Preliminary Draft report

"Rural Non-Farm Employment in Uttar Pradesh"

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2003

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PREFACE

The mounting pressure of population has changed the entire structure of the country. Since independence the population of the country has increased almost three fold from 361 million in 1951 to 1002 million in 2001. With the rise in the population, the labour-force has also increased. Though the rate of growth of the economy has been around 6.5 per cent, the incidence of unemployment has been at 7 per cent on the basis of current daily status. Keeping pace with the rural population which has grown by about 74 per cent from 360 million to 741 million, unemployment in rural India increased to an alarming extent. According to the 16th round of NSS 1.82 per cent of rural population and 0.82 per cent of urban population were unemployed during the period July 1960 to June 1961. The responsibility of absorbing increasing labour force lies on public or private sectors. They are also known as organized and unorganized sectors. On account of many adverse facts in organized sector, employment is decreasing. The other unorganized sector which is known as informal sector or rural non-farm sector has wide range of employment opportunity. Rural non-farm sector comprises of different industrial, commercial and service activities in rural areas. In Uttar Pradesh with 16.61 crore of population and geographical area of 241 thousand kilometers the flock of unemployed persons in rural areas, have been increasing.

This study 'Rural Non-Farm-employment in Uttar Pradesh' has been assigned to this centre by the Ministry of Agriculture and Cooperation, Govt. of India. District Muzaffarnagar and district Kannauj were selected for the gross root study on the ground of maximum and minimum concentration of population in non-farm sector. Details of diversification have been studied from state level to village and household level.

The study contains seven chapters.

Chapter one contains introduction and general information about 'Rural Non-Farm Employment in the country. This chapter also contains research-methodology of the study.

In the second chapter basic profile of the State has been dealt with. Detailed study based on industrial classification of the rural non-farm workers has been done. The position of non-farm workers in different divisions of Uttar Pradesh has also been included.

In chapter-III distribution of rural non-farm workers in the selected districts of Muzaffarnagar and Kannauj has been dealt with. Basic profiles of the selected districts have also been described.

In the chapter-IV a detailed study of the diversification based on the specified industrial categories at the village level of the selected households has been done. Details about selected rural non-farm workers have been presented from different angles such as operational holding, nature of employment, detailed account of infrastructure available in the village, households average income, wage-rates etc.

In the chapter- V, status of enterprises in the State of Uttar Pradesh has been described. Present status of industries in the State, growth of

industrialization through different five year plans, financial assistance to industries in the State and position of processing sector have been described.

In Chapter- VI, present status of live stock in the State, processing activities and gross-root position of meat units with investment and returns, different marketing channels, constraints etc. have been mentioned.

In chapter-VII, summary and conclusions alongwith the suggestions for the policy implications have been mentioned.

The report presents the gross-root insights of rural non-agriculture sector of the state and I hope it will be useful to the policy makers and to those who are interested in the affair.

The study was conducted by Shri. B. K. Mishra, Research Officer of the Centre.

Shri. S. N. Shukla and Shri. R. S. Maurya did data collection and processing work.

On behalf of the Centre, I thank Rural Development Commissioner of Uttar Pradesh, District magistrates of Muzaffarnagar and Kannauj and their team of officers and workers. Thanks are due to Dr. Sachdeva, Cane Incharge of Shamli Sugar Mill, Muzaffarnagar and to all those who directly or indirectly assisted in the collection of information regarding the study. It shall be a great failing on my part, if I do not express my gratitude to the household respondents of the selected villages who co-

operated whole-heartedly with the investigating team. I also thank the

selected butchers of Kanpur who, in spite of their very busy hours, gave

the necessary information with blood stains on their bodies. All out

efforts have been made to make the study useful but on account of

paucity of time and resources, it may not be upto the desired level. Any

comments and suggestions for improvement are earnestly solicited and

will be thankfully acknowledged.

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Date: 28.4.2003

(Prof. S. A. Ansari) Hon. Director

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CHAPTER-1

Introduction

The mounting pressure of population, on limited resources has changed the basic character of the economy. Since independence the rate of population growth in the country has been such that it has more than doubled the total population from 361 million in 1951 to 1,000 million by the end of the century. In the meantime, the labour force or the economically active population has also more than doubled. Though the rate of growth of the Indian economy has been around 6.5 per cent during the post-reform period, the increasing labour force surpassed it and resulted in the shape of acute unemployment. At the end of the century, the incidence of unemployment has caught the height of 7 per cent on the basis of current- daily status. The responsibility of absorbing increasing labour force lies on public and private sectors. They are also known as organized and unorganized sectors. On account of many adverse factors in organized sector, the rate of employment has deteriorated. The unorganized sector, also known as informal sector, has the responsibility of providing employment to the sizeable work force of the country. This sector consists of wide range of activities. Based on location, this is also known as rural and urban informal sector. Urban employment has grown at the rate of 2 per cent while in the rural area it increased only by 0.5 per cent. It shows that the employment-situation in rural area is very alarming. According to the 16th round of NSS 1.82% of rural population and 0.82 per cent of urban population were unemployed during the period July 1960 to June 1961. Unemployment is the most serious and burning problem before the country. Unemployed persons involve themselves in destructive activities and the social set-up of the country gets destroyed. The rural sector, also known as informal sector can further be grouped into farm and non-farm sectors. As the share of agriculture in national income has decreased, the responsibility of absorbing the increasing labour force in rural areas lies in the non-farm sector.

Rural Non-Farm Sector

Rural Non-Farm Sector (RNFS) comprises of different types of activities undertaken in rural areas. It includes service, industrial and commercial activities. Different agencies have described this sector in different ways. RNFS consist of all non-agricultural activities such as mining and quarrying, household and household manufacturing, processing, repair construction, trade and commerce, transport and other services in villages and rural town.

Based on census reports and NSS estimates of rural non-agricultural employment in India for the period 1961-91 Dr. Rakesh Basant et al had made a study of Non-agricultural Employment in Rural India. The data used by them are reproduced below to give an insight into the various facets of the problem.

Table-I-1 Estimates of Rural Non Agricultural Employment, All India, 1961-91

Source/year	Worker		No. o	No. of rural non-agri.			Rural non	
	populati	population ratio		rkers (M	illion	agri. workers		
	(%	(%)		Persons	3)	as per	centage	
						(of	
	Male	Female	Male	Female	Total	Male	Female	
Population Census								
1961	58.3	31.4	17.4	5.7	23.1	16.3	10.3	
1971	53.6	13.4	19.6	2.9	22.5	16.3	10.4	
1981 (Main workers)	52.6	16.0	25.1	4.3	29.4	18.3	10.9	
1981 (Main &	53.8	23.2	25.5	5.6	31.1	18.2	9.7	
Marginal workers)								
1991	52.5	26.7	32.5	5.7	38.2	20.2	10.5	
	(51.3)	(19.1)						
NSS Rounds								
27 th Round 1972-73	54.5	31.8	21.3	7.3	28.6	16.8	10.3	
32 nd Round 1977-78	54.7	32.6	27.3	9.6	36.9	19.4	11.9	
38 th Round 1983	55.6	34.2	32.4	10.7	43.1	22.4	12.3	
43 rd Round 1987-88	53.9	32.3	40.9	14.1	55.0	25.5	15.3	
						(24.6)	(13.8)	

Source-: 1. Govt. of India 1964, 1977,1983

2. NSSO (1977, table-1, Page 82, 1981, Table 29, S97-100, 1988 Tables 1, 8 and 14, 8, 40-41, and 1990 statements 23 and 34, 63,100-101.

Notes:

- 1. NSS estimates relate to workers in terms of usual status and include subsidiary workers.
- 2. Following Krishnamurthy (1970), unclassified and general labour in 1961 has been distributed prorate among agricultural Labourers, construction and other sources.
- 3. The population census estimates for 1981 exclude Assam and for 1991.
- 4. Excluded Jammu & Kashmir
- 5. Figures in Parenthesis for 1987-88 report estimates excluding workers engaged in public works.

From the above table, it is clear that in the country as per 1961 population census worker-population ratio, sex wise was 58.3 per cent

male and 31.4 per cent female. Number of rural non-agricultural workers were 17.4 million male and 5.7 million female. Rural non-agricultural workers in percentage term for male was 16.3 and for female it was 10.3 per cent. In 1991 main workers were 52.6 per cent males and 26.7 per cent females. Similarly 32.5 million were rural non-agricultural male and 5.7 million rural non-agricultural female. Their percentage stood at 20.2 and 10.5 respectively.

In 43rd round of NSS in 1987-88 workers population-ratio of male was 53.9 per cent for male and 32.3 per cent for female. Non-agricultural males were 40.9 million and females 14.1 million. In percentage-term they were 25.5 and 15.3 in their respective order.

Objectives of the Study

The broad objectives of the study are as follows:

- (i) To study the pattern of rural Non-Farm Employment diversification.
- (ii) To estimate the determinants of employment in the selected nonfarm rural activities.
- (iii) To assess region-specific constraints in the growth of the live-stock based agro-processing units and draw the policy implications.

Research Methodology

From the State of Uttar Pradesh two districts Muzaffarnagar and Kannauj have been selected on the basis of maximum concentration of non-farm workers and lowest concentration of non-farm workers respectively. From Muzaffarnagar district, class two town Shamli and from Kannauj, Kannauj itself were selected. From Shamli town of Muzaffarnagar a Cluster of three villages (Cluster-I) has been selected. This cluster is in the radius of three kilometers from Shamli town. Similarly from Kannauj three villages were selected under Cluster-I. Similarly 3 villages forming Cluster-II have been selected which are at a distance more than ten kilometers from the town. From both the selected clusters, 30 households each have been selected. Thus in all 120 households have been selected for the study. Village informations have been collected from tehsil and block head quarters and from the Pradhans of the villages.

As for as collection of secondary information is concerned, in spite of the best efforts many of them could not be collected from the State head quarter. As no live stock processing unit were found in the selected districts, the Directorate of Industries, Kanpur was consulted. There were some slaughter houses but they were in very bad and dirty shapes. Inspite of much persuasion their owners refused to talk. Tannery units were also approached but on account of government's pressure on them to install treatment plant and locking of the units by the authorities no body cooperated in the investigation. Ultimately the information has been collected from 15 butchers of different blocks in Kanpur. In brief the following is the pictorial presentation of the sample selection:

Table-I-2 Selected Districts, Towns and Villages in Uttar Pradesh

Distri	ct-1	District-II		
Muzaffa	rnagar	Kanna	auj	
(highest Con	centration)	(Lowest Cond	centration)	
Shamli	Town	Kannauj	Town	
Cluster-I villages	Cluster-II villages	Cluster-1 villages	Cluster-II villages	
(Upto 3 Kms. From	(More than 10			
Town) village	Kms.) village			
Badla Jatta	Khanpur	Ritukala	Tilpai	
Tajpur	Kasampur	Saraei Meera Dehat	Jalalabad	
Simbhalika	-			
Sainta Kanjar Heri		Akbarpur Sarai	Nekpur	
		ghagh	Kayastha	

Categories of Households

Households were divided according to different industrial categories given by the Co-ordinating Centre i.e. Institute of Economic Growth, New Delhi.

The Categories are as follows:

- 1. Small and Marginal Farmers dependent on rural non-farm sector.
- 2. Manufacturing, processing, servicing and repairs
- 3. Construction workers in government sponsored construction activities or agriculture labour
- 4. Private construction workers
- 5. Whole sale traders
- 6. Retail traders
- 7. Workers in transport, storage and communication activities

Apart from these, further bifurcation has been done according to the need and requirement.

After collection of possible, selected and available data, they have been processed on the basis of guidelines given by the Co-ordinating Centre. Simple statistical tools have been applied.

CHAPTER-II

Basic Profile of the State

Uttar Pradesh occupies the geographical area of 240,928 square kilometers with population of 16.61 crore having 8.75 crore males while 7.86 crore females. There are 898 females per 1000 males. Rural population is 13.15 crore and urban one is 3.45 crore. Out of total population the percentage of cultivators is 72.20% with total workers of 29.7%. Industrial workers are 7.75% of the total population. Total revenue of the State, on current price, is Rs, 1, 59, 408 crore. Per capita income of the State, on current price, is Rs. 9721. The net sown area of the state is 16,825 thousand hectare while the gross cropped area is 25, 304 thousand hectares. The food grain production is 432.50 lakh metric tonnes. Net irrigated area of the State is 124.01 lakh hectares. Total metalled roads are 104 thousand kilometers. Number of electrified villages are 55896. Birth and death-rates are 26.7 per thousand and 8.5 per thousand respectively. Table-II-1

Details of Workers in Uttar Pradesh

Here we deal with the position of workers in the State. In 1961 census, the percentage of agricultural workers to total workers was 11.30. In which males were 7.05 per cent and females were 4.25 per cent. In non-agricultural workers who were 24.82 per cent of total workers males were 21.29 per cent and females 3.53 per cent. In 1971 census the percentage of number of agricultural labour to total labour was 19.95, in

which males were 15.44 per cent and female 4.51 per cent. While in case of non-agricultural labour, they were 22.62 per cent of total workers in which males were 21.31 percent and females were 1.31 per cent.

In 1981 census we find that the percentage of agricultural workers to total workers was 15.20, in which males were 12.30 per cent and females 2.90 per cent. Non-agricultural workers were 29.12 per cent of the total workers. The percentage of male members was 23.64 and that of female 5.48.

Taking the census of 1991 we find that percentage of agricultural workers was 18.94 to total workers in which male workers were 14.74 per cent and female 4.20. The non-agricultural workers were 33.09 percent of the total workers of which males were 24.39 per cent and females 8.70 per cent (Table-II-2)

<u>Industrial Classification of Non-farm Workers According to the Sex in Uttar Pradesh</u>

Starting from the census of 1961, we observe that there were 18428 thousands of non-farm workers in the industrial category of cultivators. Out of it 77.61 per cent were males and 22.39 per cent females. In the other category of 'agriculture labour' per cent of male members was 62.42 while the females were 37.58 per cent. The category of 'Cattle rearing, working in jungle, hunting, fisheries etc' has 76.94 per cent males and 23.06 per cent females. In 'Mining and quarrying the male members were as high as 97.22 per cent. In 'Manufacturing and Repairs 81.50 per cent were male participants while, the percentage of females was 18.50. In 'Construction-work' the involvement of males was

as high as 98.13 per cent and females were having their presence only to the extent of 1.87 per cent. In trade out of 1083 workers, males were 91.97 per cent while the females were 8.03 per cent. In 'Transport' the involvement of males was the highest being 99.25 per cent and the remaining 0.75 per cent were females. In remaining 'Others' Category the males were 84.88 per cent and 15.12 per cent were females.

In 1981 census in the industrial category of 'Cultivators' participation of male members was as high as 92.92 per cent while the females were only 7.08 per cent. In 'Agriculture Labour' again the males were 80.90 per cent while females were 19.10 per cent. The next industrial category of 'Cattle-rearing. Work in Jungle, hunting, fisheries etc'. also has 94.94 per cent males and 5.06 per cent females. In 'Mining and quarrying' males dominated by their presence upto 95 per cent against females only 5 per cent. In 'Manufacturing and Repairs' males participated upto 92.95 per cent while females only 7.05 per cent. In 'construction' males cover 97.58 per cent while females were only 2.42 per cent. In 'Trade' males were 97.82 per cent and females only 2.18 per cent. In 'Transport' the dominance of males was as high as 99.25 per cent while female participation was only 0.75 per cent. In the last category of 'Others' male-participation was 91.97 per cent with female at 8.03 per cent.

Narrating the position of 1991 census we find that in the Industrial categories of 'Cultivators' the number of workers were 21,440 thousand in which 89.24 per cent were males and 10.76 per cent as female. In the category of 'Agriculture Labour' 76.89 per cent were males and the remaining 23.11 per cent were females. In third category of 'Cattle-

rearing, work in Jungle, Hunting, Fishing etc'. The males were 90.26 per cent and the females were 9.74 per cent. In 'Mining and quarrying' the dominance of males was upto 90 per cent while those of females only 10 per cent. In 'Manufacturing and repairs' the males were 88.76 per cent with females 11.24 per cent. In 'construction' the participation of males was 96.14 per cent while that of females 3.86 per cent. In 'Trade' males were 96.05 per cent and the females were only 3.95 per cent. In 'Transport' maximum percentage of males could be witnessed which was 99.25 per cent while females were having very nominal presence 0.25 per cent. In the last category of 'Others' presence of male was upto 93.35 per cent while those of females was 6.65 per cent.

In the end we find that in almost all industry categories, dominance of males was witnessed and that participation of females was very low. (Table-II-3)

Here we present the regional scenario of the non farm employment in Uttar Pradesh. After the bifurcation of Uttaranchal, U.P. has four regions. They are Eastern, Western, Central and Bundelkhand. In Eastern region, there are 27 districts. In western number of districts are 26. Central and Bundelkhand regions have 10 and 7 districts respectively. Thus, there are 70 districts in the State. But in 1991, there were 19 districts in Eastern, 20 in Western, 10 in Central and 7 in Bundelkhand regions. The maximum number of non-farm rural workers are in Western Uttar Pradesh. They are 7.25 per cent of the total work force.

Eastern Uttar Pradesh stands second. Here also the percentage of rural non-form workers to total work force was 7.09 Similarly in central U.P. the percentage of non-rural form workers to labour force stood 5.58. In Bundelkhand region also the percentage of non-farm workers to total labour force was 6.11.

Analyzing the relation of rural form workers with the population. We find that percentage was 2.31 in Eastern region 2.16 in Western region 1.79 in Central region and 1.78 in Bundelkhand.

If we see the position of non-farm rural workers in relation with some agricultural indicators we find that Western U.P. stands top by covering irrigation upto 89.7 per cent. Similarly as for as yield-rate is concerned, Western U.P. scores first by producing 24.05 qtls per hect. It means there is positive co-relation between agriculture-development and non-farm-rural employment.

Taking an industrial indicator of no. of factories on per lakh of population, we find that in 1992-93 western U.P. stands highest as it has 8.1 followed by Central U.P. 5.1, then Eastern U.P. 4.9 and Bundelkhand 1.9.

Seeing the position of non-farm workers is all the districts of Uttar Pradesh, we find that in Muzaffarnagar districts of Western region, there are 12.53 per cent of total work force. The reason is that the district people work in non-agricultural jobs of dairnging, weaving, transport etc. Similarly in MAU district of Eastern region, hand-loom work has taken the shape of cottage industry.

Poverty-Line

Poverty lines in rural and urban areas in U.P. and All India in different NSS rounds, as per the new official methodologys how that there is very wide difference between the rural and urban dwellers.

Following table depicts the clear picture-

NSS	Uttar F	Pradesh	All I	ndia
rounds	Rural	Urban	Rural	Urban
1973-74	48.92	57.37	49.63	56.76
1977-78	54.21	69.66	56.84	70.33
1983-84	83.85	110.23	89.50	115.65
1987-88	114.57	154.15	115.20	116.16
1993-94	213.01	258.65	205.84	281.35
1999-2000	336.88	416.29	327.56	454.11

Poverty-line (implicit) at All India level is worked out from the expenditure class-wise distribution of persons and the poverty-ratio at All India is obtained as the weighted average of the state-wise poverty-ratio.

Source: Annual Plan 2003-4 volume I (Part I) Page 100.

Table-II-1
Basic Profile of the State of Uttar Pradesh

1	Geographical Area	2,40,928 kilo meter
2	Population	16.61 Crores
	(i) Male	8.75 Crores
	(ii)	7.86 Crores
3	No. of females on 1000 of males	898 Crores
4	(i) Rural Population	13.15 Crores
	(ii) Urban Population	3.45 Crores
5	% of Cultivators	72.20%
	Total Workers	29.7%
	Industrial Workers	7.75% of total Population
6	Total Revenue (on current price)	1,59,408 crores
	Per capita income (on current Price)	Rs. 9721
7	Net Sown Area	16,825 thousand hectares
	Gross Cropped Area	25304 thousand hectares
8	Net Irrigated Area	124.01 Lakh hectares
	Gross Irrigated Area	176.90 Lakh hectares
	Total Irrigation Capacity	307.16 lakh hectares
9	Food grain production	432.50 lakh metric tonne
10	Total metalled roads	104 thousand Km.
11	No. of electrified villages	55896
12	Birth rate	26.7 per thousand
13	Death-Rate	8.5 per thousand

Table-II-4
Regional Presentation of Non-Farm Rural Workers in Different
Regions of Uttar Pradesh

Sl. No.	Regions / Districts	Population 1991	Worker 1991	Non Farm Rural Workers 1998	Percentage of total workers to total population	Percentage of non- farm rural workers to total worker	Percentage of non- rural worker to total populati- on
	Western Region	48442293	144148449	1044657	29.76	7.25	2.16
1	Saharanpur	2309029	684171	54933	29.63	8.03	2.38
2	Buland Shahar	2849859	825619	50841	28.97	6.15	1.78
3	Meerut	3447912	1052025	49030	30.51	4.66	2.00
4	Ghaziabad	2703933	817513	24892	30.23	3.04	0.92
5	Muzaffarnagar	2842543	948444	118806	33.37	12.53	4.18
6	Aligarh	3295982	987114	46969	29.95	4.76	1.43
7	Mathura	1931146	562980	29079	29.15	5.17	1.51
8	Agra	2751021	773721	49641	28.12	6.42	1.80
9	Mainpuri	1316746	364649	15011	27.69	4.12	1.14
10	Etah	2244998	692216	26389	30.83	3.81	1.18
11	Bareilly	2834616	826638	61376	29.16	7.42	2.17
12	Bijnour	2454521	696102	70877	28.36	10.18	2.89
13	Badaun	2448338	773588	50912	31.60	6.58	2.08
14	Muradabad	4121035	1208012	81672	29.31	6.76	1.98
15	Shahjahanpur	1987395	620574	27482	31.23	4.43	1.38
16	Pilibhit	1283103	388079	27018	30.25	6.96	2.10
17	Rampur	1502141	465578	44353	30.99	9.53	2.95
18	Farrukhabad	2440266	725159	28731	29.72	3.96	1.18
19	Etawah	2124655	582819	20245	24.04	3.47	0.95
20	Firozabad	1553054	419848	30315	27.03	7.22	1.95
21	Gautam Budha	-	-	14271	-	-	
	Nagar						
22	Hathras	-	-	18387	-	-	
23	Joitirwaphule Nagar	-	-	35516	-	-	
24	Kannauj	_	_	13234	_	_	
25	Bagpat			38454			
26	Oraiya			16223		_	
20	Uraiya		_	10223		_	

Source: Fourth Economic Survey 1998 in Uttar Pradesh.

Table-II-4

Sl. No.	Regions / Districts	Population 1991	Worker 1991	Non Farm Rural Workers 1998	Percentage of total workers to total population	Percentage of non- farm rural workers to total worker	Percentage of non- rural worker to total population
	Central	24197714	7779038	433775	32.15	5.58	1.79
	Region	2410405	641020	27000	26.51	- 1 <u>-</u>	
1	Kanpur Nagar	2418487	641039	35088	26.51	5.47	1.45
2	Kanpur	2138317	626644	31777	29.31	5.07	1.49
	Dehat	10000					
3	Fatehpur	1899241	702700	47285	37.00	6.73	2.49
4	Lucknow	27772801	817556	26152	29.48	3.20	0.94
5	Unnao	2200397	737999	34233	33.54	4.64	1.56
6	Raibarelly	2322010	820750	49767	35.35	6.06	2.14
7	Sitapur	2857009	918779	54542	32.16	5.94	1.91
8	Hardoi	2747082	880555	44992	32.05	5.11	1.64
9	Kheri	2419234	772383	49348	31.93	6.39	2.04
10	Barabanki	2423136	860683	60591	35.52	7.04	2.50
	Bundelkhand	6729748	259557/8	119519	38.57	4.60	1.78
	Region						
1	Banda	1862139	804311	21730	43.19	2.70	1.17
2	Jhansi	1429698	499632	18635	34.95	3.73	1.30
3	Chitrakute	-	-	8134	-	-	-
4	Hamirpur	1466419	587055	19280	40.03	3.28	1.31
5	Lalitpur	752043	314644	18093	41.84	5.75	2.41
6	Jalaun (Orai)	1219377	389936	19024	31.98	4.88	1.56
7	Mahoba	-	-	14623	-	-	-
	Total Uttar	132090673	4198300	2817560	31.78	6.11	2.13
	Pradesh			(100.00)			

Table-II-4
Regional Presentation of Non-Farm Rural Workers in Different
Regions of Uttar Pradesh

Sl.No	Regions/Districts	Population 1991	Worker 1991	Non Farm Rural Workers 1998	Percentage of total workers	Percentage of total workers to total population	Percentage of non- farm rural workers to total worker
	Eastern Region	52720918	17193535	1219609	32.61	7.09	2.31
1	Allahabad	4921313	1662970	84010	33.79	5.05	1.71
2	Varanasi	4860502	1536514	79055	31.61	5.15	1.63
3	Mirzapur	1657139	584165	48647	35.25	8.33	2.94
4	Jaunpur	3214636	916189	97231	28.50	10.61	3.02
5	Gazipur	2416617	705750	59010	29.20	8.36	2.44
6	Ballia	2262273	638159	49779	28.21	7.80	2.20
7	Gorakhpur	30666002	880620	65074	28.72	7.39	2.12
8	Dewaria	4440024	1384459	56639	31.18	4.09	1.28
9	Basti	2738522	901156	41572	32.91	4.61	1.52
10	Azamgarh	3153885	943059	75663	29.90	8.02	2.40
11	Faizabad	2978484	943505	27623	31.68	2.93	0.93
12	Gonda	3573015	1313215	39599	36.75	3.02	1.11
13	Bahraich	2763750	1071618	32951	38.77	3.07	1.19
14	Sultanpur	2558970	808167	47868	31.58	5.92	1.87
15	Pratapgarh	2210700	704367	45854	31.86	6.51	2.07
16	Sonbhadra	1075041	450901	24546	41.94	5.44	2.28
17	Maharaj Ganj	1676378	641582	31829	38.27	4.96	1.90
18	Siddharth Nagar	1707885	626877	42380	36.70	6.76	2.48
19	Mau	1445782	480262	56002	33.22	11.66	3.87
20	Sant Ravidas Nagar	-		30073			
21	Padrauna	-		46591			
22	Ambedkar Nagar	-		27641			
23	Kaushambi			18397			
24	Chandauli			30354			
25	Balrampur	-		21024			
26	Shrawasti	-		15051			
27	Sant Kabir Nagar	=		25146			

CHAPTER-III

<u>Distribution of Rural Non-Farm Employment Workers of the Selected Districts</u>

We take the 'Industrial Category of 'Agriculture' of Muzaffarnagar district'. In the census year of 1971, 43.22% of total main workers were engaged in this category. In 'Agriculture Labour' they stood at 27.97 per cent. In the category of 'Animal Husbandry, Forest plantation, tree plantation' the percentage was 0.56. In 'Mining and quarrying, it was very nominal i.e 0.01 per cent. In family and non-family industrial Categories, it was 5.48 and 4.65 per cent respectively. In case of 'Construction', it was only 1 per cent. The percentage of 'Trade and Commerce' was 5.95. In 'Transport storage and Communication it was 1.94 per cent. Other workers stood at 9.22 per cent.

In the census of 1981, the share of 'Agriculture' stands at 41.71 per cent of total main workers followed by 28.20 per cent in 'Agriculture Labour'. In the category of 'Animal Husbandry, Forest Plantation, Tree Plantation' it was only 0.62 per cent of main workers. In 'Mining and quarrying' the percentage was very nominal i.e. 0.01 per cent. In family and non-family industrial categories the percentage was 4.06 and 7.16 respectively. IN 'Trade and Commerce', the percentage was 6.49. In 'Transport, Storage and Communication' they were 2.19 per cent. While 'Other Workers' were 7.94 per cent.

In the census of 1991 in "Agriculture' the percentage was 37.03. In 'Agriculture Labour' the same was 31.03 per cent. In 'Animal

Husbandry, Forest Plantation, Tree Plantation' the percentage was only 1. In 'Mining and quarrying' only 0.01 per cent were employed. Family industry and non-family industry stood at 1.86 per cent and 8.31 per cent respectively. In 'Construction' these were 1.71 per cent. Trade and Commerce employ 7.76 per cent. In 'Transport, Storage and Communication' there were 2.16 per cent. In the category of 'Other Workers' the percentage of total main workers was 9.13.

In the district of Kannauj, in 1971, the percentage of workers in 'Agriculture' was 68.69. In 'Agriculture-Labour' the same was 11.68 per cent. In 'Animal Husbandry, Forest Plantation. Tree Plantation' very nominal per cent of 0.38 stood. It was followed by 'Mining and quarrying' (0.01 per cent). In the category of 'Family Industrial' and Non-Family-Industrial they were 3 per cent and 3.66 per cent respectively. In 'Construction' the percentage was 0.42. In 'Trade and Commerce' there were 3.57 per cent of workers. In 'Transport, Storage and Communication' the percentage was 0.95. 'Other-Workers' stood at 7.64 per cent.

In 1981, 68.18 per cent were engaged in industrial category of 'Agriculture'. In 'Agriculture-Labour' the percentage was 10.12. In 'Animal Husbandry, Forest Plantation, Tree Plantation' it stood at 0.40 per cent. In 'Mining and quarrying; it was 0.01 per cent. In 'Family Industrial' and in 'Non-family Industrial' the percentage were 3.06 and 5.68 respectively. In construction 0.78 per cent were engaged. In 'Trade and Commerce' 4 per cent were employed. In 'Transport, Storage and Communication' 1.39 per cent of the workers were engaged. In 'Other Workers' the same was 6.38 per cent.

In 1991 census of the Kannauj district, the percentage of total workers employed was 67.14. In 'Agriculture-Labour' the same was 11.35 per cent. In 'Animal Husbandry. Forest Plantation, Tree Plantation' there were only 0.41 per cent of workers. In 'Mining and quarrying, it was very nominal, i.e. 0.01 per cent. In Family-Industry and Non-Family Industry the percentage were 1.92 and 6.14 respectively. In 'Construction' it was 0.42 per cent. In Trade and Commerce' the workers-employment was 5.07 per cent. In 'Transport, Storage and Communication; the percentage was 0.88. In 'Other workers' it was 6.66 per cent.

Examining the employment position of both the districts, we find that there is similar tendency in different industrial categories (Table-III-1).

Basic Profile of the Districts Selected for the Study

The geographical area of both the districts has been shown. The geographical area of Muzaffarnagar district is 4008 square Kms. While that of Kannauj is 2129.2 Km.

As for as the demographic feature of the district is concerned, total population of Muzaffarnagar district in 1991 was 284261 thousand in which males were 1528.63 thousand while females were 1313.98 thousand. Percentage of urban population to total population was 24.6. Sex ratio was 860 females to 1000 males. The rural and urban population of the district was 2143.31 thousand and 699.23 thousand respectively. Regarding demographic feature of Kannauj, the total population of the

district was 1155.85 thousand in 1991 in which male members were 628.65 thousand and females were 527.19 thousand. The urban population was 181.79 thousand (24.6%) and that of rural was 974.06 thousand. The sex-ratio there was 839 females one thousand males.

Percentage of literate males in 1991 was 56.6 and that of female 21.1 per cent in Muzaffarnagar district. In Kannauj the same was 61.1 per cent (males) and 32.9 per cent (females).

Number of electrified villages in Muzaffarnagar was 929 in 1999 and 612 (in 2001-2). Length of roads in Muzaffarnagar was 2662 Kms. And in Kannauj it was 818 Km. The net area sown in Muzaffarnagar district was 326 thousand-hectare in 1998-98. The area sown more than once was 165 thousands. Net irrigated area was 321 thousand hectares and the gross irrigated area was 479 thousand hectares. Net production of foodgrains was 517 thousand metric tonnes.

In Kannauj district, the net area sown was 145 thousand hectares in 2001. While area sown more than once was 87 thousand hectares. Net irrigated area was 135 thousand hectares, When the gross irrigated area stood at 168 thousand hectares. Agriculture production of foodgrains was 457 thousand metric tonnes.

Percentage of agriculture-workers to total population was 20.4 in Muzaffarnagar and 22.3 in Kannauj.

In Muzaffarnagar district, percentage of main workers to total rural population was 30.9 alongwith its urban i.e. 27%. In the same way in Kannauj district the percentage of rural population to main workers was 29.1 and that of urban it was 28.3.

If we see the salient features of both the districts, we find that per hectare value of agricultural output of Muzffarnagar and Kannauj was Rs. 31,157 and 19054 respectively. In the same way per capita value of agricultural output was Rs. 5380 in Muzaffarnagar and Rs. 3824 in Kannauj districts. In case of per-capita figure of rural population, it stood Rs. 7138 in Muzaffarnagar and Rs. 4539 in Kannauj district. As far as per tractor of land holding is concerned it was 15.76 hectare in Muzaffarnagar 80.40 hectares in Kannauj district. Similarly a pumpset irrigates 6.61 hectare of land in Muzaffarnagar and 4.02 in Kannauj. The percentage of rural population was 75.38 in M. Nagar and 84.26 in Kannauj. (Table-III-2B)

As for as the classification of workers according to industrial categories is concerned, in 'Agriculture' in Muzaffarnagar district, there were 37.2 per cent of the main workers while in Kannauj they were 67%. In the category of 'Agriculture-Labour' they were 30.8 per cent in Muzaffarnagar and 11.4 per cent in Kannauj. In case of 'Family-Industry' there was 1.9 per cent each in Muzaffarnagar and Kannauj district. In case of Non-family industry also they were 8.3 per cent in Muzaffarnagar and 6.1 per cent in Kannauj.

In the category of 'Construction' it was 1.7 in Muzaffarnagar and 0.4 per cent in Kannauj. In 'Trade' the percentage was 7.8 in Muzaffarnagar and 5.1 in Kannauj. The industrial category of 'Transport' has 2.2 per cent in Muzaffarnagar and 0.9 per cent in Kannauj. The category of 'Others' shared 9.2 per cent in Muzaffarnagar and 6.7 per cent in Kannauj. (Table-III-2)

Table-III-2A Basic Profile of the Districts

Basic Profile Muzaffarnagar Kann 1 Geographical Area (1991) 4008 Sq. Kms. 2 Population (000) 1. Male (1991) 1528.63 2. Female (1991) 1313.98	2129.2
2 Population (000) 1. Male (1991) 1528.63	2127.2
1. Male (1991) 1528.63	
	628.65
	527.19
3. Total (1991) 2842.61	1155.85
(i) Rural (1991) 2143.31	974.06
(ii)Urban (1991) 699.23	181.79
3 % of Literate Persons	
1. Male (1991) 56.6	61.1
2. Female (1991) 21.1	32.9
3. Total (1991) 44.0	48.4
4 Sex Ratio- No. of Women on 860	839
per 000 of Male	
5 Value of Agriculture Output 152979 lakh 442	205 lakhs
(2001) (Rs.)	
6 No. of Tractors (2001) 20590	1973
7 No. of Pumpsets Mobile 1164	13
Fixed 48187	36103
8 Landholdings No. 2965726	22187
Hect. 324580	158627
9 No. of Villages	
10 No. of Cold Storage 31	79
11 Agriculture	(0.00.1
(i) Net Area Sown (1998-99) 326 (000 hect.) 145 (000 hect.
(") A C M Tl O 1(5 (000 l)) 97 (000 l .	2000-1)
(ii) Area Sown More Than Once 165 (000 hect.) 87 (000 hect.)	
(iii) Net Irrigated Area 321 (000 hect.) 135(1)
(iii) Net Irrigated Area 321 (000 hect.) 135(000 hect. 2000-1)
(iv) Gross Irrigated Area 479 (000 hect.) 168 (000 hect.
(11) S1055 Hilgared Area 479 (000 fieet.)	2000-1)
(v) Agri. Production (food 517(000 Metric 457 (00	00 Metric
grains) tonnes)	tonnes)
12 Length of the roads (1998-99) 2662 818 Kms	
(Km.)	(2000 01
	2 (2001-2

14	% of Urban Population to total	24.6 (1991)	15.7
	population	• • •	22.2
15	% of Agri. Workers to total	20.4	22.3
	Population		
16	% of total Main Workers to Popul		
	Rural	30.9	29.1
	Urban	27.1	28.3
	Total	30%	29.1
17	% of total Main Workers		
	(i) Agriculture	37.2	67.1
	(ii) Agri. Worker	30.8	11.4
	(iii) Animal Husbandry forest	_	-
	Plantation Tree Plantation		
	(iv) Quarrying	-	-
	(v) Family Industry	1.9	1.9
	(vi) Non- Family Industry	8.3	6.1
	(vii) Construction	1.7	0.4
	(viii) Trade	7.8	5.1
	(ix) Transport	2.2	0.9
	(x) Others	9.2	6.7
	Urbanization & Infrastructure		
	(1) No. of Towns & Cities	20	8
	(2) Rural Roads (2001)	1582 Km.	548 Kms
	(3) Rural Centres like IIT	1	1
	(4) Existence of Active NGOS	N.A	N.A
	(5) Land Holdings (i) (NOS)	296572	22187
	(ii) Area Hect.	324580	158627

Table-III-2B
Depicting Some Development Indicators of the Selected Districts

Particulars	Muzaffarnagar	Kannauj
1. Per Hect. Value of Agriculture	31157 Rs	19054 Rs.
Output		
2. Per Capita Agriculture output	5380 Rs.	3824 Rs.
3. As Per Rural Population	7138 Rs.	4539 Rs.
4. Per Tractor of Land Holding	15.76 Hect	80.40 Hect.
5. Per Pumpset of Land Holding	6.61 Hect	4.02 Hect
6. Percentage of Rural Population	75.38	84.26
7. Irrigation	98.4	88.4
8 (i)Total food gram	517438	410160
(ii) Average yield	28.2	24.51
9. No. of factories on per lakhs of	8.2	-
population		
10. Cropping Intensity	150.51	163.63

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CHAPTER-IV

Profile of the Villages Selected for the Study

We study here the size of village population. In case of villages of Cluster-I of Muzaffarnagar district, there were 10,153 persons, while in case of Cluster-II villages of the same district there were as many as 5, 452 persons. In Kannauj district, the number of population of Cluster-I villages stood at 3,382 persons while in Cluster-II villages there were 8479 persons. Apart from, the average holding of all the selected villages were studied. In case of Cluster-I villages of the Muzaffarnagar district, the average size of holding was 1.56 hectares. In case of Cluster-II, the same was 0.53 hectare. In case of Kannauj district, they stood at 0.35 hectare and 0.58 hectare respectively. So far as the irrigated area is concerned it was 1.56 hect. (100%) in cluster-I villages and 0.51 (95.76%) hectare in Cluster-II villages of the Muzaffarnagar district. In case of Kannauj district, they were 0.25 hectare (70.11%) and 0.58 hectare (100%) in Cluster-I and Cluster-II villages respectively.

The proportion of landless household stood at 6.83 in Cluster-I villages of Muzaffarnagar district. The per capita land available was 0.09 hect. and 0.11 hect. in village Cluster-I and village Cluster-II of Muzaffarnagar district respectively. In case of Kannauj district the same stood at 0.08 hect. and 0.04 hect. in Cluster-I and Cluster-II villages respectively. So far as the percentage of literacy is concerned, it was 53.53% in Cluster-I villages and 49.28 per cent in Cluster-II villages of Muzaffarnagar district. In case of Kannauj district it was 45.24 and 52.51

percentage in villages of Cluster-I and Cluster-II respectively. The distance from the villages to towns was 2 Km. In case of Cluster-I villages and 14 Kms. from Cluster-II villages in Muzaffarnagar district. In Kannauj district, the distance of Cluster-I village was 2 Kms and 16 Kms from Cluster-II villages. The population size of the nearby town in Muzaffarnagar was 89861 and in Kannauj the same was 71,530. (Table-IV-1)

Table-IV-1
Basic Characteristics of Village Groups Selected for the Study

	Districts					
Village-Characteristics	Muzaff	arnagar	Kannauj			
-	Village-C-1	Village-C-2	Village-C-1	Village-C-2		
Size of Village population	10153	5452	3382	8479		
Average holding size	1.56	0.53	0.35	0.58		
(cultivated area per farm						
household) hect.						
Proportion of Irrigated land	100.00	95.76	70.11	100.00		
Per capita land (cultivation	0.09	0.11	0.08	0.04		
land/village population)						
Percentage of literate %	53.53	49.28	45.24	52.51		
Distance from nearby towns	2	14	2	16		
Size of nearby towns (population)	89861	89861	71530	71530		

<u>Distribution of Households by Size of Operational Land Holding</u>

The selected households were divided among marginal, small, medium and large categories. In Muzaffarnagar district, there were 554 households in Cluster-I villages. Out of 554 there were 492 (88.81%) in marginal category, 55 (9.93%) in small category and 7(1.26%) in medium category. There was no household in large category. Similarly in Cluster II villages of the same district, there were 1103 households, out of them 1056 (95.74%) were in marginal category, 43 (3.90%) in small and 4 (0.36%) in medium category. In this Cluster also there was no large farmer. In case of Kannauj district, in Cluster-I villages, there were 772 households. Out of them 750 (97.15%) were in marginal category, 13 (1.68%) small and 9 (1.17%) in medium category. In this district also, there was no large farmer. In case of the Cluster-II villages of the district also the number of households was 1579. Out of them, maximum number 1546 (97.91%) were in marginal category, 29 (1.84%) in small category and remaining 4 (0.25%) in medium category. As in Muzaffarnagar district so in Kannauj district also, there was no large farmer(Table-IV-2)

Table-IV-2
Distribution of Households by Size of Operational Land Holding in the Sample Village Groups

8								
	Districts							
Land Holding	Muzaffa	arnagar	Kar	ınauj				
	Village-C-1	Village-C-2	Village-C-1	Village-C-2				
Marginal	492	1056	750	1546				
	(88.81)	(95.74)	(97.15)	(97.91)				
Small	55	43	13	29				
	(9.93)	(3.90)	(1.68)	(1.84)				
Medium	7	4	9	4				
	(1.26)	(0.36)	(1.17)	(0.25)				
Large	-	-	-	-				
Total	554 (100.00)	1103 (100.00)	772 (100.00)	1579 (100.000				

Proportion of Owned Account Enterprises Industrial Category-Wise in the Village

Households were studied according to own Account Enterprises, industrial category-wise. An own Account Enterprise is owned and operated with the help of family members only. In Cluster-I village-I villages of Muzaffarnagar district, 4.40 per cent persons were engaged, in the activities of manufacturing, processing etc. inclusive of rural artisan. While in Cluster-II villages, 2.88 per cent were engaged in the same activities. Similarly in Kannauj district in Cluster-I Villages 7.84 per cent were engaged in these activities while in Cluster-II villages 1.56 per cent in the above mentioned activities.

As for as the construction work is concerned none did the same in Cluster-I village of Muzaffarnagar while in Cluster-II, the same stood at 1.12 per cent of the households in the village. In case of Kannauj district, 13.41% and 1.71% were engaged in Cluster-I and II village groups respectively.

Traders and shopkeepers were 4.95 per cent and 1.86% in Cluster-I and Cluster-II villages respectively in Muzaffarnagar district. In case of Kannauj district, 5.40% were traders and shop-keepers in Cluster-I and 2.57% in Cluster-II village groups.

Transport as another very important sector in which 1.38 per cent in village group Cluster-I and 2.23 per cent in Cluster-II village group were engaged in Muzaffarnagar district. In case of Kannauj district 1.57% in villages group Cluster-I and 0.16 per cent in village group Cluster-II were engaged.

Table-IV-3
Proportion of own Account Enterprises Industrial Category-wise in the Village (Proportion with Respect to the Number of Households in the Village

	Districts						
Industrial Categories	Muzaff	arnagar	Kannauj				
	Village-C-1	Village-C-2	Village-C-1	Village-C-2			
Manufacturing,	4.40	2.88	7.84	1.56			
Processing etc. inclusive							
of rural artisan							
Construction	(0.00)	1.12	13.41	1.71			
Traders & Shopkeepers	4.95	1.86	5.40	2.57			
Transport	1.38	2.32	1.57	0.16			
Services	0.28	0.28	0.70	0.70			
Total	11.01	8.46	28.92	6.70			

In services, 0.28 per cent each in Cluster-I and Cluster-II were engaged in Muzaffarnagar district. In Kannauj 0.70 per cent each in Cluster-I and Cluster-II village groups were engaged. (Table-IV-3)

Proportion of Casual Workers, Industrial Category-Wise

Agricultural Labour (Exclusively) were 16.49% in village Cluster-I group and 8.46% in village Cluster-II respectively in Muzaffarnagar district. In Kannauj district they were 11.56 per cent in Village group-I and 4.81% in village group-II. Similarly agricultural labours with land were 26.58% and 28.69% respectively in Muzaffarnagar district. In the same way in Kannauj district, 34.39% and 23.43% respectively were in village group-I and village group-II.

Position of agricultural labourers with allied activities were studies. Their position was 0.25 and 1.48% in Cluster-I and Cluster-II village groups in Muzaffarnagar district. In Kannauj district in Cluster-I

there were 10.05 per cent while in Cluster-II village group there was none. In case of Agricultural Labourers with land and allied activity. They were 16.73 per cent and 9.94 per cent in village group-I and II respectively in Muzaffarnagar district. In the same way, in Kannauj district in Cluster-I and Cluster-II villages the figures were 21.61 per cent and 4.81 per cent respectively.

In manufacturing and processing etc. in Cluster-I and village Cluster-II, figures stood at 0.63 and 0.57 per cent respectively. In Kannauj district the same were 1.33 per cent and 0.24 per cent in group-I and group-II villages respectively. In construction work in Muzaffarnagar district 0.22 per cent 0.22 per cent were engaged in Cluster-I and Cluster-II villages. In Kannauj district they were 2.28 per cent and 0.26 per cent in village-I group and village group-II respectively.

As for as persons engaged in trade were concerned they were 0.71 per cent and 0.37 per cent in I and II groups respectively in Muzaffarnagar. In Kannauj district the same stood at 0.92 per cent and 0.39 per cent in Cluster-I and Cluster-II respectively.

As for as transport is concerned, in Muzaffarnagar district in village group-I and village group-II the figures were 0.20 per cent and 0.46 per cent respectively. Similarly in Kannauj district, they were 0.27 per cent in Cluster-I and 0.20 per cent in Cluster-II.

In service sector in Muzaffarnagar district none was engaged in selected village groups while in Kannauj district they are 0.12 per cent in village group Cluster-I and 0.11 per cent in Cluster-II. (Table-IV-4)

Proportion of Casual Workers Industrial Category-wise in the Village (Industrial Category as in the background material and Proportion would be with respect to the total population of the village)

	Districts						
Industrial Categories	Muzaff	arnagar	Kannauj				
	Village-C-1	Village-C-2	Village-C-1	Village-C-2			
Agricultural Labourer	16.49	8.46	11.56	4.81			
(exclusively)							
Agri. Labourers with land	26.58	28.69	34.39	23.43			
Agri. Labourers Land but with	0.25	1.48	10.05	-			
allied activity							
Agri. Labourers Land but with	16.73	9.94	21.61	4.81			
allied activity							
Manufacturing, Processing etc.	0.63	0.57	1.33	0.24			
Construction	ı	0.22	2.28	0.26			
Trade	0.71	0.37	0.92	0.39			
Transport	0.20	0.46	0.27	0.02			
Services	-	-	0.12	0.11			
Total	61.59	50.19	82.53	34.07			

Comparative Account of Infrastructure Available within the Villages

Basic infrastructure is the backbone of development. Here we study the basic infrastructure available in the village groups. Education forms the basic infrastructure of development. In Cluster-I and Cluster-II villages of Muzaffarnagar district there were both public and primary schools. In Kannauj district in village Cluster-I there was a private primary school while in Cluster-Ii both public and private primary schools were functioning. As for as health care centre is concerned, in Muzaffarnagar district private health centres existed in both the Clusters. Similarly in Kannauj district, in Cluster-I there was a private health care centre and in Cluster-II, both the private and public health centres were in operation.

Live-stocks are part and parcel of village dwellers. They provide milk, meat, wool and drought cattle plough the fields. Therefore, veterinary dispensary is the basic requirement of modern village. But it is an irony of fate that in both the Clusters of Muzaffarnagar district and in Cluster-I of Kannauj district, there was no veterinary dispensary, in Cluster-II villages of Kannauj district there was only one.

Roads are the blood and soul of development. Rural roads are the most important basic infrastructure of village development. As for as motorable roads are concerned they are available only in few Cluster-I and II villages of Muzaffarnagar district. In case of Kannauj district, in Cluster-I villages, the roads were available in all the villages. But in Cluster-II villages they were available in a few villages.

Financial institutions play very important role in village development. In order words we can say that finance is the pivot around which all the activities Cluster. Here in Cluster-I village of Muzaffarnagar district, there was a post office while in Cluster-II neither post office nor any commercial bank existed. Similarly in Cluster-I of Kannauj district no financial institution existed.

The non-financial institutions comprising of Private Training Centre, Govt, Training Centre, Krishi Vigyan Kendra etc. existed in Cluster-I and II villages of Muzaffarnagar. In case of Cluster-I villages of Kannauj district only private training centre existed, while in Cluster-II none of these existed.

Non-Government Institutions are very much useful in rural development. In Cluster-I of Muzaffarnagar district only two out of three

non-government institutions (such as Cooperative, SHGS and active NGOs) existed. Similar is the case in both the Clusters of Kannauj district.

Post harvest facilities benefit both the producers and the consumers. Cold storage facility, regulated market, processing units transform the consumption habits of the habitants.. In Muzaffarnagar district, in Cluster-I villages, no such type of facilities existed. In Cluster-II many cold storage facilities existed. Similarly in Kannauj district no such facilities were available in both the Clusters of the villages (Table-IV-5).

Here we narrate the position of households on the basis of major source of employment. In village 1 group, villages of Muzaffarnagar district 7 persons (23.33%) were engaged in 'Agriculture activity'. In industrial category of Manufacturing, processing, servicing and repairing, 3 persons (10.00) were engaged. The next item of 'private construction' was occupied by 23.34 percent of the household. In retail traders and in services 'transport, storage and communication' 3 persons (10 per cent) each were engaged. In agriculture labour 7 persons (23.33%) of the households were engaged.

Table-IV-5
A Comparative Account of Available Infrastructure within the Village Groups

	Muzaff	arnagar	Kan	nauj
Available Infrastructure	Village	Village	Village	Village
	C-1	C-1	C-1	C-1
Primary School (no.: 0, public 1 private: 2. Both: 3)	3	3	2	3
Health Centre (No. 0, Public: 1 Private: 2, Both: 3)	2	2	2	3
Veterinary Dispensary (No. 0, Public: 1, Private: 2	0	0	0	1
both: 3 Others in any mention with No.)				
Motorable Road (Not available in any of the village 0,	1	1	2	1
available in few village but not in all the village of the				
Cluster-I available in all the village 2				
Financial Institutions (Post Office: 1, Commercial	1	0	0	3
Bank 2, Both 3, Non-one of them 0				
Non-Financial Institutions (Private Training Centre: 1	4	4	1	5
Govt. Training Centre 2, Both Type of Training				
Centres 3, KVIC Office 4, Non of these 5				
Non-Govt. Institutions (Cooperative 1, SHGs 2, Active	4	4	4	4
NGOs for rural development 3, two out of the three				
institutions 4, All the three institutions 5. None 0)				
Post harvest Facilities (Existence of Storage facility 1,	0	1	0	0
Existence of regulated market 2, existence of				
processing units 3, Existence of 2 out the three				
indicators 4, Existence of all the three facilities 5,				
Absence of all 0				

Similarly in village Cluster-2 of the same district, out of the 30 selected households 4 persons (13.33%) were engaged in agriculture. In manufacturing, processing and repairs' also the same i.e. 4 persons (13.33%) were engaged. In private construction 5 persons (16.67%)

shared from 30 selected households. In the next categories of retail traders, and services (transport, storage, communication 3 each) (10.00%) were engaged. Lastly, under Agricultural-labour there were 11 households (36.67%).

Taking the case of Kannuaj district, in village-1 group we find that 11 (36.67%) adopted 'agriculture' as their occupation. In case of 'Manufacturing, Processing, Servicing and Repairs' there were 3 (10.00%). Private construction' was the occupation of 5 persons (16.67%). Only 1 person (3.33%) was found engaged in 'whole-Sale-Trading' in the entire study in this village-group. Similarly in the category of 'Retail Traders' and Services, transport, storage and communication' 3 each (10.00%) occupied the scene. In the category of 'Agriculture-labour' 4 persons (13.33%) were engaged. In villages-2 group of the same district we find that maximum 14 persons (46.67%) were working in 'Agriculture'.

In Manufacturing, Processing, Service and Repairs' 2 persons (6.67%) were engaged. In private-construction also 4 (13.33%) were engaged. In the categories of 'Retail traders' and Services (Transport, Storage and Communication) 3 each (10%) shared this category. 4 workers (13.33%) have been classified as Agricultural Labourer.

Thus we find that in both the districts, more or less similar trend of employment was witnessed (Table-IV-6).

Table-IV-6
Distribution of households by major sources of employment in village groups

Major Sources of Employment	Muzaffa	ırnagar	Kannauj		
	Village-1	Village-2	Village-1	Village-2	
Agriculture	7	4	11	14	
	(23.33)	(13.33)	(36.67)	(46.67)	
Allied Activity	-	-	-	-	
Manuf, Processing, Service & Repairs	3	4	3	2	
	(10.00)	(13.33)	(10.00)	(6.67)	
Private Construction	7	5	5	4	
	(23.34)	(16.67)	(16.67)	(13.33)	
Whole Sale Traders	-	-	-	-	
Retail Traders	3	3	3	3	
	(10.00)	(10.00)	(10.00)	(10.00)	
Services (transport, storage,	3	3	3	3	
communication)	(10.00)	(10.00)	(10.00)	(10.00)	
Agricultural Labour	7	11	4	4	
	(23.33)	(36.67)	(13.33)	(13.33)	
All	30	30	30	30	
	(100.00)	(100.00)	(100.00)	(100.00)	

Figures in brackets are percentage of absolute figures.

Here we see the position of average income of the selected households for the study. In case of Cluster-1 villages of Muzaffarnagar district, average annual income of those who are engaged in cultivation stood at Rs. 44,943. In case of agriculture labour, the same was Rs. 22007. Those who are engaged in 'self employment in Manufacturing' earned Rs. 40,704 as an average income. Non agricultural wage labourers earned Rs. 1,487. The category of 'Regular Employment in Non-Agriculture' earned Rs. 25,323 as an average income. In the end we find

that average income of all households in this group was found at Rs. 32103.

Taking the facts of Cluster-2 of the same district, we find that the average income of this group of cultivation stands at Rs. 48,150. In the next group of agriculture-labour, the same was Rs. 17,940. In the group of 'Self Employment in Manufacturing' the average income was Rs. 18,512. So far as 'non-agriculture wage labour' is concerned the earning is Rs. 31644. The households belonging to the category of 'Regular employment in non-agriculture' earned an average income of Rs. 24,209. In the end of this group, we find that the average in-come of all the households stands at Rs. 26915.

In the district of Kannauj, we find that in Cluster 1 villages, the average income under 'cultivation' was Rs. 16018. In case of 'Agriculture-Labour' the same was Rs. 15037. The division of self-employment in Manufacturing earned Rs. 12, 817 as its average income. Non-Agriculture-wage labour earned Rs, 18072. The next division of households of Regular Employment in Non-Agriculture' earned Rs. 16815. Thus the average income of all the households was Rs. 16095.

Here we examine the position of average income of different categories of Cluster-2. In case of the category of 'Cultivation' the average income was Rs. 28147. 'Agriculture-Labour, earned Rs. 20045. The households of 'Self- Employment in Manufacturing, earned an average income of Rs. 18,753. The workers of 'non-agriculture-wage labourer' earned Rs. 14265. The category of Regular Employment in non-agriculture earned Rs. 25,570 on an average Thus the average

income of all the households of this Cluster 2 village, was Rs. 24074 which is higher than that of Cluster 1 villages. (Table-IV-7)

Table-IV-7 Average Income by Major Source of H.H

(**Rs.**)

Major Sources of H. H. Income	Muzaffarnagar Kanna			nauj
	Village-1	Village-2	Village-1	Village-2
Cultivation	44943	48150	16018	28147
Agriculture Labour	22007	17940	15037	20045
Allied Activity	-	-	-	-
Self Employment in	40,704	28,512	12,817	18,753
Manufacturing etc.				
Self Employment in Pvt.	-	-	-	-
Construction				
Self Employment in Servicing etc.	-	-	-	-
Non-Agriculture Wage Labour	31,487	31,644	18,072	14,265
Regular Employment in non	25323	24209	16815	25570
Agri.*				
Govt. Construction	-	-	-	-
Average All Households	32103	26915	16095	24074

^{*} Included whole sale traders, Retail traders & services. (Here income may be derived out of employment and sources of income may be constructed as employment from specific industrial category)

Now we examine the average number of economic activities per worker according to different industrial categories. In Muzaffarnagar district, under Cluster 1 'Cultivation' has 5.20 average number of economic activity. While in the category of 'Agriculture-Labour' the same is 7.50. 'Self employment in Manufacturing etc' has 3.33 average activities. Non-agriculture-wage Labour and Regular Employment in non-agriculture have 5.33 and 3.25 average activities respectively.

Taking the case of Cluster 2, we find that cultivation has 4 as average economic activities. Agriculture labour stood 3.33. In case of

Self Employment in Manufacturing etc., the figure stood as 2.50. Non-Agriculture wage-labour and Regular Employment in Non-Agriculture are having 2.67 activities and 2.83 respectively.

As far as the position of Cluster-1 of Kannauj district is concerned, 'cultivation' occupied 8.67 numbers, followed by 2.50 as 'Agriculture-labour'. In 'Self Employment in Manufacturing etc'. the figure was 2.00. The industrial categories of 'Non-Agriculture-wage-Labour and Regular Employment in Non-Agriculture have 3.75 and 2.00 activities respectively.

Similarly, in the Cluster-II of the district cultivation occupies 6.58 number of average activities. In case of 'Agriculture-Labour' the same was 2.50. As for as the category of 'Self- Employment in Manufacturing etc. is concerned, it was 3.00. Lastly the categories of Non-Agriculture-Wage Labour and Regular Employment in non-Agriculture have 4.17 and 4.33 activities respectively. (Table-IV-8)

Table-IV-8
Average Number of Economic Activities Per worker Industrial Category-wise in the Sample Village

(Nos.)

Major Industrial Category	Muzaffa	Muzaffarnagar		nauj
	Village-1	Village-2	Village-1	Village-2
Cultivation	5.20	4.00	8.67	6.58
Agriculture Labour	7.50	3.33	2.50	2.50
Allied Activity of Agri.	-	-	-	-
Self Employment in Manufacturing etc.	3.33	2.50	2.00	3.00
Self Employment in Pvt. Construction	-	-	-	-
Self Employment in Services etc.	-	-	-	-
Non-Agriculture Wage Labour	5.33	2.67	3.75	4.17
Regular Employment in non Agri.*	3.25	2.83	2.00	4.33
Govt. Construction	-	-	=	-

Here we see the position of households reporting various subsidiary source of income by Major sources of household Employment/ Income. Taking the major Industrial Category of 'Cultivation', we find that in subsidiary source of income 'Cultivation' secures 86.94 per cent while Agriculture Labour accounts for only 11.06 per cent. Similarly in Major Industrial Category of Agriculture-Labour, in Agriculture labour as subsidiary source of income contributes 41% followed by 'Self Employment in Manufacturing' 3.96 per cent, Non-Agriculture Wage-Labour 13.84% and Regular Employment 19.02 per cent. In major industrial Category of 'Self Employment in Manufacturing' this as subsidiary source of income secures 40.24 per cent. Non-agriculture wage labour has 37.32 per cent. In major Industrial Category of non-Agriculture Wage Labour, cultivation stands at 27.60 per cent, agriculture labour 16.75 per cent, self employment in manufacturing 10.27 per cent. Non- Agriculture Wage-Labour 28.14% and Regular Employment in Non-Agriculture 17.24 per cent stand as subsidiary source of income. In the major Industrial Category of Regular Employment in Non-Agriculture, cultivation stands 44.84 per cent, agriculture labour 5.32 per cent, Self Employment in Manufacturing 14.26 per cent regular employment in non-agriculture 35.58 per cent as subsidiary source of income (Table-IV-9).

Table-IV-9
Percentage of Households Reporting Various Subsidiary Sources of Income by Major Sources of Household Employment/ Income

Major Industrial		Subs	sidiary	sources	of Inc	ome in I	Percent		
Category	Cult.	AL	AA	SEM	SEC	NAWL	RENA	GC	Other
Cultivation	86.94	41.00	-	40.24	-	27.60	44.84	-	-
Agriculture Labour	13.06	22.18	-	-	-	16.75	5.32	-	-
Allied Activity	-	-	-	-	-	-	-	-	-
Self Employment in Manufacturing etc.	-	3.96	-	22.44	-	10.27	14.26	-	-
Self employment in Pvt. Construction	-	-	-	-	-	-	-	-	-
Self Employment in Services etc.	-	-	-	-	1	-	-	-	-
Non-agriculture Wage Labour	-	13.84	-	37.32	-	28.14	-	-	-
Regular Employment in non- Agriculture	-	19.02	-	-	-	17.24	35.58	-	-
Govt. Construction	-	-	-	-	-	-	-	-	-
Other- If Any	-	-	-	-	-	-	-	-	-
All Households	100.00	100.00	-	100.00	-	100.00	100.00	-	-

The sex-ratio of working population in Cluster-I of Muzaffarnagar district was 0.76 male and 0.24 female in case of cultivation. In the category of Agriculture labour the male-female ratio stood at 0.60: 0.40. In case of 'Self Employment in Manufacturing etc. it was 0.60: 0.40. In the category of non-Agriculture in Wage Labour it was 0.44: 0.56. Regular Employment in Non-Agriculture has its sex-ratio as 0.77 male and 0.23 as female. Taking the position of all households of this group, we find that overall sex-ratio was 0.65 male and 0.35 as female.

In the Cluster-II of the same district we find that in the category of 'Cultivation' the sex ratio was 0.81 males and 0.19 female. In Agriculture Labour also, the same was 0.79: 0.21. The sex-ratio was 0.60: 0.40 in the category of 'Self Employment in Manufacturing etc. Non-Agriculture Wage-Labour has the ratio of 0.88: 0.12. Regular Employment in Non-Agriculture has .88: 0.12 as sex ratio. At the aggregate level sex ratio of the working population of this cluster was .80: .20.

In Cluster-I of Kannauj district the sex-ratio under 'Cultivation' was 0.78 male and 0.22 female. In case of Agriculture-Labour the same was 0.80: 0.20. In the category of 'Self Employment in Manufacturing the ratio was 0.67: 0.33. Non-Agriculture Wage Labour has 0.70: .30 as sex ratio. Thus, the over-all average of the sex ratio of the working population of this Cluster was .78: .22.

In case of Cluster-II, the category of 'Cultivation' shows 0.77 male and 0.23 female. In case of 'Self Employment' in Manufacturing etc. the male was 0.67 and female 0.33. In Non-Agriculture Wage Labour sex ratio was 0.73: 0.27. Regular Employment in Non-Agriculture has the sex ratio of 0.92: 0.08. Combining all the households of this group we find that it is 0.79: 0.21 as sex-ratio (Table-IV-10).

Table-IV-10 Worker Population Ratio (Male: Female) in the Industrial Categories in Sample Village

Major Industrial Category	N	Auzaff	arnaga	r	Kannauj			
	Villag	e-C-1	Villag	e-C-2	Villag	ge-C-1	Villag	e-C- 2
	M	F	M	F	M	F	M	F
Cultivation	0.76	0.24	0.81	0.19	0.78	0.22	0.77	0.23
Agriculture Labour (AL)	0.60	0.40	0.79	0.21	0.80	0.20	1.00	-
Allied Agriculture Activity	-	-	-	-	-	-	-	-
Self Employment in Manufacturing etc.	0.60	0.40	0.60	0.40	0.67	0.33	0.67	0.33
Self employment in Pvt. Construction	-	-	-	-	-	-	-	-
Self Employment in Services etc.	-	-	-	-	-	-	-	-
Non-agriculture Wage Labour	0.44	0.56	0.88	0.12	0.70	0.30	0.73	0.27
Regular Employment in non Agri.*	0.77	0.23	0.88	0.12	1.00	-	0.92	0.08
Govt. Construction	-	-	-	-	-	-	-	
Others-if Any	-	-	-	-	-	-	-	-
All Households	0.65	0.35	0.80	0.20	0.78	0.22	0.79	0.21

Now we see the activity status of workers (Self-employed/ Salary Employed/ Casual Wage Labour by different industrial categories). As for as the position of 'Self Employed' in Cluster-I of Muzaffarnagar district is concerned, they stand at 10 while in the category of Manufacturing, Servicing & Repairs of Cluster-II, they are 6. In Cluster-II of Kannauj district, the same category has got 3 in number. In case of 'Trade Inclusive of the Hotels' in Muzaffarnagar district, they are 6 in Cluster-I and 5 in Cluster-II. In case of Kannauj, they were 6 and 7 in Cluster-I and Clusters-II respectively. In the category of Transport, Storage and Communication, in Muzaffarnagar district, they were 2 in

Cluster-I and 3 in Cluster-II. While in Kannauj both the categories shared 1 each. In other activities in Muzaffarnagar, there were 14 and 15 in Cluster-1 and II respectively Kannauj stood at 20 and 35 in the same group of Cluster-1 and II respectively. Aggregating all the categories of Cluster-1 and Cluster-II in Muzaffarnagar, we find that they were 32 and 29 in both the Clusters. Similarly in Kannauj district, the same were 30 and 37 respectively in the two Clusters.

In case of 'Salary-Employed' in the category of 'Manufacturing, Servicing and Repairs, there were none-in Muzaffarnagar district while in Kannauj there were 3 in Cluster-II. In Cluster-I of Muzaffarnagar district there was only 1 while in Cluster-II they were 5 in numbers. In case of 'Transport, Storage and Communication' in Cluster-1 in Muzaffarnagar there were 5 and in Cluster-II while in Kannauj district they were 1 and 3 respectively in the two clusters. In case of 'Other' activities, in Cluster-II of Kannauj district, there were 6 in number. In the end, activity status of all the categories of the 'salary-employed' were 5 in Cluster-I and 1 in Cluster-II of Muzaffarnagar district. While in Kannauj they were 1 and 16 in Cluster-I and Cluster-II respectively.

In case of 'Casual Wage' in the category of 'Manufacturing, Servicing and Repairs, there were 4 in Cluster-II of Muzaffarnagar and 3 in Cluster-I of Kannauj district. In the Category of private 'construction' in Cluster-I of Muzaffarnagar there were 16 and in Cluster-II, they were 8. In Kannauj there were 10 and 15 respectively in Cluster-I and II. In the category of 'Trade, Inclusive of Hotels' there were 3 only in Cluster-II of Muzaffarnagar district. In Transport, Storage and Communication in Cluster-II of Muzaffarnagar district, there were 5. In Kannauj, in Cluster-

I and II, they were 4 and 2 respectively. In the category of 'Other Activities' there were 27 in Cluster-I and 20 in Cluster-II in Muzaffarnagar. In Kannauj they stood 17 and 22 respectively in the two Cluster. In the last we find that combining all the categories of the casual wage, there were 43 in each Cluster-I and Cluster-II in Muzaffarnagar district while 34 and 39 respectively in the two Clusters of Kannauj district (Table-IV-11).

Here we see the Activity Status of the Male Workers. 'Self Employed' males were 6 and 4 in Cluster-I and II respectively in the category of Manufacturing, Servicing and Repairs in Muzaffarnagar district. While in Kannauj there were 2 in the Cluster-I In the category of 'Trade Inclusive of Hotels in Muzaffarnagar district there were 3 and 4 in Cluster-I and Cluster-II respectively. While the same were 5 and 6 in Cluster-I and II in their respectively. In 'Transport, Storage and Communication' there were 2 in Cluster-I and 3 in Cluster-II of Muzaffarnagar while they were 1 each in both the Clusters of Kannauj district. In case of 'Other Activities' they were 11 in Cluster-I and 12 in Cluster-II of Muzaffarnagar. In case of Kannauj there were 15 and 24 in Cluster-I and -II respectively.

In 'Salary Employed' group in the category of 'Manufacturing, Servicing and Repairs, there were only 2 in Cluster-II of Kannauj district. In the category of 'Transport, Storage and Communication' there were 5 in Muzaffarnagar in Cluster-I and 3 respectively in Cluster-I and II of Kannauj district. There was only 1 in the Cluster-II under the category of 'Other Activities'. In case of all the categories of 'Salary Employed' there were 5 in Muzaffarnagar under Cluster-I and 1 in Cluster-II while

in Kannauj the same were 1 and 5 in respectively in the two Clusters. 'Casual Wage' has nothing in the Cluster-II under the category of 'Manufacturing. Servicing and Repairs in Muzaffarnagar in Cluster-II there were 2 and in Kannauj districts in Cluster-I. In case of 'Private-Construction' in Muzaffarnagar district they were 9 in Cluster-I and 7 in Cluster-II. While in Kannauj the same were 7 and 11 in Cluster-I and II respectively. In 'Trade, Inclusive of Hotels' there were 2 in Cluster-II of Muzaffarnagar district. In 'Transport, Storage and Communication', there were 5 in Cluster-II of Muzaffarnagar district while in Kannauj, there were 4 and 2 in the two Clusters respectively. In case of 'Other Activities' in Cluster-I village of Muzaffarnagar there were 18 and in Cluster-II, there were 161. While in Kannauj there was 14 and 21 in Cluster -I and II respectively. Combining, all the industrial categories we find that in Muzaffarnagar district, the males were 27 and 32 in Cluster-I and Cluster-II respectively. In case of Kannauj, they were 27 and 34 in Cluster-I and Cluster-II respectively. (Table-IV-12)

Here we describe the Activity Status of Female Workers (Self Employed / Salary Employed / Casual Wage Labour) by Industrial Categories.

In 'Self Employed' under the category of 'Manufacturing, Servicing and Repairs' in Muzaffarnagar in Cluster-I and II there were 4 and 2 respectively. In Kannauj there was only 1 female worker in Cluster-I. In the category of 'Trade Inclusive of Hotels' there were 3 female workers in Cluster-I in Muzaffarnagar district while in Cluster-II, there was only 1. In Kannauj 1 each was in the two Clusters. In the category of 'Other-Activities' in Muzaffarnagar, in Cluster-I, there were

3 female workers while the same 3 were in Cluster-II also. In Kannauj, in Cluster I and II, there were 5 and 11 female workers respectively. In the end on aggregate level all the industrial categories have 10 female workers in Cluster-I and 6 in Cluster-II in Muzaffarnagar. In Kannauj, the same were 7 and 12 in Clusters I and II. In case of 'Salary Employed' in Kannauj under village Cluster-II, there was only 1 female worker under the category of 'Manufacturing, Servicing and Repairs'. In 'Private Construction' also in Kannauj under Cluster-II, there were only 2 female workers. In the category of 'Other Activities' in Kannauj, under village Cluster-II, there were 5 female workers. On aggregate level, there was 1 female worker in Cluster-II of Kannauj.

As for as the 'Casual Wage' is concerned, in the category of 'Manufacturing, Servicing and Repairs' in Muzafarnagar there were 2 in Cluster-II while in Kannauj under Cluster-I, there was only 1 female labour. In the category of 'Private Construction' in Muzafarnagar, in Cluster-I, there were 7 and in Cluster-II there was 1 female worker. In Kannauj in Cluster-I, there were 3 and in Cluster-II, there were 4 female workers. In the category of 'Trade Inclusive of Hotels' there was only 1 female worker in Muzaffarnagar in Cluster-II. In case of 'Other Activities' in Muzaffarnagar there were 9 female workers in Cluster-I and 4 in Cluster-II. In Kannauj, we find that there were 3 female workers in Cluster-I and II. On aggregate level, under all the categories there were 16 female workers in the Cluster-I and 8 in Cluster-II villages of Muzaffarnagar. In Kannauj, under Cluster-I, there were 7 and under Cluster-II, there were 3 female workers. (Table-IV-13)

Average Monthly Income with its Range (High and Low) for Salaried Class-Workers in Different Industrial Categories in the Sample Villages

Examining the Industrial Category of 'Agriculture' we find that in cluster 1 villages of Muzaffarnagar district, the average monthly income is Rs. 4000 when its high range is Rs. 5000 and its lower range is Rs. 3500. Similarly in cluster 2 villages of Kannauj the average monthly income is Rs. 480 with the high range of Rs. 500 and low range of Rs. 300. In the category of 'Manufacturing, Servicing and Repairs, in cluster 2 villages of Kannauj district the average income has been Rs. 1025 per month with its high range of Rs. 1500 and low of Rs. 550. As for as the category of 'Private Construction' is concerned we find that in cluster-II villages of Muzaffarnagar district the average income stands at Rs. 800 with the same Rs. 800 in case of high and low income ranges. In case of cluster II villages of Kannauj district the average income is Rs. 450 when its high and low range is Rs. 700 and Rs. 200 respectively. In the Category of 'Transport, Storage and Communication' in cluster 1 villages of Muzaffarnagar district, the average monthly income is Rs. 2240 with its high and low range of Rs. 3200 and Rs. 1300 respectively. In case of cluster I villages of Kannauj, it has been Rs. 1800 each as its high and low ranges. Similarly in cluster II villages the average income, high and low ranges are Rs. 1467, Rs. 1500 and Rs. 1400 respectively. In the Industrial category of 'Other Activities' in case of cluster-II villages of Kannauj district the monthly average income is Rs. 450 with high and low range of Rs. 450 and Rs. 350 respectively. On aggregate level of 'All categories' in case of cluster I villages of Muzaffarnagar district, the average income is Rs. 2900 and its high range is Rs. 5000 and low range is Rs. 1300. In case of cluster-II villages, the average income is Rs. 800 along with the same figures in high and low range. In case of cluster-I villages of Kannauj district the average income is Rs. 1800 with Rs. 1800 each for high and low range. In case of cluster-II villages of the same district the average income, high range and low range has been Rs, 754, 1500 and Rs. 200 in respectively. (Table-IV-14)

Average Wage for Wage-Labourers in Different Industrial Categories

Narrating the industrial category of "Agriculture' we find that in cluster-I villages of Muzaffarnagar district, the average wage is Rs. 50 while its high range is Rs. 60 and low range is Rs. 40. In Cluster-II villages, the average wage is Rs. 50. High and low range is also Rs. 50 each. In cluster-I villages of Kannauj district, the average wage is Rs. 27 and high range is Rs. 30 and low range is Rs. 23. In case of 'Manufacturing. Servicing and Repairs' in cluster-II villages of Muzaffarnagar district average wage is Rs. 67 and its high range is Rs. 80 and low range is Rs. 55. In Kannauj in cluster-I villages the average wage, high range and low range have been Rs. 25 each. In case of 'Private Construction' in cluster-I villages of Muzaffarnagar district, the average wage is Rs. 62 and its high and low ranges are Rs. 70 and Rs. 55 respectively. In cluster-II villages of the same district the average wage is Rs. 98 and its high range is Rs. 130 while its low range is Rs. 65. In case of Kannauj district, in cluster-I villages the average wage is Rs. 31 and high range is Rs. 35 along with low range of Rs. 23. In cluster-II village the average wage is Rs 22. Its high range is Rs. 25 and low range is Rs. 20. In the category of 'Trade-Inclusive of Hotels, in cluster-II villages of Muzaffarnagar district the average wage is Rs. 98 and its high range is

Rs. 130 and the low range is Rs. 65. In the category of 'Transport. Storage and Communication' in cluster-II villages of Muzaffarnagar district the average was Rs. 53 and its high and low range have been Rs. 60 and Rs. 45 respectively. In case of Kannauj district, in cluster-I villages, the average wage is Rs. 23 and its high range is Rs. 25 and low range is Rs. 21. In Cluster-II of the same district, the average wage is Rs. 22 with its high and low range of Rs. 25 and 20 respectively. In case of 'Other-Activities' in Cluster-I villages, in Muzaffarnagar district the average wage is Rs. 55 and high and low ranges have been Rs. 60 and Rs. 50 respectively. In cluster-II villages, the average income is Rs. 67 and its high and low ranges are Rs. 80 and Rs. 55 respectively. In Kannauj district in cluster-I villages, the average wage is Rs. 24 and its high and low ranges have been Rs. 25 and Rs. 23 in that order. In cluster-II village, the average income is Rs. 24 while its higher range Rs. 26 and lower range is Rs. 23. Summing up the average wage of all the industrial categories, we find that in Muzaffarnagar district of cluster-I villages the average wage is Rs. 56 and its high range is Rs. 63 and low range is Rs. 48. In case of cluster-II villages, the average wage is Rs 77 and its high range is Rs. 96 and low range is Rs. 57. Depicting the situation in Kannauj district, in case of cluster-1 villages we find that the average wage there is Rs. 26 and high range is Rs. 28 and low range is Rs. 23. In case of cluster-II villages, the average wage in Rs. 24 and high range is Rs. 27 and low range is Rs. 22. Thus, we find that in Muzaffarnagar district wage-rate is high because this is an advance district having many agricultural industrial employment-avenues while Kannauj district is not so developed. (Table-IV-15)

Extent of Employment of Casual Labour

Here we deal with the magnitude of employment of casual labourer. In the Industrial Category of 'Agriculture' per worker employment is 64.38 per cent in cluster-I of Muzaffarnagar district. While in cluster-II villages the same is 46.03 per cent. In Kannauj district in cluster-I villages, the extent of employment is 32.33 per cent while is cluster-II villages it stands at 49.86 per cent. In the category of 'Manufacturing and Repairs' in cluster-II villages of Muzaffarnagar the employment percentage is 60.27. When in the cluster-I villages of Kannauj district the same is 21.64 per cent. In 'private construction' of Muzaffarnagar district, under cluster-I villages, per casual worker-employment is 41.37 per cent while in cluster-II villages of the same district, it is 52.33 per cent. In case of Kannauj district, in cluster-I villages the extent of employment is 39.45 per cent and in cluster-II, the same is 44.38 per cent.

In the category of 'Agriculture-Labour' in cluster-I and cluster-II villages of Muzaffarnagar, the employment percentage is 46.85 and 41.37 respectively. In Kannauj district, in cluster-I and cluster-II villages these are 31.78 per cent and 64.66 per cent in that order.

In case of 'Trade Inclusive Hotels' in cluster-II villages of Muzaffarnagar district per casual labour employment is 54.79 per cent. In the category of 'Transport' in Muzaffarnagar district, in cluster-II villages the per worker casual employment is 46.54 per cent while in Kannauj figures are 68.49 per cent and 44.93 per cent in both cluster-I and cluster-II villages in respective order.

If we combine the figures of all the 'Industrial categories, we find that in Muzaffarnagar district in cluster-I and Cluster-II villages, the percentage of employment remains 53.97 per cent and 50.63 per cent respectively. In Kannauj district in cluster-I villages per worker employment is 38.63 per cent while in cluster-II villages the same is 52.88 per cent (Table-IV-16).

Table-IV-16
Magnitude of Employment of Per Casual Labour in a Year
(Percentage)

Industrial	Muzaffarnagar		Kan	nauj
Categories	Village-1	Village-2	Village-1	Village-2
Agriculture	64.38	46.03	32.33	49.86
Allied Agriculture Activity	-	-	-	-
Manufacturing & Repairs.	-	60.27	21.64	-
Private Construction	41.37	52.33	39.45	44.38
Agriculture Labour	46.85	41.37	31.78	64.66
Trade Inclusive Hotels	-	54.79	-	-
Transport	-	46.57	68.49	44.93
Others Services-if Any	-	-	-	-
Other Activities	-	-	-	-
All Industrial (Average)	53.97	50.63	38.63	52.88

CHAPTER-V

Status of Enterprises in the State of Uttar Pradesh

The economy of the state is heavily dependent on agriculture. Such state of affairs is mainly responsible for the backwardness of this big state of the country. The need is to reduce the pressure on agriculture and to shift the additional labour force to non-Agricultural enterprises. In this respect rapid industrialization is very essential which may pave the way for employment to the increasing labour force of the State. No doubt, the govt. is also trying to covert Uttar Pradesh into 'Udyog-Pradesh' by inviting industrialists, even non-resident Indians to open their enterprises in the State. Through District Industrial Centres, bottlenecks on the way of establishing industries are removed.

For rapid industrialization of the State Pick-up, Uttar Pradesh State Industrial Development Co-operation, Uttar Pradesh Finance Corporation, New Okhla Industrial Development Authority, Uttar Pradesh State Corporation, State Mineral Development Corporation, Uttar Pradesh Export Corporation, Uttar Pradesh State Skin Development and Marketing Corporation, Bhadohi Development Authority etc. are playing important role. Apart from Industrial Finance Corporation of India, Industrial Development Bank of India and Industrial Credit and Investment Corporation of India are also instrumental in the industrial development of the State.

The Eastern and Bundelkhand regions are very backward. In Purvanchal, Gorakhpur Industrial Development Authority (Gida) and Satlariya Development Authority have been established. Apart from these, Purvanchal Vikas Nidhi and Bundelkhand Vikas Nidhi have also been established. In the Western region of the State New Okhla Industrial Development Authority (NOIDA) has been established. For making the rural based industrialization blocks have been made the Industrial Development Centres and necessary essential facilities are being provided there. In the Seventh Five Year Plan (1985-90) in the State (including Uttaranchal) rate of industrial development was 10.9 per cent which declined to the level of 4.2 per cent in the Eight Five Year Plan.

Following table shows the annual rate of growth of industrialization.

Table-V-1
Annual Rate of Growth of Industrialization

Plan		Period	Average Annual Rate
1	First Five Year Plan	1951-56	2.3 Per cent
2	Second Five Year Plan	1956-61	1.7 Per cent
3	Third Five Year Plan	1961-66	5.7 Per cent
4	Three Annual Plans	1966.69	1.2 Per cent
5	Fourth Five Year Plan	1969-74	3.4 Per cent
6	Fifth Five Year Plan	1974-79	9.4 Per cent
7	Six Five Year Plan	1980-85	9.4 Per cent
8	Seventh Five Year Plan	1985-90	10.9 Per cent
9	Two Annual Plans	1990-92	1.1 Per cent
10	Eight Five Year Plan	1992-97	4.2 Per cent
11	Ninth Five Year Plan (Target)	1997-2002	12.00

Source: Uttar Pradesh Ki Arthik Sameekchha-2000-2001. 'Economics and Statistics Division, State Planning Institute, Uttar Pradesh, Lucknow. Page 17.

From the table, it is clear that the annual rate of growth was 2.3 per cent, in the second five year plan it declined to 1.7 per cent. In the third five year plan it rose to 5.7 per cent.

In three annual plans between 1966-69, it came down to 1.2 per cent. After that in fourth five year plan it rose to 3.4 per cent, In fifth plan it reached to the height of 9.4 per cent. In sixth five plan the same trend could be maintained. In seventh five year plan, it rose to the height of 10.9 per cent. It two annual plans between 1990-92 it came down badly to the level of even 1.1 per cent. In Eight Five Year Plan it recovered to the level of 4.2 per cent. In 9th Five Year Plan the target was fixed at 12 per cent.

In the State there has been big industrialization as for as big and small-scale industries are concerned.

The following table shows the joint stock companies at work in the State.

Table-V-2
Position of Joint Stock Companies in the State

Year	No.	Paid-Up Capital Rs. (000)
1960-61	1,076	14,14,70
1981-82	3417	4,30,49,25
1990-91	10676	6,81,63,64
1994-95	15,391	8,31,40,00

From the above table, it is clear that number of joint stock companies which were mere 1,076 in 1960-61 increased to the level of 15,391 in 1994-95.

In 1994-95 joint stock companies were established in different sectors.

They are as under.

Table-V-3
Sector-Wise Position of Joint Stock Companies

	Industrial Group	Number
1	Agriculture and Allied Services	81
2	Mining & Quarrying	14
3	Processing & Manufacturing of food staff, Testiles, heather and products, there of	197
4	Processing & Manufacturing of metals & Chemical & products there of	361
5	Construction & Utilities	50
6	Commerce (Trade & Finance)	138
7	Transport, Communication & Storage	22
8	Community & Business Services	622
9	Personal & Other Services	23
		1508

Source: Registrar of Companies, Ministry of Law and Company Affairs, Govt. of India, Kanpur.

The level of investment in these companies ranged from below one lakh to twenty lakhs and above.

In case of small scale industrial undertakings in 2000-2001, number of units registered with Directorate of Industries was 401372 with the investment of Rs. 4028 crore which employed 15622000 workers in the same year.

As has already been described Uttar Pradesh is giving liberal financial assistance for establishing industries in backward areas.

Following table shows the Assistance Sanctioned and Disbursed by all Financial Institutions in the State.

Table-V-4
Assistance Sanctioned and Disbursed by All Financial Institutions

Year	Sanctions	Total	Disbursement	
	Backward Areas		Backward Areas	
1981-82	81.68	199.65	70.68	160.72
1985-86	473.88	798.01	279.95	469.22
1990-91	640.80	1324.20	367.40	853.30
1991-92	893.00	1768.30	523.20	1171.60
1992-93	1056.10	2677.80	626.50	1207.20
1993-94	6442.50	14437.40	4915.60	10103.10

Source: Statistical Abstract, Uttar Pradesh 1995, Economics and Statistics Division, S.P.I., U.P., Lucknow.

The Figures reveal that the emphasis has been laid over the years, on the industrial development of backward areas of the State.

Summing up the narration on the industrial development of the State it is observed that upto 1999-2000, the number of registered factories was 10,317 which was 7.72 per cent of registered factories of the country. During this period number of persons employed were 559 thousand which was 5.6 per cent of the national figure.

Processing

The government is committed to provide more thrust to food processing and agro-based industries with an endeavor to increase the income of farmers, create more employment opportunities and foster rural industrialization. This sector is recognized as having an important role in improving agricultural productivity, reducing wastage of fruits, vegetables and other perishable food items and improving food availability for domestic consumption as well as for exports. Not only govt. of Uttar Pradesh but the Indian Government also is the pushing authority in this regard. Agricultural Export by Govt. of India has increased to more than Rs. 22885 crores in 1995-96 from Rs. 11765 crores in 1990-91 Packaging and the chain of cold storages have helped reduce wastage and increased agro-export. In Uttar Pradesh where there are about 1100 cold storages are plan their commendable level on this account. On national level our country today more than 73% of paddy, 55% maize, 24% pulses and 45% oil seeds and 45% sugarcane. Processing of fruits and vegetables is, however, not upto the mark. There are food processing promotional organization industries under the supervision of State level Agriculture Department. In the State there are flour-mills, rice-mills, maize shellers, dal-mills, oil expellers, fruit and negotiable processing units, milk powder, condensed milk, butter, cheese, ice cream units in the State. In the State processing and agro-processing are being undertaken in government sector and private sector both. In case of milk and milk products co-operative development plays very important role. The following table shows the distribution of milk and milk products by cooperative department in Uttar Pradesh, procured and processed by the department.

Table-V-5
Distribution of Milk and Milk Products by Co-operative Department in Uttar Pradesh

Year	Milk (000	Butter (Kgs)	Cream (Kgs)	Ghee (Kgs)	Other
	liter)				Products
					(Kgs)
1971	49,189	1,14,156	3,58,628	2,27,147	11,03,604
1980	61,166	1,48,496	26,573	2,89,346	12,26,820
	ŕ	, ,	ŕ	, ,	, ,
1989-90	9,957	9,19,910	1.195	18,16,620	3,48,023
	,	, ,		, ,	, ,
1990-91	3,62,559	11,15,482	1,276	18,21,221	3,93,936
	, ,	, ,	,	, ,	, ,
1991-92	45,144	14,47,041	1,306	12,48,315	4,10,846
	, , , , , ,	, ,	_,	, ,	1, 2, 2, 2
1992-93	1,17,676	15,80,201	19,22,751	46,90,402	4,97,181
	1,1,1,0,0	12,00,201	12,22,701		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1993-94	1,32,196	46,79,851	1,23,61,131	1,17,69,801	8,93,431
1775 74	1,52,170	10,77,031	1,23,01,131	1,17,02,001	0,73,731

Source: Statistical Abstract, Uttar Pradesh 1995, Economics & Statistics Division, State Planning Institute, Uttar Pradesh, Lucknow.

From the above table it is clear that processing is the heart and soul of milk industry. In 1971, only 49,189 thousand litres of milk was distributed. Butter in that year was distributed by the co-operative department upto the quantity of 1,14.156 (Kilo grams). Cream and ghee were distributed to the extent of 3,58,628 kgs and 2,27,147 kgs respectively. Other products were 11,03,604 kgs. But on account of advanced techniques of processing and preservation alongwith other factors in 1993-94 the distribution of milk was 1,32,196 thousand litres followed by butter 46,79,851 Kgs. Cream and ghee were to the extent of 1,23,61.131 Kgs and 1,17,69.801 Kgs respectively. Other products were 8,93.431 Kgs.

Apart from these, there are sugarcane crushers operated by power and bullocks. The number of crushers operated by power was 69,489 in 1993 and drawn by bullock was 3,37,078 in the same year. Similarly processing of pulses plays very important role. In 1950-51, processing of pulses was around15 lakh metric tonnes. In the year 1993-94 it increased a bit higher to the extent of 15,84 929 Metric Tonnes.

In meat, fish, wool and other industries processing works are on war footing. But in the State of U.P., their members are mostly facing troubles on account of power shortage, inspector-raj and lack of basic infrastructure and political instability. In processing sector, there is thunderous employment opportunity and income generating avenues. Govt. has to increase its power production first. In this State where electricity is available only for few hours how development can take place is a million rupee question.

CHAPTER-VI

Status of Live Stock

Livestock plays very important role specially in rural life of the country. Livestock is very good land saving and employment oriented venture of the majority of rural habitants of the nation. Utility of livestock is immense alive or dead, it is income generating creature. Though it has always been contributing in the well being and prosperity of the national economy, yet in recent decades this sector has become heart and soul for the survival and modern living of the people. It is widely accepted that favourable prices to milk producers and to other cattle rearers provide incentive and contributes in the growth of the economy. The role of processing units stands very high. The livestock and livestock based processing activities have immense potential for creation of employment specially in rural sector. Though trend of employment in live-stock processing is not available separately, the recent national sample survey organization estimates indicate-fall in employment in most of the allied activities including live-stock.

Live-stock processing activity is being practised in one form or other in the entire country. The state of Uttar Pradesh does not lag behind. In this State, live-stock and its processing units are found in unorganized way even in the remote corner of the villages of the State.

From the table-VI-1 we find that in the State of Uttar Pradesh. No. of total live-stock was 4,94,04,356 in 1961. In the year of 1966, it increased the level of 499,71,686. In the year of 1972, the figures came

down to the level of 4, 91,966. In 1978 it further increased to 5,23,44,633. In 1982 they increased to the level of 5,67,35 124. In 1988 it further increased to the level of 6,11,48,528. In 1993, the same was 6,01,52054.

Processing Units

In all districts of the State milk and meat processing units, in unorganized sector, are working in villages, towns and cities. Small units can be started with very nominal investment. By processing the milk and meat people get gainful employment. Since this Centre has been assigned to work on meat and meat product, description about these are made here. Though various types of animals are the source of meat production, goats are exclusively meant for that. As we see in the table of live-stock there were 1,31,09828 goats in the state in the 1993. There were 144 factories in the State submitting returns with average daily workers employed 160,11. Since district Kanpur Nagar in Uttar Pradesh is very important industrial-city and had many meat and tannery units, this district was selected for the study. As we see in the table-VI-2 the population of the live-stock in the district was (1993) 321137. The basic economic indicators of the Kanpur district have also been presented in the Table-VI-2.

Selection of the Units

On the advice of Director of Industries tannery units were selected for the study. But on account of Govt. pressure on them for opening treatment plants, many units have been locked by the district magistrate of Kanpur. Owners of the units even refused to talk about the subject.

Therefore, 15 butchers were selected for the study. On the advice of local officials 5 persons were selected from block Kalyanpur, 2 from village Singhpur, 4 from village Chaubepur and the remaining 4 from the village and block Shiv Rajpur. They were operating this business with the help of family members hence they form the category of OAME (Own Account Manufacturing Enterprises).

Table-VI-3
Scale of Operation of OAME in Kanpur District in March 2003

Particulars	Qty in Qtls	Value (Rs.)	Per H. H.
Material Purchased	3.87	27090	1806
Product Obtained	3.10	27900	1860
Other Material	-	3610	241
Total Amount Received (2+3)	-	31510	2101
Product Sold	-	31510	2101
Marketing Cost			
(a) No. of Persons Involved	50	2500	120
(b) Payment for Setting	74	74	
(c) Others	-	62	
Net gain Received	1	1620	175

As is clear from the table-VI-3 the materials purchased by the household was 3.87 qtls worth Rs. 27090. The product obtained was 3.10 qtls for Rs, 27900. The per household product was for Rs. 1860. Apart from the main product, other remaining materials were sold worth Rs. 3610. In this case also per household value stands at Rs. 241. Thus combining main and subsidiary products, households found the value of Rs. 31510 and thus per household value was Rs.2101. No. of persons involved were 50. Their imputed wage stood at Rs. 2500. Other minor marketing costs were Rs. 270. Thus, the total amount spent by the butchers was Rs. 29860. Thus net gains received by them is Rs. 1650.

Expenditures Incurred on Purchase of Goats and Marketing Cost

As is clear from table no-VI-4 goats purchased directly from owners were worth Rs.18630 and from markets for Rs8460. Total amount spent on the purchase of goats was Rs. 27090.

Table-VI-4
Expenditures incurred for Purchasing of Goats

Particulars	No	Amt. (Rs.)	Per H.H
Purchased Direct from Owner of	27	18630	1242
Village			
Purchased from Market	11	8460	564
Purchased from Commission	-	-	-
Agents			
Purchased from Retailers	ı	-	-
Marketing Cost Involved	-	2770	-
Total Amount Paid by Purchaser	-	29860	1991

In the following table we see the market margins of both producers and butchers.

Table-IV-4A
Market Margins of Producers and Butchers

(I)	Price received by the producers	27,090
(II)	Price paid by butcher	29,860
(III)	Price received by butcher	31510
(IV)	Price paid by consumers	31510
(V)	Margin of butchers	1650
(VI)	Producer's share in consumers	86%
	Butcher's share in consumer's rupee	94.76%

Marketing Channels for the Sale

In village markets main product worth Rs. 10503 has been sold. In cities product worth 21007 were sold. Thus the value of the product sold was Rs. 31510. (Table-VI-5)

Table VI-5 Marketing Channels for Selling Main Products

	Markets				
Channels	Vill	lage	Ci	ities	Total
	No	Amt.	No.	Amt	Amt. (Rs)
		(Rs)		(Rs)	
Consumers	7	10503	14	21007	31510
		(700)		(1400)	(2100)
Whole Sellers	-	-	-	-	-
Retailers	-	_	-	-	-
Processing Units	-	-	-	-	-
Other	-	_	-	-	-

N.B: Figures in brackets are Per H.H.

Constraints in Purchase and Sale

From the Table-IV, it is clear that all the selected households reported about the availability of raw material (goats) throughout the year. Since it is a family business there is lack of labour for processing activity.

In case of management of funds for purchasing the raw materials, all the selected persons managed themselves from their own fund.

In case of availability of infrastructural facilities 4 said yes and the 11 remaining replied in negative. All the selected households reported affirmative about the availability of supporting equipments for their processing units.

In case of size of pattern of demand 2 gave their opinion in positive and remaining 13 in negative.

About the quality consciousness of buyers, all of them asserted in favour.

In case of existence of co-operation all the selected households told in favour. No one told about the rivalry. There is no any Government intervention. No promotion agencies help the unit holders. As for as the existence of NGO is concerned, unit holders did not come across any. There is no active 'Association' for saving the interest of unit holders (Table-VI-6).

Position of Meat and Skin Industry

Though the district of Kanpur has been on top in meat and skin works, during these days the position is not good. For skin processing industry, raw material is skin from animals. Mainly cow, bullocks, buffaloes, goats and sheep are used in this work. Raw skin is available either from slaughtered or from dead animals. In our country share of skin from dead animals is main. On account of lack of proper technique of skin collection, transportation etc, quality of raw-skin gets deteriorated and that results in poor quality of finished products.

Production of Meat and Skin in the State

It was found that the condition of slaughter house in the country is very bad. The right equipments are lacking. There is no facility of slaughtering in rural areas on sound footing. Govt. of India, under its 'Food Processing' scheme gives 50% subsidy and 50% loan for modernizing the units, but this facility is not availed in real term in the State.

According to an estimate by the working group for 8th five year plan. "On account of delay or improper skin taking, the loss of Rs. 600 crore is involved.

The State of Uttar Pradesh must also utilize the benefits from Leather Technology Mission.

Table-VI-6
Constraints in Purchasing and Selling OAM to Kanpur District.

Constraints in Purchasing and Sening OAM to Kanpur District.				
Constrains	Views			
	Yes	No	All	
1. Availability of Raw Materials	15	-	15	
throughout the Year				
2. Availability of Labour in Processing	15	-	15	
Activities				
3. Availability of Capital Owned	15	-	15	
Source of credit	-	-	-	
Payment Schedules	-	-	-	
Rate of Interest	_	-	-	
4. Availability of Infrastructural Facilities	4	11	15	
1. Roads	_	-	-	
2. Communications	_	-	-	
5. Availability (Supporting Equipment for	15	-	15	
the Processing Units)				
6. Size of Pattern of demand	2	13	15	
7. Quality Consequences of buyers	15	-	15	
8. Existence of Co-operations	15	-	15	
9. Existence of rivelry	-	15	15	
10. Govt. Intervention initiating the	_	15	15	
enterprises				
1. Registrations	_	15	15	
2. License	_	-	-	
3. Others	-	-	-	
11. Govt. Support	-	15	15	
1. Training	_	-	-	
2. Supply in equipments	-	-	-	
3. Others	-	-	-	
12. Existence of Promotions Agencies	-	15	15	
13. Existence of	-	15	15	
1. NGOS	-	-	-	
2. SHGS	-	-	-	
3. Cooperatives	_	-	_	
14. Existence of Producers Associations		15	15	

Table-VI-2 Brief Profile of Kanpur Nagar

1	Geographical Area (1991)	1040 Square Kilo
2	Population Male (1991)	1325.73 (000)
	Female (1991)	1092.76
	Total (1991)	2418.49
3	Rural (1991)	2037.33
	Urban	381.15
4	No. of Literates	
	Male	872.25
	Female	538.16
5	No. of Habitat Villages	247
	No. of Non Habitat villages	31
6	No. of Cold Storage	14
7	Net Area Sown 1995-96	56998
8	Area Sown more than once 1995-96	26248
9	Net Irrigated Area	41594
10	Production of Foodgrains	128 metric tonne
11	Total Live Stock (1993)	321137
12	No. of Factories (Industrial Rule 1948) (1990-	1613
	91)	
13	Small Scale industry 1996-97	10128
14	Length of Roads 1995-96	2367 km
15	Density of Population (Per Sq. Km 1991)	2325
16	% of Main Workers to the Population 1991	
	Rural	34.47
	Urban	25.0
	Total	27.2
17	% of Agricultural Labour to total Population	4.4
18	% of total Workers	
	1. Agriculture	10.4
	2. Agriculture Worker	6.1
	3. Cattle Rearing, Forest Plantation, Tree	0.7
	Plantation	
	4. Quarrying	0.8
	5. Family Industry	0.6
	6. Non- Family Industry	23.6
	7. Counseling	1.8
	8. Trade & Commerce	22.9
	9. Transport & Communication	7.3

Manufacture of Skin and Its Product (factories submitting returning) 144 Average daily workers employed 16,011.

Table-Rural Non-Farm Employment in Uttar Pradesh

Position of Non- Farm Workers in Different District

Sl.	Districts	Non-Farm Workers		
No.		Male	Female	Total
1.	Buland Shahar	45185	5656	50841
2.	Gautam Budh Nagar	11255	3016	14271
3.	Bagpat	31280	7174	38454
4.	Meerut	42486	6544	49030
5.	Ghaziabad	21955	2937	24892
6.	Muzaffarnagar	105056	3750	118806
7.	Saharanpur	50434	4499	54933
8.	Jyotiba Phulle Nagar	33445	2071	35516
9.	Mooradabad	76575	5097	81672
10.	Bijnor	63183	7694	70877
11.	Rampur	42700	1653	44353
12.	Bareilly	57890	3486	61376
13.	Budaun	48769	2143	50912
14.	Shahjanpur	25742	1740	27482
15.	Piliphit	24864	2154	27018
16.	Eath	24027	2362	26389
17.	Mathura	25990	3089	29079
18.	Manipuri	13426	1585	15011
19.	Firozabad	27566	2749	30315
20.	Hatras	15580	2807	18387
21.	Aligarh	41658	5311	46969
22.	Agra	44911	4730	49641
23.	Jhasi	15728	2907	18635
24.	Jaloun (Orai)	17818	1206	19024
25.	Lalitpur	15528	2565	18093
26.	Hamirpur	16809	2471	19280
27.	Banda	18526	3204	21730
28.	Mahoba	12373	2250	14623
29.	Chitrakut	6838	1296	8134
30.	Allahabad	69414	14596	84010
31.	Fatehpur	43458	3827	47285
32.	Pratapgarh	39283	6571	45854
33.	Kaushambi	15845	2552	18397
34.	Kanour (Nagar)	31258	3830	35088

35.	Kanpur (Dehat)	28567	3210	31777
36.	Etawah	18302	1943	20245
37.	Farukhbad	24428	4303	28731
38.	Kannauj	11714	1520	13234
39.	Oraiya	14651	1572	16223
40.	Varansi	62172	16883	79055
41.	Ghazipur	50600	8410	59010
42.	Jaunpur	84155	13076	97231
43.	Chandauli	25860	4494	30354
44.	Mirzapur	42688	5959	48647
45.	Sonbhadra	21487	3059	24546
46.	Sant Ravidas Nagar	26685	3388	30073
47.	Lucknow	23258	2894	26152
48.	Sitapur	48680	5862	54542
49.	Unnao	29980	4253	34233
50.	Hardoi	41417	3575	44992
51.	Kheri	47218	2130	49348
52.	Raibareli	43852	5915	49767
53.	Gorakhpur	56031	9043	65074
54.	Deoria	51062	5577	56639
55.	Kushi Nagar	42712	3879	46591
56.	Maha Raj Ganj	29941	1888	31829
57.	Sidharth Nagar	38407	3973	42380
58.	Sant Kabir Nagar	21493	3653	25146
59.	Basti	36099	5473	41572
60.	Sultanpur	41854	6014	47868
61.	Faizabad	24476	3147	27623
62.	Ambedker Nagar	25328	2313	27641
63.	Barabanki	51563	9028	60591
64.	Balrampur	18656	2368	21024
65.	Shravasti	14058	993	15051
66.	Bahraich	31322	1629	32951
67.	Gonda	35541	4058	39599
68.	Azamgarh	63533	12130	75663
69.	Ballia	43579	6200	49779
70.	Mau	46675	9327	56002
71.	Uttra Pradesh	2494899	322661	2811560
	on a Fourth Francis Survey 1009	(88.55)	(11.45)	

Source: Fourth Economic Survey 1998 in Uttar Pradesh.

Table VI-4
Expenditures incurred for Purchasing of Goats

Particulars	Number	Amount (Rs)	Per H.H
Purchased	27	18630	1242
Direct from			
owner of village			
Purchased from	,,	8460	564
Market			
Purchased from	-	-	-
Commission			
Agents			
Purchased from	-	-	-
Retailers			
	-	2770	55.40
Marketing Cost			
Total Amount	-	27090	1806
Paid by			
Purchaser			

Table-VI-3 Scale of Operation of OAMS in Kanpur District in March 2003

Particulars	Qty. in Qtls	Value (Rs)	Per H.H
Material	3.87	27090	1806
Purchased			
Product Obtained	3.10	27900	1860
Other Material	-	3610	241
Total Amount	-	31510	2101
Received 2+3			
Product Sold	-	31510	2101
Marketing Cost			
(1) No. of persons	-	2500	-
involved 50			
(2) Transport	-	134	-
(3) Payment for	-	74	-
sifting			
(4) Others	-	62	-
Net gain received	-	1650	-

Table-4 (A)
A Few Agriculture & Industrial Indicators

Particulars	Eastern	Western	Central	Bundel
				-khand
1. Irrigation	67.4	89.7	73.30	42.00
8. (i)Total food gram	40431254	15529587	6679648	2599291
(ii) Average yield	19.44	24.05	19.09	12.20
3. No. of factories on per lakhs of population	4.9	8.1	5.1	1.9
4. Cropping Intensity	151.81	155.95	148.04	117.67

State Planning Institute, Uttar Pradesh Lucknow

CHAPTER-VII

Summary and Conclusion

Introduction

The mounting pressure of population is changing the basic character of the economy. Rate of growth of the economy lags behind the increasing labour force. At the end of the century the incidence of unemployment has been around 7 per cent on the basis of current daily status. The responsibility of absorbing labour force lies with public and private sectors. This is also known as organized, unorganized sectors. Unorganized sector is also known as in formal sector. Based on location, this is also known as rural and urban informal sectors. Keeping pace with the population, rural sector has more unemployed labour force than that of the urban sector. Rural sector is also known as farm and non-farm

sector. As the share of agriculture in national income has decreased the responsibility of absorbing increasing, labour force in rural areas lies with non-farm sector.

Rural Non-Farm Sector

It consists of many diversified activities such as mining and quarrying, household and household manufacturing, processing, repair construction, Trade and Commerce, Transport and other services in villages and rural towns.

The objectives of the study are as follows:

- (I) To study the Pattern of rural non farm employment diversification;
- (II) To estimate the determinants of employment in the selected non farm rural activities; and
- (III) To assess region specific constraints in the growth of livestock based agro-processing units and draw the policy implications.

Research Methodology

Muzaffarnagar, having highest concentration of non farm workers and district Kannauj with the lowest concentration have been selected for the study. From each district 3 villages within the radius of 3 Kms. of class two town area (Cluster-I) and 3 villages at the distance of 10 and above kilometers (Cluster-II) have been selected. From each Cluster 30 households were selected. Thus, 120 households from the six villages of the two districts were selected for the study. Apart from these for

fulfilling the 3rd objective of the study 15 meat centres have been selected.

Categories of Households

The households have been categorized as follows:

- 1. Small and marginal formers dependent on rural non -farm sector.
- 2. Manufacturing, Processing, Servcing and Repairs.
- 3. Construction-workers in govt. sponsored construction activities or agriculture labour.
- 4. Private construction workers.
- 5. Whole sale Traders
- 6. Retail traders
- 7. Workers in Transport, storage and communication activities.

Uttar Pradesh

Uttar Pradesh occupies the geographical area of 241 thousand kilometer which is 7.33 per cent of the entire geographical area of 3287 thousand square Kms. of the country. From the point of view of the area after Rajasthan (10.41 per cent) Maharastra (9.30%) Madhya Pradesh (9.03 per cent) Andhra Pradesh (8.37 per cent), U.P. (7.33 per cent) stands as the 5th biggest State of the country. Population of the State is 16.61 crore in which males are 8.75 crore and females 7.86 crore. The female population stands at 898 per thousand males. Density of the population is 689 person per square kilometer. The rural population is 13.15 crore and urban one is 3.45 crore. There are 70 districts. Literacy rate of males is 70.23% and that of females is 42.98%. There are 29.7%

workers to total population. 72.20 per cent are cultivators, 7.75 per cent are engaged in industrial occupation. Net sown area in agriculture stands at 16,825 thousand hectare.

Details of Workers in the State

In 1991, total workers in the State were 41360734 in which males were 36510310 and females were 4850424. Agriculture workers were 7835258 in which 6095941 were males and 1737314 were females. As for as non-agriculture workers are concerned they were 13688000 in which males were 10089000 and females 3592000.

Details of Non-Farm workers According to Industrial Categories

In 1991 in the Industrial Category of 'Cultivators' males were 89.24 per cent and females were 10.76 per cent. In 'Agriculture-Labour' males and females were 76.89 per cent and 23.11 per cent respectively. In 'Cattle Rearing in Jungle, Hunting, Fishing etc.' males were 90.26 per cent and females were 9.74 per cent. In 'Mining and Quarrying' they were 90 and 10 per cent respectively. In the category of 'Manufacturing and Repairs' males were 88.76 per cent and females were 11.26 per cent. In 'Construction' the percentage of males was 96.14 and that of females 3.86. In 'Trade', they were 96.5 and 3.95 is their respective order. In 'Transport' males were 99.25 per cent and females 0.75 per cent. In 'Others' they were 53.35 per cent and 6.65 per cent respectively.

Regional Presentation of Non-Farm Workers in U.P.

In western region there were 1044657 non-farm workers in which males were 90.28 per cent and females were 9.72 per cent. In Eastern region the total non-farm workers were 1219609 in which 86.83 per cent were males and 13.17 per cent females. In Central Region, males were 89.74 per cent while females were 10.26 per cent. Similarly in Bundelkhand Region males were 88.55 per cent and females 11.45 per cent.

<u>Distribution of Non-Farm Employment Workers in the Selected Districts</u>

classification of Examining the non-farm workers ofMuzaffarnagar district, we find that in Muzaffarnagar 'Agriculture' occupies the percentage of 37.03 in 1991. In 'Agriculture-Labour' the same was 31.03 per cent in 'Animal Husbandry, Forest Plantation, Tree Plantation' the percentage was only 1. In 'Mining & Quarrying' the figure was 0.1 per cent, 'Family Industry' and 'Non Family Industry' stood at 1.86 per cent and 8.31 per cent respectively. In 'Construction' it was 1.71 per cent. Commerce employs 7.76 per cent. In 'Transport', 'Storage' and 'Communication' it was 2.16 per cent. In the category of 'Other Workers' the percentage was 9.13.

In Kannauj district, in 1991, the percentage of total workers employed was 67.14. In 'Agriculture Labour' the same was 11.35 per cent. In 'Animal Husbandry, Forest Plantation, Tree Plantation' there were 0.41 per cent of workers. In 'Mining and Quarrying' it was very nominal 0.01 per cent. In 'Family-Industry and Non family Industry' there percentage were 1.92 and 6.14 per cent respectively. In 'Construction' it was 0.42 per cent. In 'Trade and Commerce', workers 'employment' was 5.07 per cent. In 'Transport, Storage and Communication', the percentage was 0.88. In 'Other', it was 6.66 per cent.

Basic Profile of Both the Selected Districts

The geographical area of Muzaffarnagar district is 4008 square kilometers while that of Kannuaj is 2129.2 Kms.

In so far as the demographic features of Muzaffarnagar District are concerned, the population of the district in 1991 was 284261 in which males were 1528.63 thousand and females were 1313.98 thousand. Sexratio was 860 females per 1000 males. The rural and urban population of the district are 2143.31 thousand and 699.23 thousand respectively.

As for as the Kannauj district is concerned, the total population of the district was 1155.85 thousand is 1991 in which males were 828.65 thousand and females were 527.19 thousand.

Thus, the basic profile of both the districts shows that both of them have basic facilities but in Muzaffarnagar they were more than that in Kannauj.

Basic Profile of the Villages Selected for the Study

In the Cluster-1 villages of Muzaffarnagar district there were 10,153 persons while in Cluster two villages there were 5452 persons.

In case of Kannauj district, the population in Cluster-1 village was 3,382 persons while in Cluster-II villages there were 8479 persons. Similarly, the average holding of Cluster-1 villages in Muzaffarnagar was 1.56 hectares While in case of Cluster-II it was 0.53 hectare. In case of Kannauj, it was 0.35 hectare and 0.58 hectare in Cluster-I and Cluster-II villages respectively.

<u>Distribution of Households by Size of Operational Land Holding</u>

Selected households were divided in marginal, small, medium and large categories. In village Cluster-I of Muzaffarnagar there were 88.81% marginal, 9.93% as small and 1.26% as medium categories. In Cluster-II there were 95.74% marginal, 3.50% small and 0.36 per cent as medium.

Proportion of Owned Account Enterprises

The Owned Account Enterprises are owned and operated with the help of family members only. Selected households have been studied according to different industrial categories. In both the districts more or less similar tendency was found.

Proportion of casual workers under different Industrial Categories was also studied. In so far as the case of availability of basic infrastructure is concerned, these facilities are available in both districts. Health Care Centres either in public or private are available in the both the Clusters of selected villages. In Muzaffarnagar there was veterinary centre but in Kannauj there was no such facility. Roads were available almost in all the villages of Muzaffarnagar but in Kannauj only in a few villages such type of facilities is there. In Muzaffarnagar there were nongovernment financial institution but in Kannauj, there were none. Examining the major source of employment, in Muzaffarnagar district, 23.33% were engaged in Agriculture in Cluster-I villages while in Cluster-II 13.33% were employed in 'Agriculture'. Similarly in other 'Industrial Sectors' also the distribution is wide.

Status of Live Stock

Live stock plays very important role specially in rural life of the country. It is an employment oriented land saving venture, and serves the humanity in dead and live position. In the State of Uttar Pradesh the number of live stock was 6,01,52054 in 1993.

Processing activities specially of meat and milk are found almost in every corner of the State. Though these activities are very much unorganized, they generate income and employment both. The Production of milk, meat, skin and even wool etc. are available from cow, buffaloes, sheep, goats, horses, ponies, pigs, camels and poultry etc.

Gross root study was done about individual, small meat units. It was found that the net gain worth Rs. 2620 was availed and per household income was Rs. 175 per day.

In the State of Uttar Pradesh the position of meat and skin units is not satisfactory. As for as the availability of good skin is concerned, on account of lack of proper technique of skin collection, dirty and unhygienic condition of slaughter houses and other similar certain factors, the condition is bad in the State. According to an estimate by the working group for 8th five year plan "on account of delay or improper skin taking, the loss of Rs. 600 crore is involved". The number of units registered with the Directorate of Industries, Uttar Pradesh were 401372 having investment of Rs. 4028 crore and employment to 1552000 persons. Liberal financial assistance for establishing industries in backward area was given to the extent of Rs. 10103.10 crore.

Processing

This sector is recognized as having an important role in improving agricultural productivity, reducing wastage of fruits, vegetables and other perishable food items and improving food availability for domestic consumption as well as for exports. In Uttar Pradesh there are about 1100 cold storages and many processing units. There is Food Processing Promotional Organization under the supervision of State level Agriculture Department.

In the field of milk processing butter, cream, ghee and other products are made through processing. There are rice-hullers, cane crushers etc. In meat, fish, wool and others, processing is found every where in the State.

In the processing sector, there are abundant employment opportunities and the income of the workers is satisfactory.

Status of Enterprises in the State of Uttar Pradesh

The economy of the State is heavily dependent on agriculture. Such state of affairs is mainly responsible for the backwardness of the State. There is the need to reduce the pressure on agriculture and to shift the additional labour force to non-agricultural enterprises. Govt., no doubt, is working in this direction. Many industrial promotion institutions have been opened by the government. On account of efforts by the govt. many joint stock companies are working. There have been 15391 joint stock companies with paid capital of Rs. 8,31.40,00.

On account of various promotional activities the rate of growth of industrialization has been 4.2 per cent between 1992-97. In case of small scale industries in 2000-2001 generating avenues. But the irony of fait is this that in this State electricity remains cut for many hours, how development can take place.

Suggestions for Policy Implications

Economy of the State of Uttar Pradesh is mainly dependent on agriculture. According to the census of 1991 total main workers were 388.81 lakhs. Out of them, 206.87 lakhs were cultivators and 76.9 lakhs also agricultural labourers. Their combined percentage was 72.8. In the State the per capita available cultivable land is lower than that of its national average. The need is to shift a sizeable proportion of population from agriculture to non-agriculture specially in rural areas because unemployment is very high in rural sector.

The following suggestions are made cited for policy implication in this regard:

- 1. Conducive atmosphere should be created for pushing industrial development, specially the tempo for development of village and cottage industries should be revived.
- 2. The supply position of electricity must be improved. Unhindered supply of power is required for operation of different plants and machines. In the State of Uttar Pradesh where power is available hardly for a few hours, all activities get almost stagnated. At all cost it must be improved. Because

'no power, no development, and no development, no employment' is the maxim.

- 3. Rural roads are instrumental in employment absorption. Prime Minister Road Plan, must be undertaken on war footing.
- 4. Getting the lisence and other govt. facilities have become very cumbersome and troublesome in this State. The unnecessary delays must be avoided.
- 5. Work in different industrial categories must be undertaken on war footing in rural areas.
- 6. Propaganda and wide publicity must be done so that consciousness can be created about different schemes for setting up the industrial ventures.
- 7. Rural areas must be developed at par with urban one.
- 8. Since employment is a national problem, all out effort must be made to solve it by the State and Central Government jointly.
- 9. Marketing network for the sale of product of village and cottage industries should be strengthened.
- 10.Government should have determination to fight the problem with real zeal because if this burning problem is not solved it may disturb the entire social set- up.

Study Mirror

S1.	Title-Study on Rural Non-Farm Employment in Uttar Pradesh
No.	Reference Year-
2	National Scene
	Population of Country-1000 million (A) Rural
	→ (B) Urban
	Rate of growth of Economy-6.5 P.C
	Incidence of Unemployment 7 P.C
3	Urban Employment increased @ 2 per cent
	Rural Employment increased @ 0.5 per cent only
	Rural Non-Farm Employment
	Rural Non-Farm Consists of All Non-Agricultural activities such as
	Mining & Quarrying, Household and Non-Household Industries Manufacturing, Processing, Repairs Construction
	Trade & Commerce, Transport and Other Services
4	Estimates of Rural Non-Agriculture Employment in India
	(i). In 1991 worker-population-ratio Male 51.3 → Female 19.1
	(ii). Number of Rural Non-Agriculture Workers (in Millions) Male 32.5
	Female 5.7 (iii). Rural non-agricultural workers (%)
	—→ Male 20.2
	Female 10.7
5	Distribution of Non-Farm Workers in Different Regions of Uttar Pradesh

		Male	Female	Total			
	Eastern	1058956	160653	1219609			
	Region	(86.83%)	(13.17%)	(100)			
	Western	943072	101585	1044657			
	region	(90.28%)	(9.72%)	(100.00)			
	Central	389251	44524	433775			
	Region	(89.74%)	(10.26%)	(100.00)			
	Bundelkhand	2494899	322661	2817560			
	Region	(88.55)	(11.45)	(100.00)			
6	There are 4 region		(' - /)	(
	(1)		gion contains 27 d	istricts			
	(2)	_	gion there are 26				
	(3)). Central region	n 10 district				
	(4)). Bundelkhand	regions 7 District	S			
7	Research Method	ology					
	Districts Selected						
	(i	i) MuzaffarN a	ıgar				
	(ii) Kannauj						
	Towns- Shamli in Muzaffarnagar & Kannauj in Kannauj						
	Number of Villages Selected						
	From Muzaffarna	_					
	E V	From Cluste					
	From Kannauj -	From Cluster					
	In all 12 willows 1	From Cluste		for the Study			
	In all 12 villages 1: For Live Stock 15			ioi me study			
8	Distribution of Ru			rkers 1001			
O	Census	urar 14011-1-arini 1	employment wo	IRCIS 1771			
	Industrial Catego	rv	Muzaffarnaga	r Kannauj			
	Agriculture	<u>- J</u>	37.03%				
	Agri. Labour		31.03%				
	Animal Husbandry	Jungle	1.00%				
	Plantation, Tree Pl	_					
	Mining & Quarryin		0.0%	6 0.01%			
	Family Industry		1.86%				
	Non-Family Indust	trv	8.31%				

Construction	1.71%	0.42%
Trade & Commerce	7.76	5.07%
Transport, Storage & Commerce	2.16%	0.88%
Other Workers	9.13%	6.66%

Distribution of households by major sources of employment in village groups

Major Sources of Employment	Muzaffa	rnagar	Kannauj	
	Village-1	Village-2	Village-1	Village-2
Agriculture	7	4	11	14
	(23.33)	(13.33)	(36.670	(46.67)
Allied Activity	-	-	-	-
Manuf, Processing, Service & Repairs	3	4	3	2
	(10.00)	(13.33)	(10.00)	(6.67)
Private Construction	7	5	5	4
	(23.34)	(16.67)	(16.67)	(13.33)
Whole Sale Traders	-	-	-	-
Retail Traders	3	3	3	3
	(10.00)	(10.00)	(10.00)	(10.00)
Services (transport, storage,	3	3	3	3
communication)	(10.00)	(10.00)	(10.00)	(10.00)
Agricultural Labour	7	11	4	4
	(23.33)	(36.67)	(13.33)	(13.33)
All	30	30	30	30
	(100.00)	(100.00)	(100.00)	(100.00)

Figures in brackets are percentage of absolute figures.

Average Number of Economic Activities Per worker Industrial Category-wise in the Sample Village

(Nos.)

Major Industrial Category	Muzaffarnagar		Kan	nauj
	Village-1	Village-2	Village-1	Village-2
Cultivation	5.20	4.00	8.67	6.58
Agriculture Labour	7.50	3.33	2.50	2.50
Allied Activity of Agri.	-	-	-	-
Self Employment in	3.33	2.50	2.00	3.00
Manufacturing etc.				
Self Employment in Pvt.	-	-	-	-
Construction				
Self Employment in Services	-	-	-	-
etc.				
Non-Agriculture Wage	5.33	2.67	3.75	4.17
Labour				
Regular Employment in non	3.25	2.83	2.00	4.33
Agri.*				
Govt. Construction	-	-	-	-

Distribution of Milk and Milk Products by Co-operative Department in Uttar Pradesh

Year	Milk (000 liter)	Butter (Kgs)	Cream (Kgs)	Ghee (Kgs)	Other Products
					(Kgs)
1971	49,189	1,14,156	3,58,628	2,27,147	11,03,604
1980	61,166	1,48,496	26,573	2,89,346	12,26,820
1989-90	9,957	9,19,910	1.195	18,16,620	3,48,023
1990-91	3,62,559	11,15,482	1,276	18,21,221	3,93,936
1991-92	45,144	14,47,041	1,306	12,48,315	4,10,846
1992-93	1,17,676	15,80,201	19,22,751	46,90,402	4,97,181
1993-94	1,32,196	46,79,851	1,23,61,131	1,17,69,801	8,93,431

Source: Statistical Abstract, Uttar Pradesh 1995, Economics & Statistics Division, State Planning Institute, Uttar Pradesh, Lucknow.

Annual Rate of Growth of Industrialization

	Plan	Period	Average Annual Rate
1	First Five Year Plan	1951-56	2.3 Per cent
2	Second Five Year Plan	1956-61	1.7 Per cent
3	Third Five Year Plan	1961-66	5.7 Per cent
4	Three Annual Plans	1966.69	1.2 Per cent
5	Fourth Five Year Plan	1969-74	3.4 Per cent
6	Fifth Five Year Plan	1974-79	9.4 Per cent
7	Six Five Year Plan	1980-85	9.4 Per cent
8	Seventh Five Year Plan	1985-90	10.9 Per cent
9	Two Annual Plans	1990-92	1.1 Per cent
10	Eight Five Year Plan	1992-97	4.2 Per cent
11	Ninth Five Year Plan (Target)	1997-2002	12.00

Source: Uttar Pradesh Ki Arthik Sameekchha-2000-2001. 'Economics and Statistics Division, State Planning Institute, Uttar Pradesh, Lucknow. Page 17.

Table-II-4 Regional Presentation of Non-Farm Workers in Different Regions of Uttar Pradesh

Sl. No.	Regions / Districts	Population 1991	Worker 1991	Non Farm Rural Workers 1998	Percentag e of total workers to total populatio n	Percenta ge of non- farm rural workers to total worker
	Bundelkhand Region			Total		
1	Banda			21730		
2	Jhansi			18635		
3	Chitrakute			8134		
4	Hamirpur			19280		
5	Lalitpur			18093		
6	Jalaun (Orai)			19024		
7	Mahoba			14623		
	Total			119519		
				(100.00)		
	Total Uttar Pradesh			2817560		
				(100.00)		

Annexure-II

Action Taken

(1) Table-II-4

Regional presentation of the districts has been incorporated as required.

(2) Table-IV-8

As for as economic activity per worker is concerned, calculation has been done on an average basis. Even a single worker works in lock-making, floor-making, gaggary and khansari making and in other manufacturing units. Cane crushing is a seasonal work.. In Muzaffarnagar district, these activities are very common. Avenues are open to skilled and unskilled workers. They work on high salary. Wagerates are also very high.

In the district of Kannauj perfumes are prepared from different types of flowers. Being a part of previous Farrukhabad district potato is cultivated on large-scale in the Kannauj district too. In different types of activities of grading, selling etc, labourers are engaged on handsome payments.

(3) Table-IV-14

As far as wide variation in income in the sample districts is concerned, as is clear, the selection of the districts for the study has been done on the ground of maximum and minimum concentration of non-farm rural workers. In this sequence we find that district Muzaffarnagar

stands on top. There are various types of cottage and village industries such as gaggary and Khandsari making, handloom-weaving, lock-making and various other units are in operation. In these industries employees get handsome amount.

But in Kannauj district, which was selected on the ground of minimum concentration, the salary and wage-rates are lower.

- (4) The analysis of live-stock based processing-units has been revised in the light of required direction. Market-margins etc. have been calculated.
- (5) Analysis of constraints in the processing-units has been done on the basis of available information.
- (6) In the analysis of live-stock based processing activities, price of the main product, byproduct and raw materials have been depicted. Price of the main product varied from Rs. 60 to 80 per kg. Price of raw material (he-goat) was between Rs. 500 to 700 per he-goat.
- (7) Muzaffarnagar district is adjacent to the districts of Panipat and Karnal of Hariyana State and Saharanpur, Bijnore, Meerut, Baghpat of Uttar Pradesh. It also touches the district of Haridwar of Uttaranchal State. Geographical area of the district is 4008 square kilometer. Population of the district is 2842.54 thousand. The literates were 996.05 thousand. Number of tehsils are 5. Community development blocks are 14. The number of habited villages was 141. The dominating crop is

sugarcane. In 2000-01 its production was 13446 metric tonnes followed by foodgrains 575 tonnes of 55 thousand metric tonnes. Potato was cultivated in the area. Average rainfall was 753 Millimeter is 2001. No. of small scale industries was 28468 in 2001-02 in which 65, 148 persons were engaged. Length of the canal was 1154 km. No. of Govt. tube-well was 484. Personal tube-wells and pumpsets were 84339. There is one Industrial Training Centre. There are two institutions Polytechnics.

Density of population is 709 per square kilometer of the area. Percentage of main workers to total population was rural 30.9 and urban 27.1. Percentage of agricultural worker to total population was 20.4. Community Development blocks are Oon, Thanna-Bhavan, Shamli, Kairana, Charthawal, Purkazi, Sadar, Badhra, Kandhla, Budana, Shahpur, Morna, Jansath and Khatauli.

Shamli block was selected for the study. Density of population of Shamli was 656 per square kilometer of the area. The percentage of main workers to total population was 30.1. The percentage of agricultural workers to main workers was 76.3.

There is Shamli Sugarmill also. As we have seen, sugarcane is the main crop of the area. Crushers are common in the area. Yarn making works are mostly prevalent in the villages. Shamli Rly. Station is adjacent to sugarmill. The nearby villages are very prosperous. Non-farm working avenues are very much there. Wide-spread prosperity is there. People mostly rear buffaloes for milk. Vans of Mother Dairy come in the

morning to collect the milk. The area is mostly dominated by Jats who are very laborious. The wage rate is very high.

As far as Kannuaj district is concerned it was selected on the ground of minimum concentration of non-farm workers. It is adjacent to the districts Hardoi, Kanpur, Etawah, Mainpuri. This district was earlier part of Farrukhabad district. Geographical area of the district is 2129.2 square kilometers. Population of the district is 1155.85 thousand. Rural population is 974.06 thousand and urban is 181.78 thousand. Literates were 446.48 thousand. No. of tehsils is three. The community development blocks are 7. No. of villages is 689. The net area sown was 145000 hectare. Potato is the dominating crop of the districts with 808 thousand metric tonnes of output followed by foodgrains (457 metric tonnes). Length of the canal was 516 kilometer. No. of Govt. tubewells was 213 while private tubewells and pumsets were 40308. Small scale industrial units were 1339. There is one Industrial training institute. Percentage of urban population to total population is 15.7. Density of population is 543. Percentage of agricultural workers including cultivators to total population was 22.8. The Blocks are Chhibra-mau, Talgram, Saurikh, Jalalabad, Kannauj and Umarda.

Kannauj and Jalalabad blocks were selected for the study. Both are connected by railway stations. Density of population of Kannauj and Jalalabad was 493 and 558 persons per square kilometer of the area. In Kannauj perfume making is the popular economic activity. It has also taken the shape of cottage industry. In potato cultivation season the workers get abundant employment.

Annexure-1

Comments On Draft Report

- (1) Title of the Report Rural Non-Farm Employment
- (2) Date of Receipt of the Study Report June 10, 2003
- (3) Date of Dispatch of Comments May 10. 2003
- (1) In Table-II-4 about regional presentation of non-farm worker, the number of non-farm workers in the district would not make any sense for the present analysis unless it is compared with the [population work force figures of the respective districts and regions.]
- (2) In Table-IV-8, Average number of Economic activity per worker, it is not comprehensible how a self-employed person in manufacturing etc. can have more than three economic activities in a calendar year, if yes, then what are these activities for the self-employed in the manufacturing sector and in what conditions? The findings of the tables need to be discussed with the region specific reasons.
- (3) In table-IV-14, there is wide disparity (ten fold) in average income from agriculture in the comparable districts, even though these districts present extreme agricultural development, a difference of this magnitude requires special care in tabulation and analysis of data.

- (4) The analysis of live stock-based processing activity is inadequate. Most of the tables based on the primary survey VI-3/4/5 are unable to provide any meaningful information; for instance marketing channels are studied to analyse pattern of market margins; Table VI-5, however fails to provide any information on market-margins, marketing-efficiency.
- (5) The analysis of constraints in the processing activity is too general, this does not show any variation in information.
- (6) In the analysis of live-stock based processing activity, price of the main products, by products, raw-material must be provided in the annexure. In the extreme case, if researchers are not in a position to extract any meaningful information about the processing activity, questionnaire, tabulation sheet may be provided.
- (7) The annexure of the report may be strengthened with the local level details, which is interesting and important for understanding tables in the report.

"Rural Non-Farm Employment in Uttar Pradesh"

Executive Summary

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2003

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EXECUTIVE SUMMARY

Introduction

The mounting pressure of population is changing the basic character of the economy. Rate of growth of the economy lags behind the increasing labour force. At the end of the century the incidence of unemployment has been around 7 per cent on the basis of current daily status. The responsibility of absorbing labour force lies with public and private sectors. This is also known as organized, unorganized sectors. Unorganized sector is also known as in formal sector. Based on location, this is also known as rural and urban informal sectors. Keeping pace with the population, rural sector has more unemployed labour force than that of the urban sector. Rural sector is also known as farm and non-farm sector. As the share of agriculture in national income has decreased the responsibility of absorbing increasing, labour force in rural areas lies with non-farm sector.

Rural Non-Farm Sector

It consists of many diversified activities such as mining and quarrying, household and household manufacturing, processing, repair construction, Trade and Commerce, Transport and other services in villages and rural towns.

The objectives of the study are as follows:

1. To study the Pattern of rural non farm employment diversification :

- 2. To estimate the determinants of employment in the selected non farm rural activities; and
- 3. To assess region specific constraints in the growth of live-stock based agro-processing units and draw the policy implications.

Research Methodology

Muzaffarnagar, having highest concentration of non farm workers and district Kannauj with the lowest concentration have been selected for the study. From each district 3 villages within the radius of 3 Kms. of class two town area (Cluster-I) and 3 villages at the distance of 10 and above kilometers (Cluster-II) have been selected. From each Cluster 30 households were selected. Thus, 120 households from the six villages of the two districts were selected for the study. Apart from these for fulfilling the 3rd objective of the study 15 meat centres have been selected.

Categories of Households

The households have been categorized as follows:

- 1. Small and marginal formers dependent on rural non -farm sector.
- 2. Manufacturing, Processing, Servcing and Repairs.
- 3. Construction-workers in govt. sponsored construction activities or agriculture labour.
- 4. Private construction workers.
- 5. Whole sale Traders
- 6. Retail traders
- 7. Workers in Transport, storage and communication activities.

Uttar Pradesh

Uttar Pradesh occupies the geographical area of 241 thousand kilometer which is 7.33 per cent of the entire geographical area of 3287 thousand square Kms. of the country. From the point of view of the area after Rajasthan (10.41 per cent) Maharastra (9.30%) Madhya Pradesh (9.03 per cent) Andhra Pradesh (8.37 per cent), U.P. (7.33 per cent) stands as the 5th biggest State of the country. Population of the State is 16.61 crore in which males are 8.75 crore and females 7.86 crore. The female population stands at 898 per thousand males. Density of the population is 689 person per square kilometer. The rural population is 13.15 crore and urban one is 3.45 crore. There are 70 districts. Literacy rate of males is 70.23% and that of females is 42.98%. There are 29.7% workers to total population. 72.20 per cent are cultivators, 7.75 per cent are engaged in industrial occupation. Net sown area in agriculture stands at 16.825 thousand hectare.

Details of Workers in the State

In 1991, total workers in the State were 41360734 in which males were 36510310 and females were 4850424. Agriculture workers were 7835258 in which 6095941 were males and 1737314 were females. As for as non-agriculture workers are concerned they were 13688000 in which males were 10089000 and females 3592000.

<u>Details of Non-Farm workers According to Industrial Categories</u>

In 1991 in the Industrial Category of 'Cultivators' males were 89.24 per cent and females were 10.76 per cent. In 'Agriculture-Labour' males and females were 76.89 per cent and 23.11 per cent respectively. In

'Cattle Rearing in Jungle, Hunting, Fishing etc.' males were 90.26 per cent and females were 9.74 per cent. In 'Mining and Quarrying' they were 90 and 10 per cent respectively. In the category of 'Manufacturing and Repairs' males were 88.76 per cent and females were 11.26 per cent. In 'Construction' the percentage of males was 96.14 and that of females 3.86. In 'Trade', they were 96.5 and 3.95 is their respective order. In 'Transport' males were 99.25 per cent and females 0.75 per cent. In 'Others' they were 53.35 per cent and 6.65 per cent respectively.

Regional Presentation of Non-Farm Workers in U.P.

In western region there were 1044657 non-farm workers in which males were 90.28 per cent and females were 9.72 per cent. In Eastern region the total non-farm workers were 1219609 in which 86.83 per cent were males and 13.17 per cent females. In Central Region, males were 89.74 per cent while females were 10.26 per cent. Similarly in Bundelkhand Region males were 88.55 per cent and females 11.45 per cent.

<u>Distribution of Non-Farm Employment Workers in the Selected Districts</u>

Examining the classification of non-farm workers of Muzaffarnagar district, we find that in Muzaffarnagar 'Agriculture' occupies the percentage of 37.03 in 1991. In 'Agriculture-Labour' the same was 31.03 per cent in 'Animal Husbandry, Forest Plantation, Tree Plantation' the percentage was only 1. In 'Mining & Quarrying' the figure was 0.1 per cent, 'Family Industry' and 'Non Family Industry' stood at 1.86 per cent and 8.31 per cent respectively. In 'Construction' it

was 1.71 per cent. Commerce employs 7.76 per cent. In 'Transport', 'Storage' and 'Communication' it was 2.16 per cent. In the category of 'Other Workers' the percentage was 9.13.

In Kannauj district, in 1991, the percentage of total workers employed was 67.14. In 'Agriculture Labour' the same was 11.35 per cent. In 'Animal Husbandry, Forest Plantation, Tree Plantation' there were 0.41 per cent of workers. In 'Mining and Quarrying' it was very nominal 0.01 per cent. In 'Family-Industry and Non family Industry' there percentage were 1.92 and 6.14 per cent respectively. In 'Construction' it was 0.42 per cent. In 'Trade and Commerce', workers 'employment' was 5.07 per cent. In 'Transport, Storage and Communication', the percentage was 0.88. In 'Other', it was 6.66 per cent.

Basic Profile of Both the Selected Districts

The geographical area of Muzaffarnagar district is 4008 square kilometers while that of Kannuaj is 2129.2 Kms.

In so far as the demographic features of Muzaffarnagar District are concerned, the population of the district in 1991 was 284261 in which males were 1528.63 thousand and females were 1313.98 thousand. Sexratio was 860 females per 1000 males. The rural and urban population of the district are 2143.31 thousand and 699.23 thousand respectively.

As for as the Kannauj district is concerned, the total population of the district was 1155.85 thousand is 1991 in which males were 828.65 thousand and females were 527.19 thousand.

Thus, the basic profile of both the districts shows that both of them have basic facilities but in Muzaffarnagar they were more than that in Kannauj.

Basic Profile of the Villages Selected for the Study

In the Cluster-1 villages of Muzaffarnagar district there were 10,153 persons while in Cluster two villages there were 5452 persons.

In case of Kannauj district, the population in Cluster-1 village was 3,382 persons while in Cluster-II villages there were 8479 persons. Similarly, the average holding of Cluster-1 villages in Muzaffarnagar was 1.56 hectares While in case of Cluster-II it was 0.53 hectare. In case of Kannauj, it was 0.35 hectare and 0.58 hectare in Cluster-I and Cluster-II villages respectively.

<u>Distribution of Households by Size of Operational Land Holding</u>

Selected households were divided in marginal, small, medium and large categories. In village Cluster-I of Muzaffarnagar there were 88.81% marginal, 9.93% as small and 1.26% as medium categories. In Cluster-II there were 95.74% marginal, 3.50% small and 0.36 per cent as medium.

Proportion of Owned Account Enterprises

The Owned Account Enterprises are owned and operated with the help of family members only. Selected households have been studied according to different industrial categories. In both the districts more or less similar tendency was found.

Proportion of casual workers under different Industrial Categories was also studied. In so far as the case of availability of basic infrastructure is concerned, these facilities are available in both districts. Health Care Centres either in public or private are available in the both the Clusters of selected villages. In Muzaffarnagar there was veterinary centre but in Kannauj there was no such facility. Roads were available almost in all the villages of Muzaffarnagar but in Kannauj only in a few villages such type of facilities is there. In Muzaffarnagar there were nongovernment financial institution but in Kannauj, there were none. Examining the major source of employment, in Muzaffarnagar district, 23.33% were engaged in Agriculture in Cluster-I villages while in Cluster-II 13.33% were employed in 'Agriculture'. Similarly in other 'Industrial Sectors' also the distribution is wide.

Status of Live Stock

Live stock plays very important role specially in rural life of the country. It is an employment oriented land saving venture, and serves the humanity in dead and live position. In the State of Uttar Pradesh the number of live stock was 6,01,52054 in 1993.

Processing activities specially of meat and milk are found almost in every corner of the State. Though these activities are very much unorganized, they generate income and employment both. The Production of milk, meat, skin and even wool etc. are available from cow, buffaloes, sheep, goats, horses, ponies, pigs, camels and poultry etc. Gross root study was done about individual, small meat units. It was found that the net gain worth Rs. 2620 was availed and per household income was Rs. 175 per day.

In the State of Uttar Pradesh the position of meat and skin units is not satisfactory. As for as the availability of good skin is concerned, on account of lack of proper technique of skin collection, dirty and unhygienic condition of slaughter houses and other similar certain factors, the condition is bad in the State. According to an estimate by the working group for 8th five year plan "on account of delay or improper skin taking, the loss of Rs. 600 crore is involved". The number of units registered with the Directorate of Industries, Uttar Pradesh were 401372 having investment of Rs. 4028 crore and employment to 1552000 persons. Liberal financial assistance for establishing industries in backward area was given to the extent of Rs. 10103.10 crore.

Processing

This sector is recognized as having an important role in improving agricultural productivity, reducing wastage of fruits, vegetables and other perishable food items and improving food availability for domestic consumption as well as for exports. In Uttar Pradesh there are about 1100 cold storages and many processing units. There is Food Processing Promotional Organization under the supervision of State level Agriculture Department.

In the field of milk processing butter, cream, ghee and other products are made through processing. There are rice-hullers, cane crushers etc. In meat, fish, wool and others, processing is found every where in the State.

In the processing sector, there are abundant employment opportunities and the income of the workers is satisfactory.

Status of Enterprises in the State of Uttar Pradesh

The economy of the State is heavily dependent on agriculture. Such state of affairs is mainly responsible for the backwardness of the State. There is the need to reduce the pressure on agriculture and to shift the additional labour force to non-agricultural enterprises. Govt., no doubt, is working in this direction. Many industrial promotion institutions have been opened by the government. On account of efforts by the govt. many joint stock companies are working. There have been 15391 joint stock companies with paid capital of Rs. 8,31.40,00.

On account of various promotional activities the rate of growth of industrialization has been 4.2 per cent between 1992-97. In case of small scale industries there have been many generating avenues. But the irony of fait is this that in this State electricity remains cut for many hours, how development can take place. Recently many public sector companies are going to be closed. It may result in shape of further unemployment.

Suggestions for Policy Implications

Economy of the State of Uttar Pradesh is mainly dependent on agriculture. According to the census of 1991 total main workers were 388.81 lakhs. Out of them, 206.87 lakhs were cultivators and 76.9 lakhs also agricultural labourers. Their combined percentage was 72.8. In the State the per capita available cultivable land is lower than that of its national average. The need is to shift a sizeable proportion of population from agriculture to non-agriculture specially in rural areas because

unemployment is very high in rural sector. Though govt. tries to increase better atmosphere in rural area itself. Still there is wide difference in rural and urban sectors.

The following suggestions are made cited for policy implication in this regard:

- 1. Conducive atmosphere should be created for pushing industrial development, specially the tempo for development of village and cottage industries should be revived.
- 2. The supply position of electricity must be improved. Unhindered supply of power is required for operation of different plants and machines. In the State of Uttar Pradesh where power is available hardly for a few hours, all activities get almost stagnated. At all cost it must be improved. Because 'no power, no development, and no development, no employment' is the maxim.
- 3. Rural roads are instrumental in employment absorption. Prime Minister Road Plan, must be undertaken on war footing.
- 4. Getting the lisence and other govt. facilities have become very cumbersome and troublesome in this State. The unnecessary delays must be avoided.
- 5. Work in different industrial categories must be undertaken on war footing in rural areas.
- 6. Propaganda and wide publicity must be done so that consciousness can be created about different schemes for setting up the industrial ventures.
- 7. Rural areas must be developed at par with urban one.
- 8. Since employment is a national problem, all out effort must be made to solve it by the State and Central Government jointly.

- 9. Marketing network for the sale of product of village and cottage industries should be strengthened.
- 10.Government should have determination to fight the problem with real zeal because if this burning problem is not solved it may disturb the entire social set- up.