagement in non-farm activity in
Banthla village (Mixed)



Source: *Table 6.7*

At Mahmoodpur village lack of interest was the main reason for engagement in non-farm activities followed by absence of full time employment opportunities, lower income and landlessness.

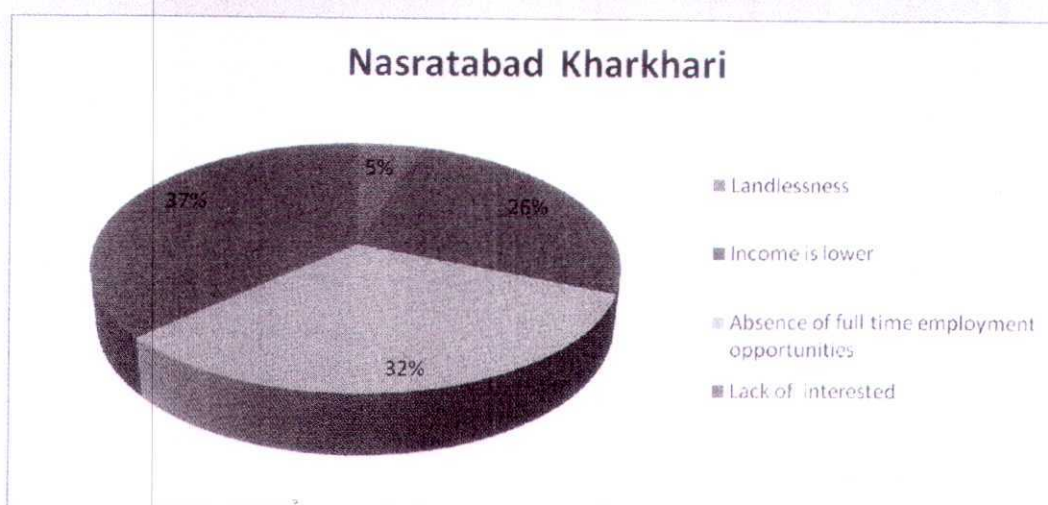
Figure: 6.18
Reason for engagement in Non-Farm activity in Mahmoodpur village (Mixed)



Source: Table 6.7

At Nasratabad Kharkhari village lack of interest and absence of full time employment opportunities were the major reason for engagement in non-farm activity, followed by lower income and landlessness.

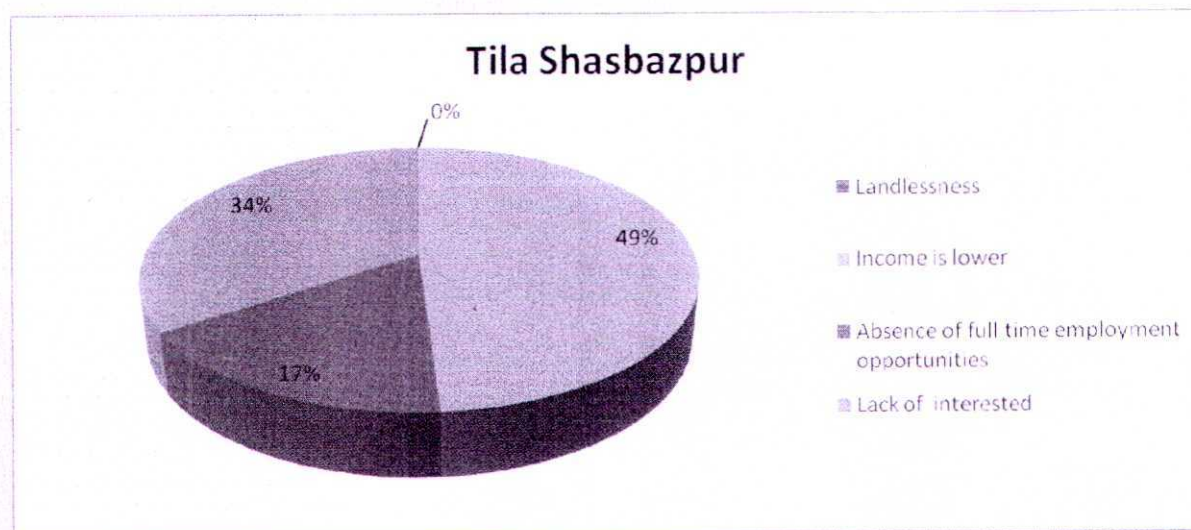
Figure: 6.19
Reason for engagement in Non-Farm activity in Nasratabad Kharkhari village (Mixed)



Source: Table 6.7

At Tila Shasbazzpur village 49 per cent reported: income is lower on account of engagement in non-farm activities. This was followed by lack of interest, absence of full time employment opportunities for engagement in non-farm activities.

Figure: 6.20
Reason for engagement in non-farm activity in
Tila Shasbazzpur village (Mixed)



Source: Table 6.7

Type of Non-Farm Activities (Mixed household)

Table 6.8 describes types of non-farm activities in both farm and non-farm households. The types of activities were utilities, construction, trade, hotels and restaurants, transport, storage, communication finance, insurance and real estate, community, social and personal services.

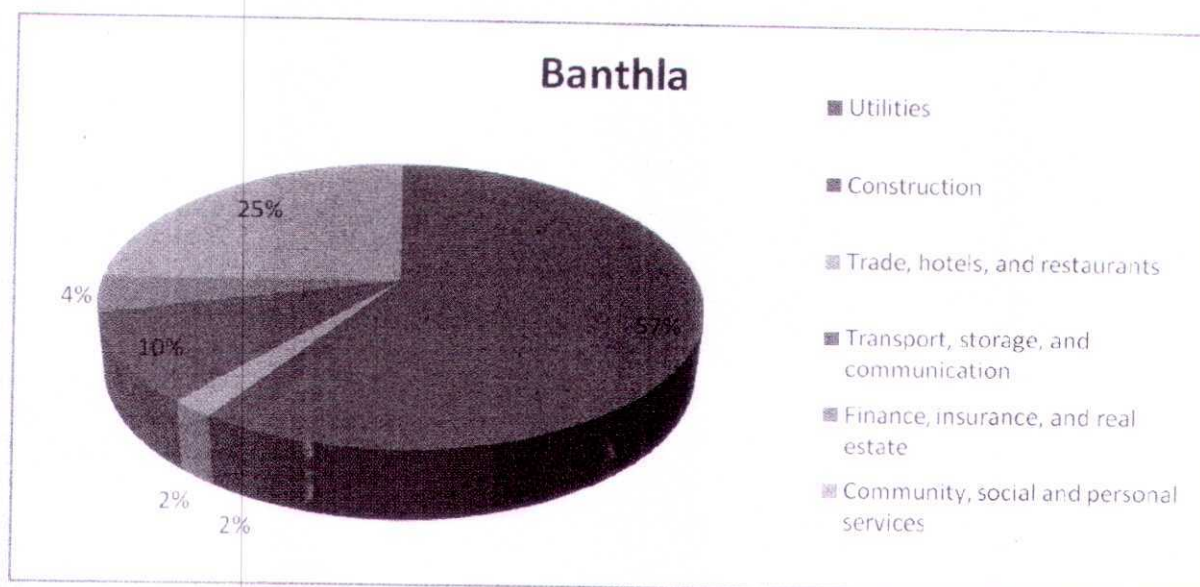
Table: 6.8
Type of Non-Farm Activities for Farm and
Non-Farm households (in %)

S. No.	Types	Banthla	Mahmoodpur	Nasratabad Kharkhari	Tila Shasbazzpur
1	Utilities	57	58	43	48
2	Construction	2	0	10	12
3	Trade, hotels and restaurants	2	0	0	5
4	Transport, storage and communication	10	2	0	5
5	Finance, insurance and real estate	4	2	0	14
6	Community, social and personal services	25	38	47	16
7	Total	100	100	100	100

Source: Field Survey

Figure 6.21, 6.22, 6.23 and 6.24 explain the reasons the engagement in various types of non-farm activities for both farm and non-farm households as discussed above. At Bantthla village maximum number of respondent were engaged in utilities. This was followed by community, social and personal services, transport, storage and communication, finance, insurance and real estate, trade, hotels restaurants and construction.

Figure: 6.21
Type of non-farm Activity in Bantthla village (Mixed)

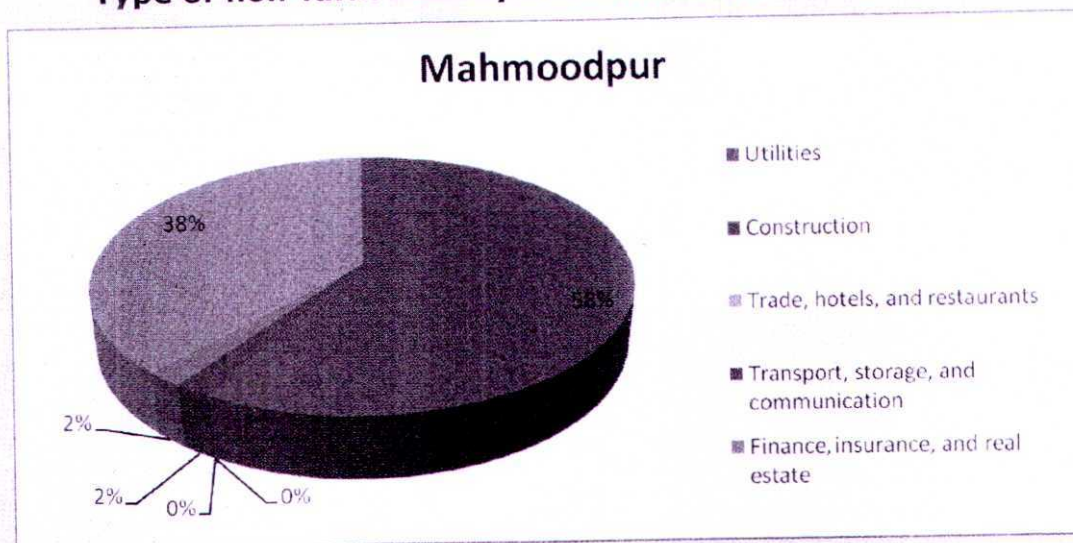


Source: Table 6.8

At Mahmoodpur village also respondent were engaged in Utilities followed by community, social and personal services, finance, insurance and real estate and transport, storage and communication.

Figure: 6.22

Type of non-farm Activity in Mahmoodpur village (Mixed)

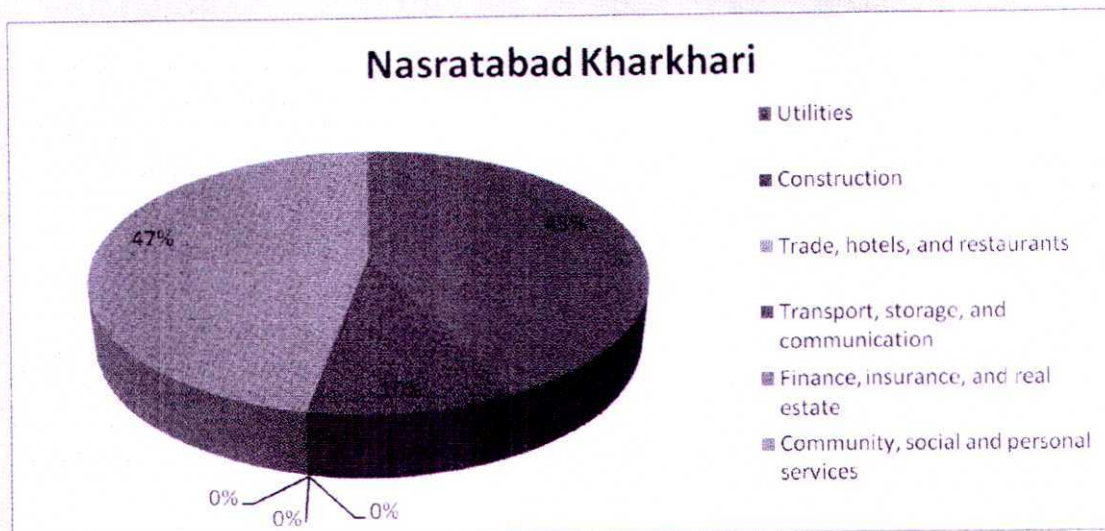


Source: Table 6.8

At Nasratabad Kharkhari village maximum numbers of people were engaged in community, social and personal services followed by utilities and construction.

Figure: 6.23

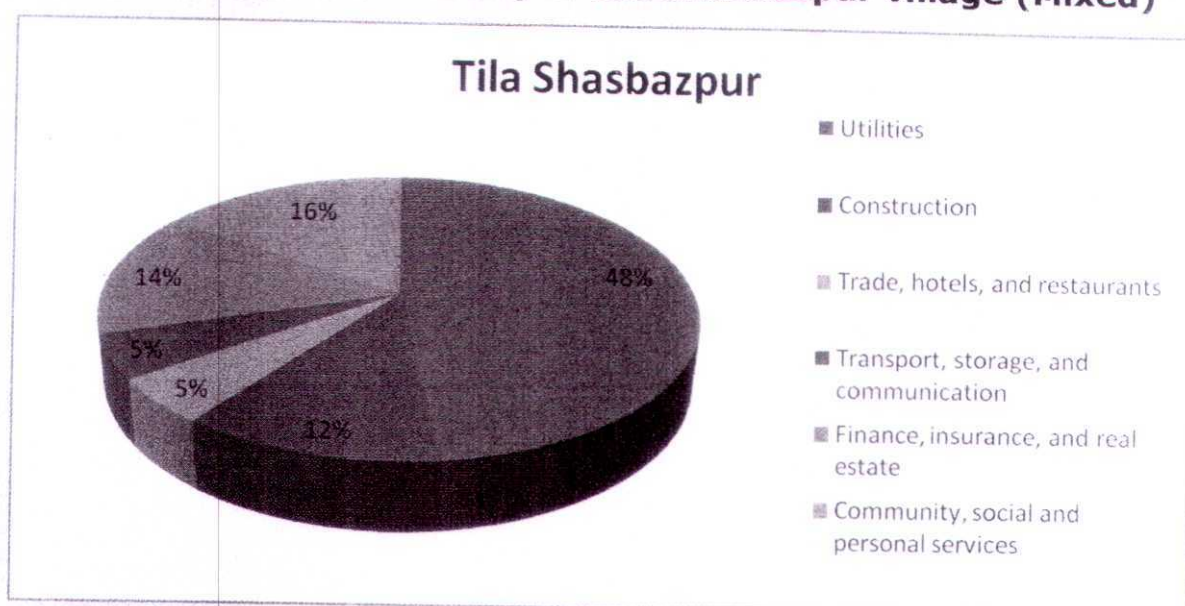
Type of Non-Farm Activity in Nasratabad Kharkhari village (Mixed)



Source: Table 6.8

At Tila Shasbazzpur villagers' maximum number were engaged in utilities. This was followed by community, social and personal services, finance, insurance and real estate, construction, trade, hotels restaurants and transport, storage and communication.

Figure: 6.24
Type of Non-Farm Activity in Tila Shasbazzpur village (Mixed)



Source: Table 6.8

Occupation of Parents engaged in Farm and Non-Farm activities

Table 6.9 describes occupation of the parents of respondents engaged in both farm and non-farm activities. Maximum numbers of parents were engaged in farm activities.

Table: 6.9
Parents Occupation: Mixed households (in %)

S. No.	Category	Banthla	Mahmoodpur	Nasratabad Kharkhari	Tila Shasbazzpur
1	Farm	82.7	87.9	86.7	93.1
2	Non-farm	17.3	6.9	3.3	1.7
3	Mixed	0	5.2	10.0	5.2
4	Total	100	100	100	100

Source: Field Survey

Conclusion

Farm households: It was found among the main reason for engagement in farm activities was *opportunities not available*. *Landlessness* was the main reason for engagement in *exclusively non-farm activities*. *Lack of interest* was the reason for engagement in *non-farm activities*, *opportunities not available* and *social security* for engagement in *farm activities* for both *mixed households*.

VII

WOMEN WORKERS IN NON-FARM ACTIVITY

The present chapter provides detailed classification of women workers in four villages namely Banthla, Tila Shasbazpur, Mahmoodpur and Nasratabad Kharkhari. In Banthla village maximum number of women were engaged in non-farm activities; in Mahmoodpur village most of the women were engaged in mixed activities; at Tila Shasbazpur village, maximum women were engaged in non-farm activities; and at Nasratabad Kharkhari also majority of women were engaged in non-farm activities. As seen in Table 7.1 maximum number of women were engaged in non-farm activities.

Table 7.1
Women workers by type of activity

S. No.	Type of activity	Banthla	Mahmoodpur	Tila Shasbazpur	Nasratabad Kharkhari	Total
1.	Farm	1	3	3	1	8
2.	Non-Farm	29	2	10	3	44
3.	Mixed	1	5	00	2	8
Total		31	10	13	6	60

Source: Field Survey

Women engage in Farm Based Activities

Table 7.2 provides detail classification of women engaged in farm based activities. In all the four villages under the study, maximum numbers of women belonged to the age group of 25-50 years of age. All these women originally belonged to the Ghaziabad area. Though most of the women were illiterate yet few of them have undergone traditional education system, available at the village itself. Most of the women were earning income of Rs. five thousand or below. These women were owning land area above five Bigha except in Banthla village. The main **reason cited for engagement in farm activities** was Lack of **opportunities** in the village. In village Mahmoodpur non-availability of social security and in Tila

Shasbazpur lack of any kind of skill was also cited as an important reason to choose farm activities. It was also found that these women spent part of their income on education of the children. Regarding satisfaction of work, there was mixed response.

Table 7.2
Detailed Classification of Women engaged in
Farm Based Activities

S. No.	Category	Banthla	Mahmoodpur	Tila Shasbazpur	Nasratabad Kharkhari	Total
1.	Age					
	Below -25	00	00	00	00	00
	Between-25 to 50	01	02	02	01	06
	Above -50	00	01	01	00	02
2.	Qualification					
	Traditional	01	01	01	00	03
	Technical	00	00	00	00	00
	Illiterate	00	02	02	01	05
3.	Income					
	Below 5,000/-	01	03	03	00	07
	Between 5,000/- to 10,000/-	00	00	00	01	01
	Above 10,000/-	00	00	00	00	00
4.	Land area					
	Below 1 Bigha	00	00	00	00	00
	Between 1to 5 Bigha	01	00	00	00	01
	Above 5 Bigha	00	03	03	01	07
5.	Reason					
	Social Security	00	01	00	00	01
	Opportunities not available	01	02	02	01	06
	Lack of skill	00	00	01	00	01
	Lack of information	00	00	00	00	00
	It is profitable	00	00	00	00	00

S. No.	Category	Banthla	Mahmoodpur	Tila Shasbazzpur	Nasratabad Kharkhari	Total
6.	Migration					
	Yes	00	00	00	00	00
	No	01	03	03	01	08
7.	Expenditure of children education					
	Less than 100/-	00	02	01	00	03
	100/- to 500/-	00	01	02	01	04
	500/- to 1,000/-	01	00	00	00	01
	Above 1,000/-	00	00	00	00	00
8.	Standard of living parents					
	Yes	00	02	01	01	04
	No	01	01	02	00	04
9.	Satisfaction					
	Yes	00	01	02	01	04
	No	01	02	01	00	04
Total		9	27	27	9	72

Source: Field Survey

Women engaged in Non-Farm Based Activities

Table 7.3 provides detailed classification of women engaged in non-farm activities. In all the four villages under the study, most of the women belonged to the age group of 25-50 years of age; few of them were below 25 years of age. Five women were of to 50 years of age in the four villages. It is interesting to know that many women in Banthla village had technical education. All these women originally belonged to the Ghaziabad area. In non-farm activities also maximum numbers of women were earning income of Rs. five thousand or below. The main reason for low wages was non availability of proper skills. **Landlessness** was the main reason to be observed in non-farm activities. Most of the women were engaged in **Utilities**. Twelve women migrated from different village but belonged to Ghaziabad district and twenty seven women belonged to local area understudy. Most of these women spend between Rs. 100 and 500 on children education. Maximum number of women said they were not satisfied with their present job.

Table 7.3
Detail Classification of Women engaged in
Non-Farm Based Activities

S. No.	Category	Banthla	Mahmoodpur	Tila Shasbazpur	Nasratabad Kharkhari	Total
1.	Age	Below -25	05	00	00	05
		Between-25 to 50	19	00	08	28
		Above -50	05	02	02	11
2.	Qualification	Traditional	00	00	01	01
		Technical	14	00	00	14
		Illiterate	15	02	09	29
3.	Income	Below 5,000/-	27	02	07	38
		Between 5,000/- to 10,000/-	02	00	03	06
		Above 10,000/-	00	00	00	00
4	Reasons	Landlessness	24	07	02	36
		Income is lower	03	03	00	06
		Absence of Full time employment opportunities	01	00	00	01
		Lack of interest	01	00	00	01
5	Type of Non-Farm activity	Manufacturing	02	00	00	02
		Utilities	20	02	10	35
		Construction	03	00	00	03
		Trade, Hotels and Restaurants	01	00	00	01
		Transport, Storage and Communication	01	00	00	01
		Finance, Insurance and Real estate	00	00	00	00
		Community, Social and Personal Services	02	00	00	02

S. No.		Category	Banthla	Mahmoodpur	Tila Shasbazpur	Nasratabad Kharkhari	Total
6	Migration	Yes	12	02	00	02	16
		No	17	00	10	01	28
7	Expenditure of children education	Less than 100/-	04	01	05	03	13
		100/- to 500/-	19	00	01	00	20
		500/- to 1,000/-	02	00	02	00	04
		Above 1,000/-	04	01	02	00	07
8	Standard of living parents	Yes	14	02	06	03	25
		No	15	00	04	00	19
9	Satisfaction	Yes	10	00	03	01	14
		No	19	02	07	02	30
Total			261	26	82	27	396

Source: Field Survey

Women engaged in both farm and non-farm (mixed) based activities

Table 7.4 describes classification in detail of women engaged in both farm and non-farm (mixed) based activities. In Banthla village, these women belonged to age group of 25 to 50 years. In Mahmoodpur village these women belonged to between 25 to 50 years and above 50 years of age. In Nasratabad Kharkhari women belonged to 50 and above age category. Most of these women were illiterate, expect in Banthla. These women were earning income below Rs. five thousand. **Social security, non availability of opportunities and profitability** was the reason for **engagement in farm activities**. These women were owning land above five bigha followed by land between 1 to 5 and one Bigha. **Lack of interested, non availability of full time employment, lower income and landlessness** were the main reason for **engagement in non-farm activity**. These women were engaged in Utilities and community social and personal services. Most of these women belong to Ghaziabad and spend certain part of their income on child education. Maximum number of these women were satisfied with their present work.

Table 7.4
Detail Classification of Women engaged in both
farm and non-farm (Mixed) Based Activities

S. No.	Category	Banthla	Mahmoodpur	Tila Shasbazar	Nasratabad Kharkhari	Total
1.	Age	Below-25	00	00	00	00
		Between-25 to 50	01	02	00	03
		Above -50	00	03	00	02
2.	Qualification	Traditional	01	00	00	00
		Technical	00	00	00	00
		Illiterate	00	05	00	02
3.	Income	Below 5,000/-	01	04	00	02
		Between 5,000/- to 10,000/-	00	01	00	00
		Above 10,000/-	00	00	00	00
4.	Land area	Below 1 Bigha	00	01	00	00
		Between 1to 5 Bigha	00	01	00	02
		Above 5 Bigha	01	03	00	00
5.	Reason for engagement in farm activities	Social Security	01	03	00	00
		Opportunities not available	00	01	00	02
		Lack of skill	00	00	00	00
		Lack of information	00	00	00	00
		It is profitable	00	01	00	00
6.	Reason for engagement in Non-Farm activities	Landlessness	00	00	00	01
		Income is lower	01	00	00	00
		Absence of Full time employment opportunities	00	01	00	00
		Lack of interest	00	04	00	01

S. No.		Category	Banthla	Mahmoodpur	Tila Shasbazpur	Nasratabad Kharkhari	Total
7.	Type of Non-Farm activity	Manufacturing	00	00	00	00	00
		Utilities	01	03	00	00	04
		Construction	00	00	00	00	00
		Trade, Hotels and Restaurants	00	00	00	00	00
		Transport, Storage and Communication	00	00	00	00	00
		Finance, Insurance and Real estate	00	00	00	00	00
		Community, Social and Personal Services	00	02	00	02	04
8.	Migration	Yes	00	01	00	00	01
		No	01	04	00	02	07
9.	Expenditure of children's education	Less than 100/-	00	02	00	00	02
		100/- to 500/-	01	03	00	01	05
		500/- to 1,000/-	00	00	00	01	01
		Above 1,000/-	00	00	00	00	00
10.	Standard of living parents	Yes	01	04	00	02	07
		No	00	01	00	00	01
11.	Satisfaction	Yes	01	04	00	01	06
		No	00	01	00	01	02
Total			11	55	00	22	88

Source: Field Survey

Conclusion

The main **reason** cited **for engagement in farm activities** was lack of **opportunities** in the village. **Social security** was the main reason to be involved in non-farm activities. **Social security, non availability of opportunities and profitability** were the reasons cited for **engagement in farm activities** for mixed households. **Lack of interest, non-availability of full time employment opportunities, low income and landlessness** were the main reason for **engagement in non-farm activity** for mixed households.

VIII

POLICY ISSUES AND IMPLICATIONS

Policy Issues of the Promotion of Rural Non-Farm Activities

Major problems in promoting the manufacturing and service sectors in rural area include, among other things: (1) the fact that rural areas are not preferred locations for most enterprises, since the social overhead capital such as roads, water supplies, and communication networks are inferior to those in urban areas; (2) the fact that the ability for investment by local government is relatively low because of severe budget constraints; (3) the fact that it is extremely difficult to secure labour since the rural labor market suffers from personnel shortages and aging; (4) the fact that farmers' business experience is often limited, and the risk of failure is high; and (5) the fact that the traditional tendency to block agricultural investment by urban-based enterprises hinders non-agriculture sectors from participating in the promotion of rural non-farm activities. Government policy often attempts to solve or try to assist solving the problems.

Macroeconomic Policies

Well-designed general macroeconomic policies are necessary, but not sufficient, for the development of rural non-farm activities, because they are needed to achieve an efficient use of resources throughout the economy. If universal economic benefits are to be generated through improved resource allocation, a combination of various policies is needed. Examples include a devaluation of the chronic overvaluation of currencies, liberalization of trade, a reduction of fiscal deficits, the elimination or privatization of parastatals and cuts in subsidies, etc.

Macroeconomic reform alone is not sufficient to spur rural non-farm sector development. Two points should be raised in this regard:

- i) There is often significant ambiguity regarding the effects of reforms in rural areas, particularly in the short term. Indeed, while liberalization may improve the terms of trade and create opportunities for rural non-farm activity, short-term effects can also include the removal of protection previously enjoyed by the rural non-farm sector and the exposure of certain rural non-farm sectors to competition from urban-based enterprises and imports. The rural economy will inevitably undergo painful adjustment in the process.

- ii) Depending on the situation, reforms may have a positive effect because of the incentives open to rural enterprises and farms. However, there are often considerable capacity constraints that limit responses to these incentives, or cause unfair allocation, especially to the asset-poor.

Investing in Rural Infrastructure

Rural areas are typically poorly-equipped in terms of infrastructure. Infrastructure investment policies can strengthen linkages between the rural non-farm sector and agriculture and thus create rural non-farm multipliers from the growth of agriculture. It is important to improve both physical infrastructure (e.g., roads, electrification) and social infrastructure (e.g., banking systems, market information systems, educational and training facilities) as a means of reducing the transaction costs for business start-ups and subcontracting in rural areas as well as improving the productivity of rural non-farm entrepreneurs.

The industrialization process displayed a high degree of spatial spread, especially with respect to rural areas. Also the relative incidence of rural industrialization kept up with the rapid expansion of the national economy. Well-developed rural infrastructure, electrification in particular, is very important. Local power generation led to better water management improving agricultural yields and incomes, which in turn had strong forward and backward production linkages as well as consumption linkages with the rural non-farm economy.

In terms of education, rural areas are frequently at a disadvantage, and the importance of enhanced rural education for development of the rural non-farm sector is incontrovertible. Empirical studies reveal education to be a strong determinant of household participation and of the level of wage earned in rural non-farm activities. However, it appears that more specific skills and training are necessary to promote rural non-farm activities in today's environment of competitive and liberalized trade. There is an urgent need to train rural people in skills that allow them to participate in the skilled labour market.

Missing Links between Agricultural Policy and Rural Non-Farm Development

The significance of rural non-farm income and employment should not be taken to mean that rural non-farm development represents an alternative to addressing agricultural development problems; nor should it detract from the importance of agricultural policy and research. On the contrary, in all but the worst agro climatic zones, the rural non-farm sector is usually closely connected to agriculture, and activities linked to agriculture are predominant forces in first stage and second stage rural non-farm sector transformation. This implies that agriculture is often crucial to the success of rural non-farm development strategies, and *vice versa*.

A sector-specific policy should identify promising sub-sectors and then systematically address the constraints to incentives and capacity for development-ranging from the participation of small and medium-scale farmers, small- and medium-sized agro-industrial development and / or linkages with larger agro industrial companies, and market development and consumer product acceptance.

The specific goal should be to provide the incentives and capacity for rural households and rural non-farm enterprises to overcome entry barriers, and to create "linkage friendly" agriculture and rural non-farm activities.

Enabling the Poor to Participate

Improving the asset base of the poor is crucial. Poor farm households often lack the assets that serve as important capacity variables for participating in rural non-farm activities. In turn, unequal access to more remunerative rural non-farm employment may cause further concentration of wealth in the form of land. A similar vicious circle may occur with other farm assets.

In some countries, where land is very unequally distributed, the lack of landholding among the poor may constitute a constraint to the growth of rural non-farm activity and employment. Income growth among the rural poor is a crucial engine for rural growth via production and expenditure linkages. On the other hand, increases in the income of wealthier population groups may be associated with leakage to the urban and foreign sectors.

Competition between Small- to Medium-scale Rural Non-Farm Firms and Large-scale Firms

An important issue is whether a significant increase in rural non-farm activity by small- and medium-sized companies is possible in situations where there are large-scale firms competing in the same markets. Trade and foreign investment, liberalization and improvement of infrastructure can constitute a threat to small- to medium-sized rural non-farm enterprises. Reductions in economic and "natural" protection of rural companies may create pressures on their competitiveness *vis-à-vis* consumer goods and inputs "imported" from metropolitan areas and / or from abroad.

This can be seen in the context of a dual economy where large retail outlets and large manufacturing companies compete in rural towns and intermediate cities with small- and medium-scale rural enterprises. In globalizing or regionalizing markets, this competition can only become more intense. In such cases, even where small rural firms have the production cost advantage, this will not necessarily translate into a market advantage, as larger urban firms may have better distribution networks, brand name appeal, etc.

The potential competition between small informal sector businesses and large formal sector businesses could take place in terms of production costs, markets for farm inputs and processed foods, and distribution channels. The issue is: whether the small business sector can take advantage of lower costs and prices; more appropriate products in the form of inputs and consumption goods targeted to small-scale farmers and poor rural households; more convenient access to products and services; and niche market strategies. Such competition can, of course, turn out to be beneficial to the rural consumer and farmer in terms of lower costs and access to products and services.

A promising type of arrangement is the "business linkage" between big urban companies and small rural businesses in contracted outsourcing and franchising.

Under such arrangements, a small company can enter a niche market for which it is particularly suited and / or to lower labour costs and increase the flexibility of labour arrangements. As labour costs and skills increase in the initial set-up of companies, there can be a second wave of outsourcing relationships, where rural companies subcontract to other rural companies. Infrastructure development that lowers costs constitutes a key ingredient in the success of these arrangements.

This type of subcontracting arrangement appears to have a number of strong advantages, as it teaches skills to small firms, creates access to dynamic markets, in some cases provides credit, etc. The buyer sometimes provides capital to suppliers by providing an advance payment for an order or by supplying raw materials for processing. Business links can help suppliers reduce their capital needs as well as cut down on search and start-up times by targeting production to an identified market. A small company can also receive marketing advice from a larger partner.

An example could be a rural entrepreneur forming a small business to distribute farm inputs or collect and perform the first processing stage of farm outputs for a large business. This arrangement could be a "strategic alliance" of agro-industrial companies and small-scale farms, or a franchise or out grower / outsourcing arrangement.

Policies Promoting Rural Non-Farm Activities with Factor Price Effects ***Interest Rates***

In most developing countries, two distinct capital markets exist: the "formal" and the "informal". Banks and similar institutions constitute the formal market, while moneylenders, raw material suppliers, and purchasers make up the bulk of the informal market. Interest rates vary widely between the two. Banks tend to lend only to established large-scale firms, which may appear to involve lower risks and lending costs. Most of the recipients are urban-based and tend to become more capital-intensive than would have been the case at the "opportunity costs" of capital.

For the rural non-farm activities, an important question is, *to what extent has the fragmented capital market resulted in depressed enterprise creation, capital formation, employment generation, and labour productivity?* An important related issue is the extent to which the government imposed ceiling on "formal" interest rates contributing to the gap between the demand for and supply of credit for rural non-farm enterprise at a given time in a country.

Tariffs

The import duty structure reflects differential treatment for the urban large-scale over the rural small scale enterprise. For most developing countries, import duties are the lowest for heavy capital goods and become progressively higher in intermediate and consumer durable goods categories. Yet, many items classified as intermediate or consumer goods in tariff schedules are capital goods for rural small-scale firms.

Foreign Exchange

Many developing countries institutionally maintain high price for foreign exchange, but grant concessionary rates to large firms. Small firms are deprived of comparable advantages, since they usually do not qualify for concessional rates. Even if there are no concessions, the large firms usually import relatively more equipment and inputs and therefore benefit more than smaller ones. This encourages greater capital intensity among urban large-scale industries and a less than optimum use of capital among rural non-farm industries.

Other Tax Incentives

Several countries employ tax incentives to encourage industrial development. These incentives differ with respect to timing and coverage. Many of these fiscal incentives have pronounced differential effects between large and small rural non-farm firms. Income tax exemptions in many countries are only made available to enterprises above a certain minimum investment or employment threshold. In countries with no minimum requirements, the qualifying procedures are often so sophisticated and time-consuming that they discourage small entrepreneurs.

Minimum Wage Regulations

Minimum wages, often initiated to achieve socially sound objectives, often apply only to larger enterprises in urban areas of developing countries. Where they are applicable countrywide, they are often not enforced as effectively among the smaller-scale rural non-farm activities. Minimum wages in most developing countries tend to cause greater capital intensity in urban areas and greater rural-to-urban migration. For the rural areas, the overall direct effect has been a possible reduction in the number of potential entrepreneurs and a deterrent to the development of a permanent skilled rural labour force.

Policies with Non-price Supply Effects**Development of Infrastructure**

Policies designed to develop the infrastructure of a developing economy could indirectly affect the performance of rural non-farm enterprises. The provision of expansion of electricity, water, or roads would appear to benefit these enterprises. Same amenities also benefit their larger-scale urban-based counterparts, which may now be able to enter markets previously dominated by rural non-farm enterprises. Indeed, one differential advantage of rural non-farm enterprises may be that they do not require sophisticated and costly infrastructure.

Industrial Policies

Many policies designed primarily with reference to large-scale urban firms are also applicable to small firms, but they often prove discouraging to the latter. Simple licenses or permits to engage in business may be hard to acquire for small firms due to strict requirements and administrative barriers. On the other hand, some countries, such as India, have taken positive measures by reserving certain

business activities for the rural non-farm or small-scale sector. Such actions bring up an issue as to whether they may cause over-corrections and raise barriers to the development of other sub-sectors.

Policies Affecting the Demand for Rural Non-Farm Activities

The fact that the rural households' income elasticity of demand for rural non-farm goods is positive and that agriculture generates the largest share of rural income have an important indirect effect on the demand for rural non-farm activities. Consequently, pricing policies that improve the terms of trade between agriculture and the large-scale urban sector or specific investment programmes and policies designed to increase, directly or indirectly, agricultural production and income can generate an increased demand for a wide array of rural non-farm goods and services.

Government policies also can affect the demand for rural non-farm activities that arise from production linkages with large-scale industry. Subcontracting is the most frequently discussed industrial linkage. Properly designed, such policies can provide relatively stable demand for certain products at prices which will not adversely affect the profitability of rural enterprises or the quality of the work environment.

Rural Non-Farm Enterprise Project Issues

General Project Issues

One of the major issues confronting project designers of rural non-farm enterprises is how to identify the intended project beneficiaries. Another issue is the type of direct assistance to be provided. It is crucial to first identify constraints facing the rural enterprises. Only after these constraints have been identified can the type and nature of assistance be ascertained.

The last general issue is an establishment of an effective monitoring and evaluation system for these projects.

Specific Project Issues

a) Credit Assistance

What is the extent of the effective demand for credit by rural non-farm enterprises? Some evidence would appear to indicate that this demand is quite formidable. Rural non-farm entrepreneurs, for example, when asked directly to identify their greatest assistance needs and greatest perceived bottleneck, will usually list credit and capital first. There is evidence that for many types of rural non-farm enterprises, the rates of return on existing capital are quite substantial. These high rates of return indicate that the potential demand for credit could be quite large.

Another related issue is the degree to which technical assistance institutions should be separated from the regular governmental machinery. There are advantages to sector approaches; confidence among entrepreneurs would likely be higher and qualified staff could perhaps be more easily recruited and retained.

Finally, there is the question of whether research institutions in the rural areas are well-staffed and well equipped to address relevant research problems of small rural non-farm enterprises. The institutions should be linked to comparable research centres in the world and within the country to personnel handling information dissemination and technical advisory services.

Another demand issue relates to the composition of this credit demand of rural non-farm enterprises. In particular, is the credit demand primarily for fixed or for working capital? For the smallest enterprises, which account for the bulk of the rural non-farm sector, the primary credit demand appears to be for working capital. Indeed, the vast majority of these rural non-farm enterprises have never even applied for funds from formal credit institutions. Thus, alternative institutional mechanisms to the formal ones might also need to be considered.

A related supply issue concerns the costs and risks associated with lending to rural non-farm enterprises. It is argued that, owing to the geographical dispersion and a vast number of rural non-farm enterprise-borrowers, the administrative costs of lending to this group are significantly higher than lending to large-scale borrowers.

The final issue that relates both to the demand for and the supply of credit is the interest rate for small-scale enterprise credit projects. In many countries, and within some donor agencies, there is a feeling that rural non-farm enterprises should receive credit at a rate below the opportunity cost of capital.

b) Technical Assistance

First, it is important to ascertain the magnitude of the demand for technical assistance. A second general issue which deserves careful consideration is what are the most cost-effective institutional mechanisms, if any, for delivering technical assistance to rural non-farm enterprises? Vocational training institutes have been providing technical assistance, particularly to unemployed youth in developing countries for some already employed personnel, vocational training has been utilized for developing alternative job opportunities or enhancing capabilities in existing lines of activity.

c) Management Assistance

An important issue which should be addressed when designing a rural non-farm project is to ascertain whether or not there is a demand for management assistance. Another related issue is what form of management skills these rural non-farm enterprises really need. The need will likely vary somewhat depending on the size and nature of an enterprise. A third issue is what delivery mechanism, if any, will be cost effective in carrying out management assistance projects for rural non-farm enterprises.

d) Marketing Assistance

The design of marketing assistance for rural non-farm enterprises raises several issues. First, it is important to ascertain what existing or new sources of domestic

demand are available and how these could be further stimulated or developed. A second issue relates to the external demand for the products of rural non-farm enterprises. In particular, a key issue how to develop and deliver information to rural enterprises on the existing and new product demand in foreign markets as well as information on product handling and financial transactions. Thirdly, there is an issue of whether there is an accessible, cost-effective, institutional support which can enable rural non-farm enterprises to purchase raw materials and produce and effectively enter the export markets. In most countries this institutional support is urban-based. Decentralization of such facilities to service the needs of rural non-farm enterprises is crucial.

e) Common Facilities

In many developing countries, the most popular type of assistance used in providing common facilities for rural non-farm enterprises is industrial estates. In some developing countries, industrial estates have been utilized for decentralizing industry toward small rural towns and villages. An important issue is whether establishing estates located in rural areas with inadequate infrastructure facilities can be cost effective.

VIII

CONCLUDING COMMENTS

The Rural Non-Farm sector must not be viewed as a panacea for the fundamental problems of rural development and poverty alleviation. The problem of development is a problem of the whole; it cannot be solved by tinkering with a single little part.

A rural non-farm activity has the potential to eradicate rural poverty, but agricultural development is regarded as a necessary precondition. It is, however, well-known that the infrastructure to facilitate rural non-farm activities requires a huge investment, since rural areas are geographically scattered. Some argue that a concentrated industrial zone is a cheaper option. Without the trickle-down effect, however, rural areas would remain below the poverty line.

Especially, after the establishment of WTO, the enhancement of agricultural competitiveness appears to be emphasized in agricultural policy. As the decrease in production costs is considered one of the major components of competitiveness, the policy measures are centered on achieving the scale economy. At the same time, as more policymakers realize the fact that more active rural non-farm activities could lead to the survival of small-scale farms through the supplementing of farm income from non-farm sources, rural non-farm activities promotion programmes become more important during the course of the structural reform.

The basic agricultural policy direction is the encouragement of full-time farming. In order to enhance the earning power, the government assists the full-time farmers to acquire the added-value through processing raw agricultural products and through marketing. As a result, agriculture is designed to become a secondary and tertiary industry. In addition, rural non-farm activities are encouraged for small-scale farmers that are willing to give up farming. Their farm land is designed to be rented out by full-time farmers equipped with heavy machinery.

In a rural economy with limited land and other resources, the role of rural non-farm employment will become more important in most developing countries. However, if the pattern of economic growth is dominated by large-scale, urban based and capital-intensive industries, the promotion of rural non-farm employment is a challenging task. The rural non-farm sector is influenced by the pattern of agricultural growth, but, also, the rural non-farm sector can influence the course and rate of agricultural development. Especially because the policy environment

is severely tough, more carefully designed programmes are required for the promotion of rural non-farm activities and employment.

With the rapid development of information technology (IT), the economic environment of rural non-farm activities will change substantially. Accessibility to the remote areas would improve and would influence both the backward and forward linkages of rural non-farm activities. Infrastructure to improve the connection between these linkages in always remain a key issue.

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ANNEXURE - I
Classification of Household's Size,
Population and S.C. Population

S. No.	Category	Banthla	Mahmood pur	Nasratabad Kharkhari	Tila Shasbazpur	Total
1.	Household Size	6.0	7.0	8.0	7.0	28.0
2.	Population					
	Population Total	9,588	2,242	1,567	4,308	17,705
	Male	5,176	1,230	858	2,319	9,583
	Female	4,412	1,012	709	1,989	8,122
3.	S.C. Population					
	Population Total	2,504	350	30	570	3,454
	Male	1,346	193	16	310	1,865
	Female	1,158	157	14	260	1,589
Total		24,190	5,191	3,262	9,762	42,445

Source: U.P. Census 2001

ANNEXURE-II
Proportion S.C. and S.T. Population

S. No.	Category	Banthla	Mahmoodpur	Nasratabad Kharkhari	Tila Shasbazpur	Total
1.	S.C. Proportion					
	Population Total	26.1	15.6	1.9	13.2	56.8
	Male	26.0	15.7	1.9	13.4	57
	Female	26.2	15.5	2.0	13.1	56.8
2.	S.T. Proportion					
	Population Total	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0
	Female	0.0	0.0	0.0	0.0	0.0
Total		78.3	46.8	5.8	39.7	170.6

Source: U.P. Census 2001

ANNEXURE-III

Literacy Rate

S. No.	Category	Banthla	Mahmoodpur	Nasratabad Kharkhari	Tila Shasbazpur	Total
1.	Literacy Rate (percentage)					
	Population Total	71.9	73.1	67.4	79.5	291.9
	Male	83.3	86.8	83.7	90.4	344.2
	Female	85.5	55.9	48.4	66.8	256.6
Total		240.7	215.8	199.5	176.7	832.7

Source: U.P. Census 2001

ANNEXURE-IV

Proportion of Agriculture Labours

S. No.	Category		Banthla	Mahmoodpur	Nasratabad Kharkhari	Tila Shasbazpur	Total
1.	Proportion of Cultivators to the total workers	P	14.8	59.3	4.2	19.6	97.9
		M	10.7	54.7	5.0	20.2	90.6
		F	56.8	70.7	0.9	16.7	145.1
2.	Proportion of agricultural Labourers to total workers	P	2.5	2.2	31.0	1.2	36.9
		M	1.8	1.9	36.4	1.2	41.3
		F	10.5	2.9	10.2	1.2	24.8
3.	Proportion of workers in household industries to total workers	P	9.0	5.1	39.4	1.4	54.9
		M	8.5	2.9	34.4	1.5	47.3
		F	13.6	10.5	58.3	1.2	83.6
4.	Percentage of other workers to total workers	P	73.7	33.4	25.5	77.7	210.3
		M	79.0	40.5	24.2	77.2	220.9
		F	19.1	15.9	30.6	80.9	146.5
Total			300	300	300.1	300	1,200.1

Source: U.P. Census 2001

ANNEXURE- V
Proportion of Main and Marginal Workers

S. No.	Category		Banthla	Mahmoodpur	Nasratabad Kharkhari	Tila Shasbazzpur	Total
1.	Proportion of Main workers	P	16.6	24.7	30.4	20.3	92
		M	28.6	41.7	45.6	31.7	147.6
		F	2.5	4.1	12.0	7.0	25.6
2.	Proportion of Marginal workers	P	9.3	12.0	3.2	4.2	28.7
		M	15.1	5.9	3.1	6.9	31
		F	2.5	19.6	3.2	1.2	26.5
3.	Proportion of Non workers	P	74.1	63.2	66.4	75.5	279.2
		M	56.3	52.4	51.3	61.5	221.5
		F	95.0	76.4	84.8	91.9	348.1
Total			300	300	300	300.2	1,200.2

Source: U.P. Census 2001

ANNEXURE- VI
RURAL TRANSFORMATION, NON-FARM EMPLOYMENT AND
SKILL ASSESSMENT

Form ■ Non-Farm ■ Mixed ■

BANTHLA

■ Only Farm based household	--- 033
■ Farm and Non- Farm based	--- 127
■ Only Non-Farm based	--- 471
Total	--- 631

Mahmood Pur

■ Only Farm based household	--- 102
■ Farm and Non- Farm based	--- 145
■ Only Non-Farm based	--- 038
Total	--- 285

Tila Shasbazpur

■ Only Farm based household	--- 069
■ Farm and Non- Farm based	--- 177
■ Only Non-Farm based	--- 231
Total	--- 477

Nusratabad Kharkhari

■ Only Farm based household	--- 014
■ Farm and Non- Farm based	--- 115
■ Only Non-Farm based	--- 044
Total	--- 173