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EMPLOYMENT AND EARNINGS IN
UTTARANCHAL: TRENDS AND
POLICY ISSUES

Rajendra P. Mamgain and Balwant Singh Mehta



INSTITUTE FOR HUMAN DEVELOPMENT
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The paper examines the growth and structure of employment in Uttaranchal, with a focus on the post-formation period of the state. It argues that despite high growth in gross state domestic product (GSDP) in the state, a large section of population particularly in its hill districts still has very low levels of income. It also examines various policy measures taken by the state government towards improving income levels and raises the issues that need to be tackled by policy planners, particularly in the next plan of the state.

I. INTRODUCTION

A distinct feature of economic growth in India relates to increase in regional inequalities over the last five and half decades of development planning (Bhattacharya and Shakthivel, 2005; Mathur, 2005). There are several regions where a large proportion of population depends on agricultural sector with very low levels of income. The higher economic growth could hardly 'trickle-down' to such regions despite several development interventions by the State as an institution over the years. Neo-classical theoretical prescriptions such as Keynesian 'aggregate demand' model and Lewesian 'two-sector labour transfer' model could hardly give convincing answers to the type of growth path which emerged over the years.

The persistence of regional inequalities in income levels is largely attributable to the failure to develop basic economic infrastructure in the region. This led occasionally to a demand for smaller states in India. The arguments in the backdrop were of better governance and resultant economic efficiency in the use of state resources, thereby leading to improved income opportunities. The creation of Uttaranchal as a new state of the Indian Union on November 9, 2000 is also largely linked with the economic backwardness of the region. The major aspirations of common people from their new state included among others creation of better employment for them. This in turn was expected to arrest the existing large scale out-migration of able-bodied youth, mainly educated males, from the hill regions of Uttaranchal. Other expectations relate to improved access to infrastructure facilities such as electricity, road, telecommunications, health and education etc. thus leading towards overall development of population residing in the hill districts.

Given this background, this paper examines the growth and structure of employment in Uttaranchal, with a focus on the post-formation period of the state. It argues that despite high growth in gross state domestic product (GSDP) in the state a large section of population particularly in its hill districts still have very low levels of income. The population in hill region has to struggle hard for eking out their livelihoods by putting larger numbers of their

household members into the labour force. Out-migration still remains a major household strategy to support livelihoods in the rural areas of the state (Mamgain, 2004; Mamgain et al., 2005). The paper examines various policy measures taken by the State Government towards improving income levels. Lastly, it raises the issues that need to be tackled by policy planners, particularly in the next plan of the state.

II. UTTARANCHAL ECONOMY: A BRIEF OVERVIEW

With a population of 8.48 million in 2001, Uttaranchal accounts for 0.82 per cent of the Indian population. The distribution of population is highly skewed in the state as over 53 per cent of its population resides in 10 hill districts. The remaining population lives in three plain districts of the state. The population growth rate has decelerated since the 1980s and is now lower than the national average.

According to 2001 Population Census, more than three-fourths of Uttaranchal's lives in its rural areas. The corresponding figures for its hill and plain regions are 85.6 per cent and 61.5 per cent, respectively. The higher rate of urbanization in the plain districts of the state has been associated with a rapid shift in the structure of employment therein.

Uttaranchal has achieved commendable success in attaining relatively high level of literacy in comparison to many regions of the country. More than 72 per cent of population of the state is literate and thus it ranked at 9th place in India. There is a big gender gap in literacy levels in the state—nearly 60 per cent females are literate as compared to over 84 per cent males (GoI, 2002). This type of gap is more pronounced in the hill districts of the state (Mamgain, 2004).

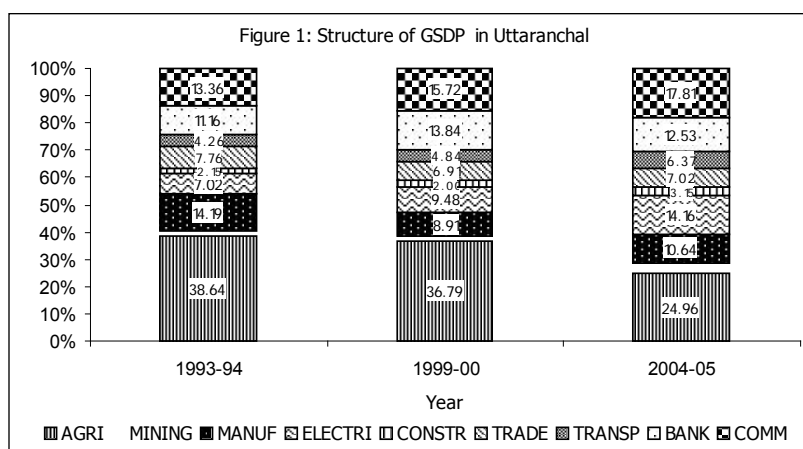
Since its formation the state witnessed an impressive increase of over 10 per cent per annum in its gross state domestic product (GSDP) during the period 1999-00 to 2004-05. The secondary sector has registered a highest compound annual growth rate of over 14 per cent. The registered organized manufacturing has been the major driver of growth in the GSDP as it registered highest annual increase of over 17 per cent during the period. The annual growth of GSDP in services sector almost doubled to 10 per cent during the period. The growth in GSDP has been appreciable in trade and transport sectors. The process of growth could hardly touch the agriculture sector, as it remained lowest at about 2 per cent per annum during the period 1999-2000 to 2004-05. If we compare the growth of GSDP in the state during the earlier period of 1993-94 to 1999-00- prior to its formation- a definite impact of the policies of the new state is clearly visible in all sectors of the state's economy except agriculture (Table 1).

Table 1
Annual Compound Growth of GSDP (At 1993-94 Prices) by Industry in Uttaranchal

Industry	Growth rate	
	1993-94 to 99-00	1999-00 to 2004-05
Agriculture & allied activities	2.33	1.81
Mining & quarrying	3.75	29.18
Manufacturing	-4.52	13.99
Electricity, gas & water supply	8.46	19.23
Construction	2.00	20.42
Trade, hotels & restaurants	1.19	10.39
Transport, storage & communication	5.39	16.28
Banking & insurance	6.92	7.87
Community and social services	6.01	12.81
All	3.17	10.03

Source: CSO (2006).

The structure of GSDP has changed considerably in the state particularly over a period of last five years. The share of agriculture in GSDP declined by about 12 percentage points-- from 36.8 per cent in 1999-2000 to 25.0 per cent in 2004-05. The relative share of secondary sector increased by over seven percentage points with nearly 2 percentage points in manufacturing and 4.7 percentage points in the case of electricity, gas and water supply. The share of services sector has increased marginally by 2.4 percentage points, and it remains the largest contributor to GSDP (43.7 per cent in 2004-05) (see Figure 1).



III. TRENDS IN WORKFORCE PARTICIPATION

According to the Population Census, 2001, there are 4.5 million workers (both main plus marginal) in Uttaranchal, which constitutes nearly 37 per cent population of the state. The work participation rate (WPR) is substantially lower by more than 2 percentage points as compared to all-India figure of 39.3 per cent. Gender-wise, 46.1 per cent of male and 27.3 per cent of female population is in the workforce. A distinguishing feature of Uttaranchal is high WPR among women coupled with low WPR among males as compared to the national average (Table 2). The difference in female WPR between Uttaranchal and India has been more pronounced during the decade 1981 and 1991 (Mamgain, 2004).

Table 2
Work Participation Rate in Uttarakhand and India

Area/Sex	Main			Main plus marginal		
	1981@	1991	2001	1981@	1991	2001
Uttarakhand						
Rural						
Person	37.07	36.8	27.77	42.97	42.81	39.63
Male	46.85	46.65	36.09	48.71	48.48	45.99
Female	27.94	26.74	19.5	37.93	37.06	33.32
Total						
Person	36.19	35.17	27.39	41.13	39.94	36.94
Male	47.69	47.33	38.13	49.24	48.78	46.42
Female	24.21	22.19	16.24	32.7	30.5	27.09
India						
Rural						
Person	34.76	35.36	31.02	38.87	39.99	41.97
Male	52.62	51.27	44.51	53.81	52.48	52.36
Female	16.00	18.40	16.77	23.18	26.67	30.98
Total						
Person	32.56	33.79	30.55	36.70	37.50	39.30
Male	50.25	50.47	45.34	52.60	51.60	51.90
Female	13.63	15.79	14.68	19.70	22.30	25.70

Note: @ Excludes Hardwar district.

Source: 1. Population Census of India, Primary Census Abstract, Uttar Pradesh, 1981-1991;

2. Population Census of India, 2001, Workers and Non-workers in India, (Electronic Data).

A very distinct pattern of WPRs can be noticed by grouping the population of Uttarakhand across its hill and plain regions for the year 2001. Over 42 per cent of population in the hill region of the state constitutes its workforce as against 30.7 per cent in the plain region. As high as 44.5 per cent of rural females are in the workforce in the hill region. Yet another distinct feature is almost equal WPR (over 44 per cent) among male and female population in hill region in the state. This shows the centrality of women in the mountain region of Uttarakhand. (Table 3)

Table 3
Work Participation Rate in Hills and Plain Regions of Uttarakhand, 2001

Region	Area	Person	Male	Female
Hills	Total	42.35	44.72	40.06
	Rural	44.35	44.15	44.54
	Urban	30.46	47.69	9.10
Plains	Total	30.72	47.64	11.56
	Rural	32.05	47.92	14.37
	Urban	28.59	47.21	6.97
Uttarakhand	Total	36.92	46.14	27.33
	Rural	39.60	45.69	33.55
	Urban	29.15	47.36	7.59

Source: Population Census, 2001.

The Census data shows a steady decline in WPRs in Uttaranchal over a period of two decades (Table 2). This trend is opposite to the all-India pattern. The declining WPRs are observed for both the sexes. However, it is more prominent in the case of females during the decade 1991-2001. The NSSO data also indicate a similar pattern of decline in the WPRs in Uttaranchal during the period 1993-94 to 1999-00 (Table 4).

The reasons for the decline in WPRs in Uttaranchal, emerge clearly from the details given in Annexure Table A1. The work participation among youth in the age-group, 15-19 years declined by a huge margin of over 35 percentage points during the period 1991-2001. The decline was of about 45 percentage points in case of males and about 26 percentage points in case of females. Also, there has been a significant decline of over 9 percentage points in the WPRs in the age-group 20-29 years. On the other hand, there has been a marginal decline in WPRs in other age groups. This also implies a larger participation of youth population in education. In fact, there has been a significant increase in school enrolments in the state, particularly since the beginning of 1980s (Mamgain, 2004)

Mamgain (2004) finds four reasons mainly responsible for the declining WPRs in the state during the decade of 1980s and 1990s: (a) a steep increase in school enrolment coupled with a faster decline in dropout rate at middle and secondary level of education; (b) lack of employment opportunities in the state compared to the country as a whole; (c) accelerated pace of male-specific out-migration as reflected in the increase in the sex ratio in many hill districts; and (d) withdrawal of women from agricultural operations in the event of flow of remittances.

The recent NSS data for the period after 2001, however, show a significant uptrend in the WPRs both in Uttaranchal and India from their previous levels in 1999-2000. The relative increase is more pronounced in Uttaranchal and that too in case of its male population than all-India average (Table 4 and Annexure Table A2). In fact, the work participation of males in the state has recorded all time high level at 52.2 per cent even since 1983. The explanations for such increase are worth to be examined. But, a cursory look into age-specific WPRs for the year 2004-05 shows an increased participation of rural population in the age-group 10-14 years and 15-19 years—6.3 per cent and 41.0 per cent respectively (NSSO, 2006). This is really a major trend reversal as a growing number of youth are not being retained in educational institutions for their higher education. Whether their joining of the labour market is a distress phenomenon or growing employment opportunities, which were missing earlier in the state, is worth to be examined. However, before that it will be appropriate to examine the growth and structure of employment in the state during the last two decades.

Table 4
Work Participation Rate in Uttaranchal and India

Year	Uttaranchal			India		
	Person	Male	Female	Person	Male	Female
1983	48.43	51.62	45.02	41.92	53.63	29.58
1987-88	45.62	50.17	41.35	41.21	53.15	28.51
1993-94	48.26	49.33	47.19	41.96	54.48	28.55
1999-00	38.58	43.57	33.75	39.67	52.73	25.99
2004-05	43.95	52.19	35.42	42.00	54.70	28.70

Source: Various Rounds of NSSO.

IV. GROWTH AND STRUCTURE OF EMPLOYMENT

1. Growth in Employment

We have calculated the growth in employment in Uttaranchal by using both Census and NSS sources. The Census data show a decline in employment growth during 1991-2001. In fact, there has been an absolute decline in the number of main workers in the state (from 2.16 million to 1.97 million) during 1991 to 2001. Though there has been a decline in the case of both male and female workers, the decline is more pronounced in case of female workers during the period. The absolute decline in the number of main workers is observed only in rural areas of the state. As against this pattern, in urban areas female employment increased by 3.8 per cent per annum and that for males by about 1.4 per cent during the same period. However, during 1981 to 1991, there has been a positive growth of more than 2 per cent in the case of the main workers in the state (Table 5).

Table 5
Annual Compound Growth Rate of Workers in Uttaranchal

Area/Sex	Main workers		Main plus marginal workers	
	1981-91@	1991-2001	1981-91@	1991-2001
Rural				
Person	1.80	-1.28	1.99	0.55
Male	1.38	-1.17	1.45	0.74
Female	2.46	-1.47	2.65	0.33
Total				
Person	2.10	-0.65	2.25	1.07
Male	1.84	-0.45	1.89	1.22
Female	2.61	-1.12	2.78	0.81

Note: @ Excluding Hardwar district.

Source: Computed from Census of India, 1981, 1991 and 2001.

Taking both the main and marginal workers in the state together, their number increased from 2.49 million in 1991 to 2.71 million in 2001, recording a compound annual growth rate of 1.07 per cent. The growth was comparatively higher (1.2 per cent) in the case of male workers as compared to female workers (0.81 per cent). If we compare the earlier decade i.e. 1981-1991, there was a higher growth rate (2.25 per cent) of total workers in Uttaranchal. However, the decline in the growth rate of female workers was much steeper — from 2.8 per cent during 1981-1991 to 0.8 per cent during 1991-2001. The rural areas witnessed a steep deceleration in employment growth during 1991-2001.

The decade of 1990s witnessed an accelerated pace of marginalisation of the workforce both in Uttaranchal and India. The percentage of marginal workers in population almost doubled to 10 percentage points in Uttaranchal during the period 1991-2001. The degree of marginalisation was however more pronounced for rural male workers in the state. Thus, the decade of 1990s witnessed deteriorating employment opportunities for stable employment in the state, and more so in its rural areas (Mamgain, 2004).

The growth rate in employment calculated on the basis of NSS data also corroborates a faster deceleration in employment growth in Uttaranchal during the 1990s. The fall was even more pronounced among the females. While at all-India level compound annual growth of employment was positive at about 1.25 per cent (Table 6).

Table 6
Employment Growth in Uttaranchal and All-India during 1983 to 2004-05

Period	Uttaranchal			All-India		
	Person	Male	Female	Person	Male	Female
1983-88	0.62	0.84	0.36	0.94	1.18	0.45
1988-94	2.83	1.97	3.88	2.92	3.06	2.65
1994-00	-1.44	-0.29	-2.84	1.06	1.42	0.27
2000-04	3.48	4.65	1.84	3.09	2.65	4.04
1983-04	0.51	0.65	0.34	1.25	1.43	0.87

Source: Various Rounds of NSSO.

There has been a significant uptrend in the annual growth rate of employment during the period 1999-00 to 2004-05, both in Uttaranchal and all-India 3.5 per cent and 3.09 per cent, respectively (Table 6). This growth is witnessed both in the case of males and females and also in rural and urban areas of Uttaranchal as well as all-India (Annexure Table A3). However, four distinct features of growth of employment in Uttaranchal as compared to all-India during the period 1999-2004 are as follows. First, growth in male employment has been much higher in Uttaranchal (4.7 per cent) whereas that for females was higher in all-India (4.04 per cent). Second, urban areas of Uttaranchal witnessed a much higher growth of employment for both the sexes as compared to its rural areas. Third, growth in female employment in rural areas of Uttaranchal is comparatively much low (1.4 per cent) as compared to that at all-India level (3.8 per cent). Fourth, the gap in growth rates between rural and urban areas, in fact, is comparatively very high (2.5 percentage points) in Uttaranchal than all-India. These trends clearly show faster increase in employment opportunities for males in Uttaranchal since its formation in 2000. The growth in urban areas of the state has definitely resulted in the growth of employment opportunities both for males and females therein as reflected in Annexure Table 3. However, such opportunities are yet to percolate to rural women in the state, particularly in its hill districts.

Sectoral Pattern in the Growth of Employment

The decade of 1990s witnessed an absolute decline in the number of workers in agricultural sector in Uttaranchal, and thus, witnessed a negative growth (-0.42 per cent per annum). Other sectors witnessed a substantive growth in employment. Both manufacturing and construction witnessed a compound growth rate of over 7 per cent per annum. Growth of employment in trade and transport was 4 and 5 per cent, respectively during the decade 1991-2001. However, this growth was not adequate enough to absorb the huge decline in employment in agriculture, thus, restricting the overall employment growth at about 1 per cent during the period, 1991-2001 (Table 7a).

Table 7a
Sectoral Growth in Employment in Uttaranchal during 1991-2001

Sector	Compound annual growth rate		
	Rural	Urban	Total
Cultivator	-0.36	-4.94	-0.42
Agriculture labour	0.53	-3.92	0.20
Livestock, forestry, etc.	4.28	-5.80	2.06
Mining and quarrying	16.42	10.24	15.45
Manufacturing HH	9.67	8.35	9.39
Manufacturing non- HH	9.46	3.86	6.56
Construction	10.09	4.76	7.93
Trade and commerce	5.28	3.50	4.19
Transport, storage and communication	6.44	3.07	4.65
Other services	-2.29	2.30	0.01
All	0.75	2.50	1.08

Source: Census of India, 1991 and 2001.

The NSSO data also provides almost similar features of sectoral growth of employment during the 1990s, barring an exceptionally higher annual rate of decline in agriculture sector (-3.1 per cent). But unlike the earlier period, i.e., 1993-94 to 1999-2000, employment in agricultural sector grew at 3.5 per cent per annum during the later period, 1999-2000 to 2004-05. The growth of employment in trade and transport has been impressive-- about 10 per cent and 8.4 per cent, respectively during this period. Manufacturing also registered a moderate growth of 2 per cent in its employment during the period 1999-2000 to 2004-05 (Table 7b).

Table 7b
Sectoral Growth in Employment in Uttaranchal

Industry	Compound annual growth rate		% distribution of additional employment generated during 1999-00 to 2004-05
	93-94 to 99-00	99-00 to 20004-5	
Agriculture and allied activities	-3.12	3.47	64.68
Mining & quarrying	-		0.00
Manufacturing	17.01	1.98	3.06
Electricity, gas & water supply	34.26	-12.92	-2.73
Construction	11.11	-0.12	-0.27
Trade, hotels & restaurants	15.7	10.32	22.23
Transport, storage & communication	11.78	8.44	6.65
Banking & insurance	15.25	-6.29	-2.45
Community and social services	2.11	3.12	8.51
All	-1.44	3.48	100.00

Source: Various Rounds of NSSO.

In brief, the impressive growth in employment (over 3.45 per cent) in Uttaranchal during the period 1999-2000 to 2004-05 has been largely confined to agricultural sector. This can be seen in Table 7b. Agricultural sector alone generated a highest 65 per cent of the total additional employment over the period. Trade, hotels and restaurants generated another highest 22.2 per cent of the additional employment. In all, the services sector generated 38 per cent of the additional employment; and manufacturing sector generated about 3 per cent additional employment in the state during the period, 1999-2000 to 2004-05 (Table 7b). In other words, the growth process of the state is not releasing its workforce from largely subsistence agriculture to non-agricultural sector. This pattern of sectoral growth in employment may have serious implications for growing sectoral inequalities in the earnings of the workers in the state (see Table 11).

2. Structure of Employment

According to the Population Census, more than 60 per cent of the workforce in Uttaranchal is employed in agriculture sector during the year 2001. Nearly one-fourth of the workforce is employed in tertiary sector. Manufacturing and construction employ the remaining 9.8 per cent and 5.2 per cent of the workforce. In rural areas, about three-fourths of workforce is employed in agricultural sector—largely self-employed cultivators. Another 13 per cent are working in tertiary sector—largely in community and other services. The share of manufacturing in employment is, thus, very small in the rural areas of the state (Table 8a).

Table 8a
Structure of Employment in Uttaranchal

Sector	1991			2001		
	<i>Rural</i>	<i>Urban</i>	<i>Total</i>	<i>Rural</i>	<i>Urban</i>	<i>Total</i>
Cultivator	69.59	4.65	58.14	62.28	2.19	50.10
Agriculture labour	10.00	4.55	9.04	9.79	2.39	8.29
Livestock, forestry, etc.	1.69	3.44	2.00	2.39	1.48	2.21
Mining and quarrying	0.16	0.18	0.17	0.69	0.37	0.63
Manufacturing HH	0.97	1.28	1.03	2.27	2.23	2.26
Manufacturing non- HH	2.31	14.67	4.49	5.28	16.74	7.61
Construction	1.77	7.05	2.70	4.29	8.77	5.20
Trade and commerce	2.47	19.66	5.50	3.84	21.68	7.45
Transport, storage and communication	1.05	6.43	2.00	1.83	6.80	2.83
Other services	9.98	38.09	14.94	7.35	37.35	13.43
All	100.00	100.00	100.00	100.00	100.00	100.00

Source: Census of India, 1991 and 2001.

The NSS 61st Round data (2004-05) on employment and unemployment also shows agriculture still a dominant sector of employment. It employed over 60 per cent of the state's workforce in 2004-05. While comparing with all-India, the share of agriculture in employment is relatively higher by 6.6 percentage points in Uttaranchal in 2004-05. Next to

agriculture is the services sector, which employed about one-fourth of the workforce in the state. The remaining 12.7 per cent workforce is employed in the secondary sector. Within the services sector, public administration and trade are the main sub-sectors each employing nearly one-tenth of the total workforce. The share of manufacturing in employment in the state is abysmally low at about 5.5 per cent. (Table 8b).

Table 8b
Structural Shifts in Employment in Uttaranchal

<i>Industry</i>	<i>1993-94</i>	<i>1999-00</i>	<i>2004-05</i>
Agriculture and allied activities	58.56	64.46	61.69
Mining & quarrying	0.25	0.00	0.00
Manufacturing	2.12	5.50	5.54
Electricity, water etc.	0.18	1.06	0.48
Construction	3.29	8.23	7.16
Trade, hotel and restaurant	2.83	6.75	10.06
Transport and Communication	1.26	2.43	3.33
Finance, insurance and business etc.	0.73	1.70	1.05
Public administration, education & community services	8.09	9.87	10.66
Total	100.00	100.00	100.00

Source: Various Rounds of NSSO.

In the case of rural areas in Uttaranchal, an overwhelmingly large majority (78.4 per cent) of workers (UPSS) are employed in agriculture and allied activities in 2004-05 and the remaining 21.6 per cent in rural non-farm activities (see Annexure Table A4). The share of rural non-farm employment is thus comparatively lower by about five percentage points in Uttaranchal than the national average (NSSO, 2006). Within the non-farm sector construction is a dominant activity in rural areas as it employed about 6.1 per cent of the rural workforce in the state during 2004-05. The next largest employer is 'other services' sector--mainly public services-- accounting for about 5 per cent share in rural employment. Trade also provides employment to 4.4 per cent of the rural workforce in the state (Annexure Table A4).

Gender-wise, about 37 per cent of rural male workforce is employed in the rural non-farm sector. On the other hand, more than 96 per cent of rural female workers are employed in the agricultural sector during the year 2004-05 (Annexure Table A4). Thus, rural non-farm employment is mainly the domain of males, with limited access to female workers.

The NSS data show a marginal decline in the share of agricultural employment during the period 1999-2000 to 2004-05. If we look into a longer period, i.e. 1993-94 to 2004-05, there has been a decline of over 12 percentage points in the share of agriculture (Table 8b). This pattern has been repeated in rural areas. This also shows the importance of agriculture acting as a cushion for absorbing the access supply of labour by the households. Self-employment is still a predominant mode of employment. As stated earlier, the structural shift has been mainly observed in the case of male workers in the state.

Yet another important feature of structural shift in employment is a steady increase in the share of trade, hotels and restaurants in employment in the state over the past 10 years (Table 8b). The share of this sector in rural employment more than doubled between 1999-00 and 2004-05 (Annexure Table A4). This also significantly changed the relative share of rural areas in total employment in trade from merely 8.6 per cent in 1999-00 to as high as 59 per cent in 2004-05. The credit for this increase can partly be attributed to the tourism policy of the state.

The structure of employment significantly varies across hill and plain regions of the state, even if we see it for the rural areas. The percentage of workers in rural non-farm sector is comparatively much lower at 23.1 per cent in hill areas. The corresponding figure for plain regions is much higher at 38.6 per cent during the year 2001 (Table 9)

Table 9
Structure of Employment in Hills and Plain regions of Uttarakhand, 2001

Region		Farm			Non-farm		
		Person	Male	Female	Person	Male	Female
Hills	Total	69.33	49.29	90.91	30.67	50.71	9.09
	Rural	76.92	59.25	93.12	23.08	40.75	6.88
	Urban	3.59	1.65	16.18	96.41	98.35	83.82
Plains	Total	41.16	38.42	53.91	58.84	61.58	46.09
	Rural	61.37	59.61	67.93	38.63	40.39	32.07
	Urban	5.03	4.81	6.75	94.97	95.19	93.25

Source: Population Census of India, 2001.

In brief, the structure of employment in Uttarakhand, particularly in its rural areas (and that too in hill regions), is predominated by low yielding employment in agriculture. This is seen in the following section, which examines the pattern of per worker GSDP across nine major industrial categories.

V. SECTORAL PATTERN OF EARNINGS

GSDP per worker provides useful insights about the productivity of labour. Per worker real GSDP at 1993-94 constant prices in Uttarakhand was Rs. 28,976 in the year 2004-05. It increased at an accelerated pace over the two periods of time. There are huge disparities in the levels of per worker GSDP across various industry groups (Table 10). The lowest GSDP per worker is in agriculture at Rs. 11,164, which is almost 2.5 times lower than the average of the state. Construction is yet another sector with marginally higher per worker GSDP (Rs. 12950) than agriculture (Rs. 12950). If we exclude electricity, gas and water supply, and banking (these sectors have a significant contribution to the GSDP of the state), per worker GSDP is highest in manufacturing (Rs. 59981). This is closely followed by transport, storage and communication sector (Rs. 58841) during the year 2004-05.

Table 10
Relative Difference in per Worker GSDP (%)

Industry	1993-94	1999-00	2004-05
Agriculture and allied activities	100	100	100
Manufacturing	949	293	508
Electricity, water etc.	5,566	1,719	8,030
Construction	97	43	113
Trade, hotel and restaurant	384	195	188
Transport and communication	474	353	507
Finance, insurance and business etc.	2,155	1,550	3,196
Public administration, education & community services	235	301	448

Source: 1. CSO (2006); 2. NSSO, Various Rounds.

A look into growth rate in per worker GSDP brings out some interesting features. Growth in per worker GSDP turned to negative in the agriculture sector---a major employment-providing sector-- during the period 1999-2000 to 2004-05. This has happened due to relatively rapid growth in employment in agriculture during this period. This reflects the distress situation of workers who are forced to work in agriculture sector despite declining real income levels therein. On the other hand, per worker GSDP increased steadily in the services sector except trade. It increased at a fastest rate in construction and manufacturing sector during the period 1999-2000 to 2004-05 after an initial negative growth during the earlier period, i.e. 1993-94 to 1999-2000 (Table 11).

Table 11
Industry-wise Growth Rate of GSDP per Worker in Uttaranchal

Industry	Compound annual growth rate	
	1993-94 to 99-00	1999-00 to 2004-05
Agriculture & Allied	5.62	-1.61
Mining & Quarrying		
Manufacturing	-18.40	11.78
Electricity, Gas & Water Supply	-19.22	36.92
Construction	-8.20	20.56
Trade, Hotels & Restaurants	-12.54	0.06
Transport, Storage & Communication	-5.72	7.23
Banking & Insurance	-7.22	15.12
Community and Social Services	3.82	9.40
All	4.67	6.33

Source: Various Rounds of NSSO.

An important feature of growth in per worker GSDP in the state is that it tended to decline in absolute terms whenever there has been a faster growth in employment—a typical case of excess labour supply. This is seen in the case of agriculture and, to some extent, trade. This kind of pattern when juxtaposed with the inter-sectoral differentials in per worker

GSDP brings out the following features: First, there is a very small differential in the level of per worker GSDP in two sectors, namely, agriculture and construction (see Table 10). The difference in per worker GSDP between agriculture and trade is substantial, but it tended to decline over the period. Second, workers tend to switch over to other sectors in case of increase in income earnings till these get equalized—a typical process of equilibrium in the labour market. This is observed in the case of construction and trade. Third, the mobility of workers from low income to high income sectors such as manufacturing, transport and other services sectors is not free as they lack required skills, thus retaining higher premium for skilled jobs in such sectors.

The situation in the hill areas of the state is more serious where productivity in agriculture is very low (even less than half in case of major crops such wheat and rice) as compared to plain areas (Mamgain, 2004). Furthermore, the hills agriculture which largely depends on climatic conditions, is subject to large fluctuations and uncertainties in production. On the other side, a large majority of the workers (nearly 70 per cent) is employed in agriculture and allied activities in the rural areas of the hill region (Mamgain, et al., 2005). They work for a comparatively longer duration in harsh climatic conditions, which demand higher energy levels. This implies that per worker income in agriculture in the hill region is even half than that of their counterparts in plain regions. The magnitude of abysmally low levels of earnings in agriculture and animal husbandry sectors in the hill districts of the state can be seen in the following Table 12. For over half of the total persondays engaged in agriculture and animal husbandry, the average per personday earning is even less than the minimum wage level (Rs. 60) during the year 2004. This only indicates a very high incidence of underemployment among those engaged in these two sectors.

Table 12
Percentage Distribution of Total Persondays by Range of
per Personday Average Earnings in Hill districts of Uttaranchal

<i>Range of per personday earnings (Rs.)</i>	<i>Self-employed in agriculture</i>	<i>Self-employed in animal husbandary</i>	<i>Casual wage labour</i>	<i>Self-employed in non farm activites</i>
Upto 30	14.85	23.25	0.16	10.36
30-60	33.16	30.14	10.06	14.77
60-90	22.14	25.82	54.75	17.84
90-150	19.80	15.60	34.74	26.70
150+	10.05	5.18	0.29	30.33
All	100.00	100.00	100.00	100.00

Source: Mamgain et al. (2005).

In sum, it appears that a tremendous growth in income in Uttaranchal has yet to reach to hill districts of the state, which are predominantly agrarian with extremely low levels of productivity. This precarious situation needs to be reversed through appropriate policies and programmes with a special focus on the development needs of such regions.

VI. POLICY INITIATIVES

Towards achieving all-round development of the state, the Government of Uttaranchal has initiated several policy measures since its formation in November 2000. The first Industrial Policy of the state was prepared in 2001. Keeping in view the fast changing economic scenario, the state prepared its New Industrial Policy in June 2003. Under this policy, new industrial sheds are being developed in Hardwar and Pantnagar (Udham Singh Nagar). The New Industrial Policy provides incentives for setting up industries in the state. The state Industrial Development Corporation has received more than 800 proposals worth Rs. 7,000 crore. The thrust industries identified for Uttaranchal include floriculture, processing of medicinal plants and herbs, honey, horticulture and agro-based industries (such as sauces, ketchup, fruit juices, fruit pulp, jam, jellies, vegetable juices, pickles, preserved fruits and vegetables, processing of fresh fruits and vegetables including packing, processing, preservation and packing of mushrooms), food processing excluding those in the negative list, sugar and its by products, silk and silk products, wool and wool products, woollen fibers, sports goods, paper and paper products, pharmaceutical products, information and communication technology industry, computer hardware, call centers, bottling of mineral water, eco-tourism, industrial gases, handicrafts and non-timber forest product based industries.

For harnessing the potential of tourism, the state has prepared its Tourism Policy under which the activities include developing state-of-the-art infrastructure, year round tourism, development of new tourist destinations, promotion of tourism oriented handicrafts industry and cuisine and human resource development. The Uttaranchal Master Plan for the development of tourism is being implemented with a package of Rs. 40 crore from Government of India.

Towards linking local population with tourism related activities as well as employment generation, the state government launched the Veer Chandra Singh Garhwali Paryatan Swarozgar Yojana. This is a credit-cum-subsidy scheme with a maximum loan of Rs. 10 lakh with a subsidy to the extent of 20 per cent of the project cost subject to a maximum of Rs. 2 lakh. Assistance is given for fast food centres, setting up of retail outlets for local handicrafts, transport, motels, hotels, equipment for adventure sports, setting up of tourist information centres with PCs, restaurants, etc. Tourism, thus, is being seen as a source of employment generation both directly as well as indirectly.

The State Government on its own has set up many development boards like the Organic Board, Jatropa Board, Board for Development of Aromatic and Medicinal Plants, the Organic Farming Board, Tea Board, Bamboo Fibre Board, Technology Mission for Integrated Development of Horticulture, Livestock Board, Sericulture and the Watershed Board. The State Government is also setting up a biotechnology park in Pantnagar and a floriculture park in Dhakrani. An Integrated Horticulture Development Programme has been launched in the hill districts of Almora, Pauri Garhwal and Chamoli. This has been done keeping in view the fact that the state enjoys a 'niche' in such commodities.

The state has declared itself as an 'organic state' and is in the process of arranging the required infrastructure including certification facilities and orientation of farmers. A plan has been made to implement the Decentralised Watershed Development Project in 1,400 villages in all the 10 hill districts over a period of eight years with financial assistance of Rs. 500 crore from the World Bank.

The state government also has plans of opening Krishi Vigyan Kendras in all the districts. Budgetary allocations for the development of horticulture and agriculture have been significantly pegged up over the years. The government of Uttarakhand has also decided to promote sheep rearing activities in the state keeping in view the vast potential that is available. The Central Sheep and Wool Development Board has sanctioned an amount of Rs. 6.50 crore for this purpose.

The Government of Uttarakhand has also introduced the Accident Insurance Policy for farmers in the state. For promoting agricultural trade the Government of India has approved and notified four crop specific Agro Exports Zones in seven districts of the state.

For promoting Information Technology – one of the major drivers identified for development by the state government--an Information Technology Academy has been set up with the help from Microsoft. Special emphasis is being given to computer literacy and e-governance. All high schools in the state have been equipped with computers.

For improving the livelihoods of vulnerable groups in a sustainable manner, International Fund for Agriculture Development (IFAD) has launched a major project in Almora, Bageshwar, Chamoli, Tehri Garhwal and Uttarkashi districts. NABARD has been providing assistance under its District Rural Industries Project scheme (DRIP) with the objective of creating sustainable employment opportunities in rural areas through rural industrialization in the districts of Tehri Garhwal and Nainital districts. Since March 2002 and April 2003, respectively. Now it has moved to Almora district also. Till 2003, 161 units had been set up under DRIP in Tehri Garhwal which provided employment to 860 persons. In Nainital district, 19 units have been established which employed 3,597 persons till September 2003.

VII. THE WAY AHEAD

1. Improving Productivity of Farm Sector

The foremost challenge is to improve the productivity of farm sector, particularly in the hill districts of Uttarakhand. This would require a diversification from the existing subsistence cereal-based production to market oriented agriculture. This has a tremendous potential for not only improving farm productivity but also for creating more employment opportunities in the agriculture sector (Badhani, 1998; Mamgain, 2004). At present the area under market oriented crops is very low—about 15 per cent during the year 2001. However, it has been slowly increasing over 2 per cent point per annum (Mamgain et al., 2005). From the long-term perspective this shift from low value cereal crops to high value added crops such as horticultural crops seems to be most obvious and strategic option in the region. There is a need to initiate such change on a wider scale in the hill districts of the state. In fact, the Government of Uttarakhand has identified horticulture development one of the major drivers of economic growth of the state (GoUA, 2003).

The uncertainties associated with the switch over to market oriented farming need to be carefully addressed through creating farmers' welfare funds with a substantive contribution from State Government, crop insurance and improved access to public distribution system for meeting the cereal needs of the farmers.

Agricultural extension services have to play a major role in the transformation from subsistence to enterprise based agriculture. The present agricultural extension services are very weak, particularly in the hill districts in terms of their approach and outreach to farmers living in remote areas. The technical skills of extension workers are insufficient to meet the new skill training needs for managing enterprise based farming simply due to lack of regular training for them, which could otherwise have enabled them to update themselves in new techniques and approaches of market oriented farming. There is, thus, a need to strengthen the existing agricultural extension services in the state. This will be of utmost importance to carry farm technology from lab to land. The 11th Plan of the state should make special provisions for the development of agricultural sector in Uttaranchal.

2. Developing Micro and Small Enterprises

There is an enormous scope for setting up of enterprises based on products, which the region has niche (Papola, 2000; Mamgain et al., 2005). Such industries include agro-processing, woolen handlooms, handicrafts, sericulture, cocoon production, minor forest products, medicinal plants, tourism, IT enabled services, etc. Though the state government's focus is on promoting such micro and small enterprises particularly in its hill districts, any noticeable success is yet to be achieved. On the other hand, the state has achieved a remarkable success in attracting huge amount of private investment. But, this investment is limited to only three plain districts of the state.

There is a growing disenchantment among population living hill region about this pattern of investment in the state. This regional imbalance in the development of industrial activity needs to be corrected by promoting small and micro enterprises in the hill districts. These activities can be developed in clusters.

Removing Regional Imbalances in Credit Flows to Priority Sector

Credit flows to the priority sectors have increased significantly from Rs. 7,956 million in 2000-01 to Rs. 12,863 million in 2003-04 in Uttaranchal. A highest 43.1 per cent of total credit goes to agriculture sector. The relative share of credit in three priority sectors remained almost the same during 2000-01 to 2003-04 (Table 13). However, the distribution of credit flows is highly inequitable across the districts in the state. The highest share (45 per cent) of total credit flow alone goes to Udham Singh Nagar district. The share of 10 hill districts in priority sector credit flow is very low at 33 per cent. If we exclude Nainital district, the share remains as low as 23 per cent for nine hill districts (Annexure Table A5). The pattern of credit flow across the districts in Uttaranchal clearly indicates the bias in credit flow in favour of developed districts like Udham Singh Nagar, Hardwar and Dehradun. Similar biasness prevails in the location of industrial units across plains and hill regions (Mamgain, 2004). In fact, there is a need to reverse this pattern by ensuring more credit to the backward districts of the state.

Table 13
Sector-wise Flow of Ground Level Credit (GLC) (Rs. lakh)

Sector	2000-01	2001-02	2002-03	2003-04
Agriculture sector	35427.58 (44.53)	38778.87 (43.42)	46144.26 (42.35)	55471.36 (43.12)
Non-farm sector	18154.71 (22.82)	21624.17 (24.21)	23051.88 (21.15)	31800.26 (24.7)
Other priority sector	25973.49 (32.65)	28912.70 (32.37)	39770.91 (36.50)	41359.60 (32.0)
Total	7955.78 (100.00)	89315.74 (100.00)	108967.05 (100.00)	128631.22 (100.00)

Note: Figures in brackets are percentages.

Source: NABARD (2005).

3. Developing Tourism and Other Amenities

Tourism is identified one of the key drivers for economic development in Uttaranchal. The State Government has allocated Rs. 1919 million outlay for the development of tourism in the state. The success of the Tourism Policy of the state is partly visible in the rapid growth in employment in trade and transport sectors. Given its unique landscape, location advantage and the current focus on the development of tourism in Uttaranchal, tourism and related activities are expected to rise on a rapid pace. At present this sector is stagnating in terms of rise in per worker real earnings. This is largely attributed to poor infrastructure facilities including electricity, water, housing and transport; and also to poor quality of services in the whole range of activities such as cooking, hygiene, service, etc. This needs to be corrected by improving the existing infrastructure facilities. Equally important is to improve skill levels of small and micro entrepreneurs engaged in tourism and related activities through their training, particularly in the field of cookery, hygiene, servicing and customer care at competitive price. Though training of such entrepreneurs is envisaged in the Tourism Policy of the state, it has yet to catch a speed.

4. Enhancing Technical Skills

The New Industrial Policy of Uttaranchal (GoUA, 2003) has been successful in attracting private investment in the state. Besides, a huge amount of public investment is being made in developing agriculture and infrastructure in the state. The increasing investment in the state has also created demand for a large number of trained persons. However, demand for such trained persons is largely being met by in-migrant workers from other regions, particularly in the hill districts of the state (Mamgain et al., 2005).

Though the state is endowed with relatively higher proportion of literate as well as better educated population, the proportion of technically trained persons (diploma and certificate holders) in the population of Uttaranchal is relatively small as compared to all-India average. This can be seen in the following Table 14. The percentage of technical diploma holders in the state is 0.24 as compared to all-India average of 0.36. This difference is seen both for

men and women but is more acute in case of the later. On the other hand, the proportion of technical degree holders is comparatively much higher in the state and that only in the case of males. In sum, Uttaranchal has comparatively much higher percentage of educated population (high school and above) both among males and females as well as in rural and urban areas as compared to the all-India average (Table 14). This human capital stock can easily be trained to meet the labour market requirements both within as well as outside the state. Therefore, the real challenge is to increase the number of technically trained persons in the labour force of the state in a phased manner, particularly at diploma and certificate levels. The recent study by Mamgain et al. (2005) clearly shows how the lack of technical skills has severely eroded the competitive advantage of out-migrants from Uttaranchal at their destination.

Table 14
Educational Level of Population in Uttaranchal and India, 2001

	Uttaranchal			India		
	Person	Male	Female	Person	Male	Female
Total						
Literacy level						
Literate	60.14	69.55	50.36	54.51	63.24	45.15
Literate but below matric/secondary	40.17	44.74	35.42	37.12	41.46	32.47
Matric/secondary but below graduate	13.00	16.37	9.51	11.42	14.29	8.33
Technical diploma or certificate not equal to degree	0.24	0.39	0.09	0.36	0.55	0.15
Graduate and above other than technical degree	4.90	5.88	3.89	3.17	4.11	2.16
Technical degree or diploma equal to degree or post-graduate degree	0.52	0.75	0.28	0.49	0.68	0.28
Rural						
Literate	56.50	67.24	45.84	48.74	58.58	38.33
Literate but below matric/secondary	41.76	47.74	35.82	36.52	42.19	30.53
Matric/secondary but below graduate	10.47	13.87	7.09	8.39	11.36	5.24
Technical diploma or certificate not equal to degree	0.15	0.26	0.05	0.22	0.33	0.09
Graduate and above other than technical degree	2.60	3.57	1.63	1.44	2.20	0.65
Technical degree or diploma equal to degree or post-graduate degree	0.21	0.35	0.07	0.19	0.30	0.09

Source: Population Census of India, 2001.

The existing technical education system, particularly at ITI and polytechnic level remains underutilized. This phenomenon aggravated in 1990s (Mamgain, 2004). It is important to mention here that mere expansion of technical education institutions does not ensure enrolment of residents of that region/state. It has been observed that nearly half the students enrolled for diploma level technical education in Uttaranchal were from other states and at the degree level this proportion is even larger (Nautiyal and Nauriyal, 2001). This again underscores the need to promote increased participation of students in technical education in the state.

The educational development in Uttaranchal has created an army of mostly unskilled labour force who are unwilling to work on their marginal farms and are unable to find suitable wage

employment opportunities within the state, and thus seek to earn their livelihoods through migration (Mamgain, 2003). Also, the quality of education being provided in the schools and colleges, particularly in technical education institutions in the state, lacks mountain specificity, which could have otherwise helped students to stay back (Papola, 1996).

Technology has a vital role to play in transforming the subsistence hills economy of Uttarakhand, and therefore, human resource development is inevitably of special significance in the state. Thus, not only do we need to develop technical and vocational education and training with mountain-specific orientation but also the skills required in a market oriented economy, entrepreneurship, management of enterprises, and marketing being among them (Papola, 1996). It must, however, be recognised that work-related education and training and their effectiveness in increasing productivity and raising incomes are only feasible and fruitful if there is a reasonably sound foundation of basic education and health services (Papola, 1996).

Thus, the daunting challenge before the planners of Uttarakhand essentially lies in developing an education system that leads to successful transition from school to work. This in turn will entail restructuring of the existing education programmes as well as institutions through (a) creating facilities of technical vocational education along with strengthening the existing ones with greater emphasis on quality education particularly at the level of lower technical education; (b) developing sound analytical, cognitive and behavioral skills along with the ability to communicate ideas to work cooperatively; (c) restructuring of courses and programmes by incorporating more mountain specificity as well as more number of service trades; (d) ensuring participation of a larger proportion of students in vocational and technical courses, particularly of women who form the backbone of mountain economy in Uttarakhand; and (e) providing flexibility to technical training institution in designing market oriented courses; and (f) establishing close links between educational and training institutions and enterprises.

VII. SUMMING UP

The pattern of growth in employment has been disappointing in Uttarakhand as it appears to be largely distress-driven, particularly in the hill districts of the state. Agriculture still remains a last resort by absorbing the major share of additions in the workforce. Though the structure of employment has been shifting in favour of non-agricultural sector over the years, this has been mainly in the case of male workforce. There has been hardly any shift in the structure of female employment in the state, particularly in its rural areas. They continue to remain the back bone of agriculture in the state, particularly in the hill region.

The double-digit growth in GSDP in the state since its inception could hardly reach to agriculture and more so to rural areas in the hill districts. In fact per worker real GSDP in agriculture sector—a major employer of the workforce—declined in absolute terms during the period 1999-2000 to 2004-05. Similar pattern is also observed in the case of ‘trade, hotel and restaurants’ sector. Other sectors witnessed a faster growth in GSDP per worker. In brief, the income inequalities between agriculture and non-agricultural sector have further

widened over the years. This only shows a distress situation prevailing in the rural areas of the state.

The state government has initiated a number of policy measures since its formation to promote the overall development of Uttarakhand including generation of productive employment opportunities. Since the state is nearly six years old and the various policies initiated have yet to be implemented on a full scale, it is too early to comment on the impact of such policies on employment generation. However, first hand field experience in rural areas and discussions with various line departments of the state government indicate that there is a big gap between the productive employment needs of rural households and the efforts that are being made by the government towards this end. The bias in credit flow for priority sectors is yet another example where the banking sector prefers to finance only developed districts and is hesitant to take risks in the least developed regions. In this process, the gap in development is bound to increase. The New Industrial Policy of the state, therefore, should ensure balanced industrial growth by attracting more capital to backward districts, particularly in the hill areas.

There are several constraints towards generating remunerative employment opportunities within and outside the farm sector. These need to be addressed by policy planners. The biggest challenge is to improve the productivity of agriculture in hill region of the state through its diversification from the existing subsistence cereal based production to market oriented enterprise. The efforts made so far in this direction need to be geared up on a larger scale along with developing strong market linkages. Yet another major challenge is to educate and train people of the state, particularly females in the hill districts of Uttarakhand to switch over to the commercial mode of farming. Since Uttarakhand is endowed with relatively a higher human capital stock, it will be easier to train them in market oriented skills on a larger scale. This will improve their employability both within and outside the state. More importantly, there is a need to develop entrepreneurship among the youth in Uttarakhand, which they generally lack. The basic tendency is to search for wage employment, even at abysmally low wages. This needs to be corrected through developing area-based entrepreneurship development training programmes.

In sum, the process of higher growth in Uttarakhand must percolate to its hill areas which have yet to witness a remarkable improvement in employment and income opportunities for their population. The development dreams of people of Uttarakhand as they visualized at the time of demand for new state, particularly those residing in hill districts must be addressed on a priority basis in the 11th Plan of the state.

ANNEXURE

Table A1
Age-wise Work Participation Rate during 1991 and 2001

Age group	Rural			Urban			Total		
	Person	Male	Female	Person	Male	Female	Person	Male	Female
1991									
5-14	6.19	5.02	7.42	1.63	2.57	0.57	5.20	4.47	5.98
15-19	66.08	73.32	58.84	43.30	68.82	9.56	60.39	72.08	47.85
20-29	74.20	85.80	63.44	44.82	73.69	9.17	66.41	82.25	50.55
30-59	80.58	95.72	65.67	61.39	95.28	14.63	75.77	95.60	54.55
60+	49.05	65.81	30.25	29.69	49.25	5.65	45.77	62.91	26.26
Total	42.82	48.48	37.03	30.38	49.68	6.55	39.94	48.78	30.49
2001									
5-14	3.81	3.49	4.15	1.37	1.98	0.68	3.24	3.13	3.36
15-19	28.71	28.92	28.50	12.96	21.24	2.58	24.58	26.77	22.19
20-29	64.66	75.47	55.08	38.25	62.56	8.78	56.90	71.25	42.94
30-59	78.35	94.90	62.78	58.42	93.58	16.16	72.64	94.49	50.59
60+	47.73	62.69	33.10	25.53	43.39	6.25	43.27	58.66	27.93
Total	39.60	45.69	33.55	29.15	47.36	7.59	36.92	46.14	27.33

Source: Population Census, 1991 & 2001.

Table A2
Work Participation Rate (WPR) of Uttarakhand and India

Area/Year	Uttarakhand			India		
	Person	Male	Female	Person	Male	Female
Rural						
1983	52.36	51.56	53.17	44.38	54.43	33.94
1987-88	51.16	51.8	50.57	43.39	53.89	32.31
1993-94	52.72	50.73	54.62	44.36	55.29	32.78
1999-00	42.61	43.68	41.64	41.72	53.06	29.88
2004-05	47.4	52.3	42.7	43.9	54.6	32.7
Urban						
1983	32.08	51.81	6.66	34.02	51.14	15.1
1987-88	26.91	45.02	8.07	33.74	50.65	15.22
1993-94	31.07	44.62	14.45	36.34	54.3	16.5
1999-00	27.75	43.31	9.85	35.35	54.2	14.75
2004-05	33.2	51.9	12.7	36.5	54.9	16.6

Source: Various Rounds of NSSO.

Table A3
Employment Growth in Uttaranchal and All-India during 1983 to 2004-05

Period/ Area	Uttaranchal			All-India		
	Person	Male	Female	Person	Male	Female
<i>Rural</i>						
1983-88	0.68	1.19	0.17	0.71	1.01	0.20
1988-94	2.42	1.54	3.31	2.44	2.53	2.27
1994-00	-1.96	-1.10	-2.81	0.67	0.94	0.16
2000-04	3.01	4.44	1.42	2.87	2.39	3.75
1983-04	0.28	0.40	0.15	1.01	1.18	0.71
<i>Urban</i>						
1983-88	0.25	-0.43	6.08	1.85	1.76	2.19
1988-94	5.31	3.54	14.84	4.73	4.65	5.01
1994-00	1.19	2.22	-3.22	2.34	2.71	0.91
2000-04	5.50	5.20	6.98	3.75	3.28	5.57
1983-04	1.77	1.42	4.35	2.09	2.14	1.87

Source: Various Rounds of NSSO.

Annexure Table 4
Structural Shifts in Employment in Uttaranchal

Industry	1993-94			1999-00			2004-05		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<i>Rural</i>									
Agriculture and allied activities	69.92	97.67	84.58	61.63	96.14	79.29	63.30	96.00	78.40
Manufacturing	0.57	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00
Electricity, water etc.	2.72	0.46	1.52	7.97	0.00	3.89	5.20	1.30	3.40
Construction	0.21	0.00	0.10	0.51	0.00	0.25	0.40	0.00	0.20
Trade, hotel and restaurant	9.27	0.27	4.51	13.13	2.33	7.61	10.90	0.50	6.10
Transport and communication	2.99	0.21	1.52	4.21	0.00	2.06	8.10	0.00	4.40
Finance, insurance and business etc.	1.60	0.00	0.75	4.11	0.00	2.01	3.70	0.10	2.00
Public administration, education & community services	0.54	0.24	0.38	1.09	0.00	0.53	1.00	0.00	0.50
Agriculture and allied activities	12.20	1.16	6.36	7.34	1.52	4.36	7.40	2.00	5.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0
<i>Total</i>									
Agriculture and allied activities	45.84	71.15	58.56	44.41	89.55	64.46	46.87	85.61	61.69
Manufacturing	0.50	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
Electricity, water etc.	3.58	0.68	2.12	8.41	1.86	5.50	7.31	2.69	5.54
Construction	0.36	0.00	0.18	1.91	0.00	1.06	0.72	0.03	0.48
Trade, hotel and restaurant	6.42	0.19	3.29	13.08	2.16	8.23	11.16	1.01	7.16
Transport and communication	5.35	0.34	2.83	11.76	0.48	6.75	14.92	1.18	10.06
Finance, insurance and business etc.	2.53	0.00	1.26	4.37	0.00	2.43	5.19	0.18	3.33
Public administration, education & community services	1.29	0.17	0.73	3.00	0.07	1.70	1.64	0.17	1.05
Agriculture and allied activities	13.93	2.29	8.09	13.06	5.87	9.87	12.14	9.04	10.66
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: NSSO, Various Rounds on Employment and Unemployment.

Table A5
District-wise Percentage Share of GLC to Priority Sector (Agriculture+ Non-farm)

District	2000-01	2001-02	2002-03	2003-04
Almora	3.30	4.39	3.60	3.23
Bageshwar	1.15	1.41	1.15	1.12
Chamoli	1.74	1.76	1.92	2.04
Champawat	0.96	1.31	1.13	1.37
Nainital	9.34	8.56	9.72	10.83
Pauri Garhwal	3.55	3.85	3.83	4.54
Pithoragarh	2.51	2.78	2.55	2.24
Rudraprayag	0.85	0.87	0.94	1.03
Tehri Garhwal	3.76	3.24	2.95	4.66
Uttarkashi	2.75	2.57	2.21	2.00
Sub-total Hills	29.91	30.74	30.00	33.06
Dehradun	10.05	11.56	13.63	10.33
Hardwar	14.97	11.92	13.47	12.10
Udham Singh Nagar	45.07	45.79	42.90	44.51
Sub-total Plains	70.09	69.26	70.00	66.94
Total	100.00	100.00	100.00	100.00
Total (Rs. Lakh)	79556	89316	108967	125141

Source: NABARD (2005).

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