

Chapter Three

Characteristics and Role of Urban Settlements in the Indian Himalayas

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INTRODUCTION

The role of service centres and market and small towns is well recognised in promoting decentralised and integrated development in peripheral areas. This recognition, in an economic sense, is based on both the supply (providing facilities and functions to the periphery) and demand functions (hinterland demand for exchanging rural surplus, agro-processing, and micro-enterprises) of these settlements. The role of market centres is also endorsed in various studies by emphasising the service functions, diffusion of ideas and technology as well as economic and employment functions to articulate the space economy and transform the rural sector.

The planned networking of market towns/service centres has the potential to diversify the rural economy as well as provide sustainable backward and forward linkages for overall development in the mountains. In the standard theory of spatial economic development, the role of small market towns, working as central places at various levels in the overall network of integrated area planning, has been advocated for balanced regional development (Papola 1996; Sharma and Khanal 1996). The state may intervene through infrastructural support and specific programmes in targeted settlements. With a view to mountain specificities, particularly the constraints (inaccessibility, fragility and marginality) to and opportunities (diversity, niche, and human adaptation mechanisms) for development, market and small towns appear appropriate for self-sustaining and broad-based economic growth.

This chapter seeks (a) to analyse the pattern of urban settlements in the Indian Himalayas and the roles played by these centres; (b) to investigate the occupational structure of urban settlements for understanding the backward–forward linkages and the

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generative-parasitic nature of urban development; (c) to review the policies and programmes related to the development of small towns and urban centres; and (d) identify research gaps and policy options with respect to the development of small towns.

METHODOLOGY

Since the census is the only source of comparable secondary data on urban centres in India, it was used for the present study. The 1991 census (GOI 1993a) data have been tabulated according to state, district, and 'urban centre' and analysed to review the existing status of market and small towns. Data for more than 322 urban centres spread over 90 districts in 12 states of the Indian Himalayas have been analysed.

There is wide variation found in the definition of market and small towns. The Indian census gives emphasis to statutory status, size of population, and non-agricultural occupation for identifying an urban centre. In some primary data-based studies, size of population and functional complexities are taken as the guiding principles. In other studies, more weight is given to functional complexities rather than population size (Sharma and Khanal 1996).

This study uses the definition of urban settlement adopted in India and analyses the pattern of small and market towns. Six size classes have been identified in the census since 1981: Class I has more than 100,000 population, Class II has 50,000–100,000, Class III has 20,000–49,999, Class IV has 10,000–19,999, and Class V has less than 10,000 (Government of India 1994).

In the 1991 census, urban centres include all 'statutory towns', that is places with a municipality, municipal corporation, and cantonment board or notified town area committee. All other places can be termed 'census towns' that satisfy three conditions: minimum population of 5,000, 75% of male workers engaged in non-agricultural pursuits, and density of population is a minimum of 400 km² (Government of India 1994). Within each urban settlement, the working population is divided into nine broad, occupational categories. The concentration of workers in one or two occupational categories can indicate the diversification or otherwise of the regional economic structure and the interdependence of core-periphery areas.

The role of the urban centre or market town is analysed on the basis of the occupational structure. It is assumed that a higher concentration of workers in industrial activities, trade, and commerce can be taken as an important indicator of diversification of regional economy around the urban node and could indicate the economic interdependence between the urban node and rural hinterland. In such situations, the urban centre would be playing a generative role and diffusing spread effects to the hinterland. Both formal and informal sectors in the urban settlements are covered while analysing the occupational structure. The informal sector, such as household-manufacturing activities, has been taken as vital for providing employment for excess rural labour. This sector can also be seen as an important link to rural areas in terms of providing support to the population in the hinterland (Todaro 1998). A high proportion of workers engaged in other services (such as government jobs) may explain the role of government-run departments and development administration in supporting urban workers. The other services category may indicate the inefficient and under-used capacities of the functional region.

The occupational structure seen in the 1991 census has been tabulated and analysed. The results should be viewed with caution as no primary data were gathered on people's movement (choices of market places) and the interdependence of the hinterland population on urban nodes (small/market towns).

The census 1991 data are taken as reliable and adequate; and they are largely used by development functionaries for implementing extension programmes in rural and urban areas. All the Himalayan states, except Jammu and Kashmir, were covered under the secondary data collection exercise. Because the 1991 census data on Jammu and Kashmir are not available the 1981 census data were taken and extrapolated to yield estimates for 1991.

URBAN PROFILE IN THE INDIAN HIMALAYAS

The Indian Himalayas are spread over 80 districts of 12 states covering an area of 534,000 sq.km and a population of 40 million (Table 10). The Himalayan region can be sub-divided further into the north-western part covering Jammu and Kashmir, Himachal Pradesh and Uttar Pradesh Himalayas (Uttarakhand) and the north-eastern part covering the remaining states. The north-western part covers almost half of the population

Table 10: Distribution of area, total population, urban population and districts in the Indian Himalayas

State	Area ('000 km ²)	No. of districts	Total population 1991	Urban population 1991	Decadal growth rate of population 1981-91 (%)
Arunachal Pradesh	83.59	11	864,558	110682 (12.80)	36.87
Assam (2 districts)	15.21	2	813,524	104952 (12.90)	5.33
Himachal Pradesh	55.67	12	5,170,877	449196 (8.69)	20.79
Jammu and Kashmir	222.24	14	7,718,700	1839400 (23.83)	28.93
Manipur	22.36	8	1,837,149	505645 (27.52)	29.28
Meghalaya	22.40	5	1,774,778	330047 (18.60)	32.86
Mizoram	21.09	3	689,756	317946 (46.09)	39.68
Nagaland	16.53	7	1,209,546	208223 (17.21)	20.00
Sikkim	7.30	4	406,457	37006 (9.10)	28.80
Tripura	10.49	3	2,757,205	421721 (15.30)	34.29
Uttar Pradesh Himalayas	51.12	8	5,926,146	1682002 (28.38)	22.58
West Bengal (1 district)	2.47	1	1,299,919	396060 (30.47)	24.00
Total Indian Himalayas	534.47	78	30,468,615	6402826 (21.01)	27.13

Note: The Government of India identifies a large proportion of Darjeeling district in West Bengal, eight districts in Uttar Pradesh, and two districts in Assam as the mountain (Himalayan) areas. Information on the number of districts is found in the 1991 census. Figures in brackets show the percentage of urban population. Many lowland urban settlements of some of the districts are also included in the Himalayan region.

Source: Government of India (1994; 1998)

(46.91%) and half of the area (53.30%). However, more than 61% of the total urban population resides there. Relatively higher levels of urbanisation are found in the north-west because many lowland or gateway towns are included in the administrative districts of the Uttar Pradesh Himalayas. The lowest urban populations are in Himachal Pradesh and Sikkim. The proportion of urban population in the districts of the Indian Himalayas is shown in Figure 12. However, in terms of overall development and per capita state domestic product, Himachal Pradesh is the most developed whereas Sikkim is the least developed state.

In terms of urban population, Mizoram and the Darjeeling district of West Bengal top the list. The high level of urbanisation in Mizoram is an artefact of the demarcation of urban areas on the basis of institutional tribal arrangements. The decadal population growth in the Indian Himalayas between 1981 and 1991 remained at 27.13%, which is higher than the national average (21.51%). However, within the Himalayan area, significant intra-regional differences are apparent in decadal population growth rate, population density, and the size of urban population.

One critical demographic characteristic in a large part of the Indian Himalayas is associated with a high rate of male migration to metropolitan and big cities, mainly located outside the mountain region. Substantial male migration is also reflected in the lower growth rate of the population, especially in the north-west. During the census operation, many male workers appear not to have been enumerated owing to their absence from villages. Interestingly, it is also reflected in the sex ratio. At the micro-level (village, block, and district), the abnormally low decadal population growth rate in some areas could be seen as a consequence of male migration. Within the Uttar Pradesh Himalayas, out of eight districts, the lowest population growth rate between 1981 and 1991 is seen in Garhwal (0.71% per year) and Almora (1.02% per year). This could be associated with high male migration (Pokhriyal 1996). The region, in turn, receives remittances and money order that improve purchasing power at the local level. Similarly, a low population growth rate can be found in North Cachar (0.51% per year) and Karbi Angalong (0.56% per year) districts in the mountain areas of Assam. Although sufficient theoretical literature is already available on this issue (Williamson 1988), the dynamics of urbanisation, migration, and positive economic linkages in the Indian Himalayas are yet to be empirically investigated.

DISTRIBUTION PATTERN OF URBAN CENTRES

The pattern of distribution of urban settlements in the Himalayan region for three different census years is shown in Table 11.

During 1971-81 and 1981-91, there was a 42.10 and 32.2% increase in the number of urban centres, respectively. In 1991, there was a total of 322 urban settlements. An average urban settlement has a population of around 19,884. The spatial distribution of urban centres is shown in Figure 13. Three districts in Arunachal Pradesh, three districts in Manipur, and two districts in Himachal Pradesh are without urban settlements as per the census definition.

The average urban population in districts varies from 1,000 to 25,000. Districts with parts of the Terai or plains included have a higher urban population. The average population per urban centre in the hill districts is lower. Figure 14 presents information on the size of urban-centre population by district. The Terai-mountain contrast can also be found in the analysis of average hinterland population served by each urban centre (Figure 15). The higher hinterland population is naturally found in the hilly districts.

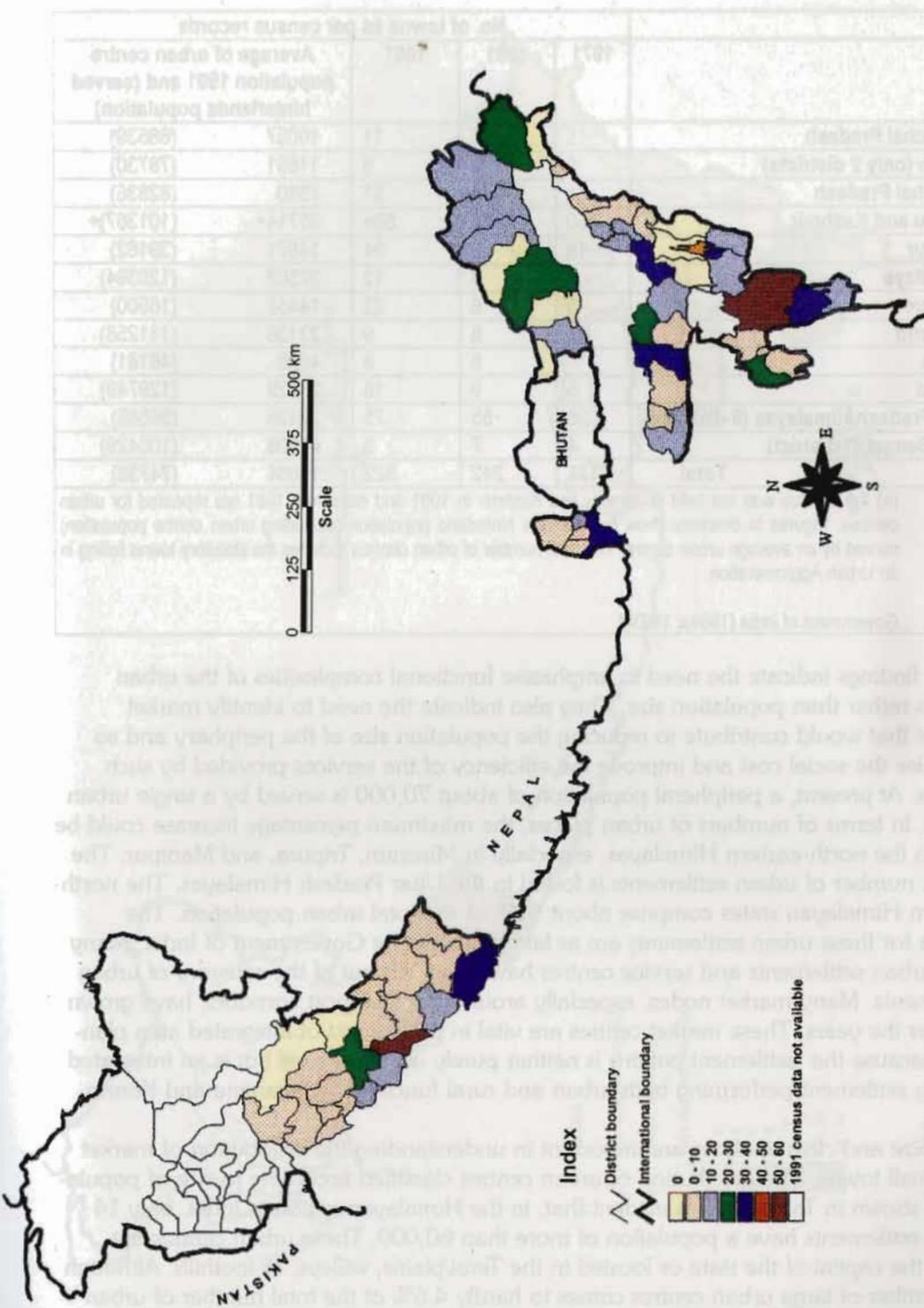


Figure 12: Distribution of urban population in the Indian Himalaya (percentage of total population, 1991 census)

Table 11: Distribution of urban settlements in the Himalayan region of India, 1971, 1981 and 1991

	No. of towns as per census records			
	1971	1981	1991	Average of urban centre population 1991 and (served hinterlands population)
Arunachal Pradesh	5	7	11	10057 (68539)
Assam (only 2 districts)	9	9	9	11661 (78730)
Himachal Pradesh	31	44	57	7880 (82836)
Jammu and Kashmir	50	58	58+	31714+ (101367)+
Manipur	19	26	34	14871 (39162)
Meghalaya	3	3	12	27503 (120394)
Mizoram	5	8	22	14452 (16900)
Nagaland	3	8	9	23136 (111258)
Sikkim	-	8	8	4626 (46181)
Tripura	5	9	18	23429 (129749)
Uttar Pradesh Himalayas (8 districts)	38	55	75	22426 (56588)
West Bengal (1 district)	4	7	9	44006 (100429)
Total	171	242	322	19884 (74738)
Note:	(+) the census was not held in Jammu and Kashmir in 1991 and data from 1981 are repeated for urban centres. Figures in brackets show the average hinterland population (excluding urban centre population) served by an average urban centre. The total number of urban centres includes the statutory towns falling in an Urban Agglomeration.			
Source:	Government of India (1984a; 1993a)			

These findings indicate the need to emphasise functional complexities of the urban centres rather than population size. They also indicate the need to identify market centres that would contribute to reducing the population size of the periphery and so minimise the social cost and improve the efficiency of the services provided by such centres. At present, a peripheral population of about 70,000 is served by a single urban centre. In terms of numbers of urban places, the maximum percentage increase could be seen in the north-eastern Himalayas, especially in Mizoram, Tripura, and Manipur. The largest number of urban settlements is found in the Uttar Pradesh Himalayas. The north-western Himalayan states comprise about 51% of the total urban population. The criteria for these urban settlements are as laid down by the Government of India. Many rural-urban settlements and service centres have been left out of the category of urban settlements. Many market nodes, especially around the transport corridors, have grown up over the years. These market centres are vital in the context of integrated area planning because the 'settlement pattern is neither purely urban or rural but is an integrated human settlement performing both urban and rural functions' (Nagamine and Konno 1990).

Size and class analyses are important in understanding the distribution of market and small towns. The distribution of urban centres classified according to size of population is shown in Table 12. It is evident that, in the Himalayan region in India, only 14 urban settlements have a population of more than 60,000. These urban centres are either the capital of the state or located in the Terai/plains, valleys, or foothills. Although the number of large urban centres comes to hardly 4.6% of the total number of urban centres, these 14 settlements nevertheless have more than 43% of the total urban population. Many of these centres function as 'growth poles' to the respective functional region or the planning district. In the absence of careful consideration of the backward-

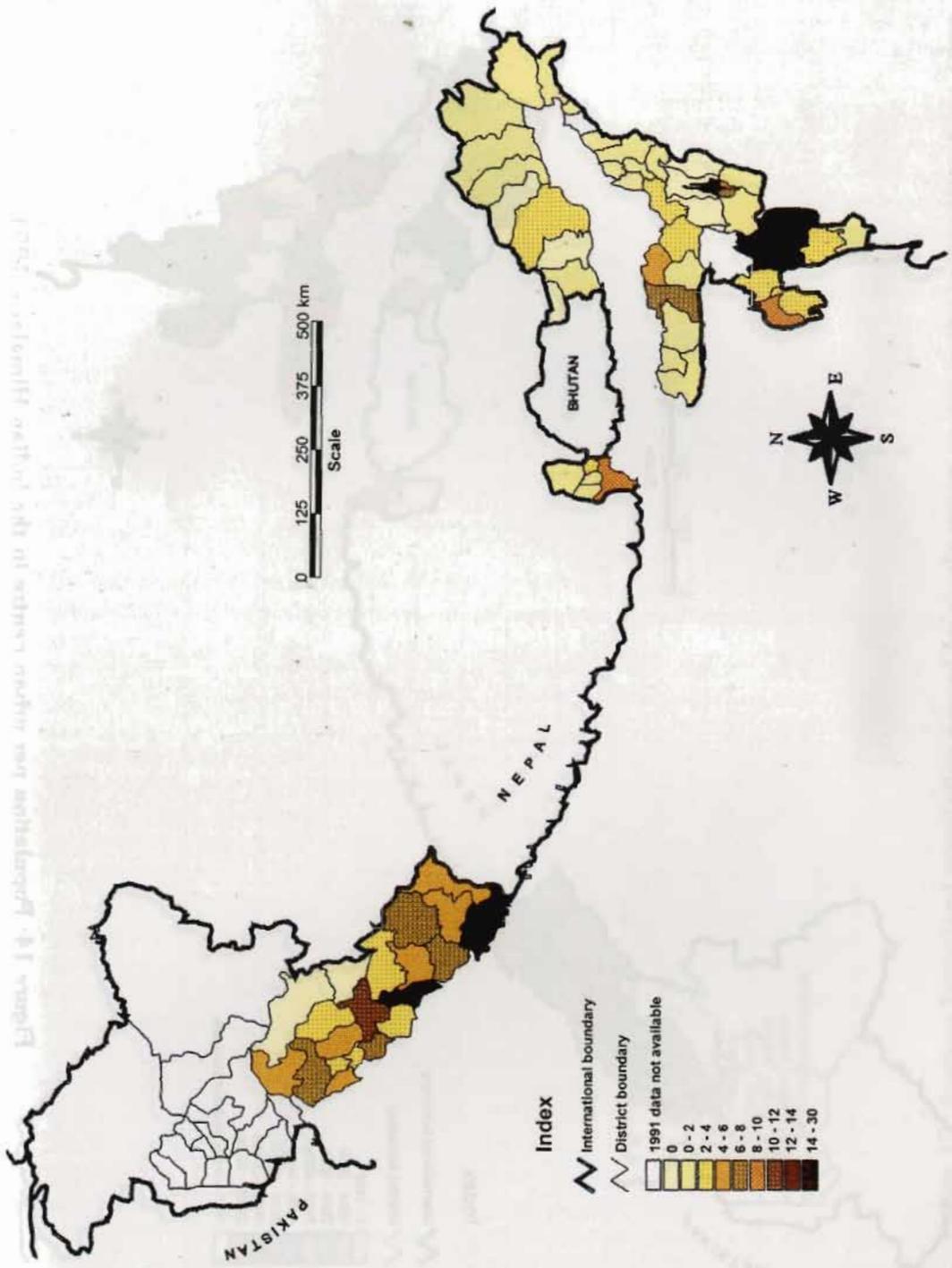


Figure 13: Number of recognised urban centres in the Indian Himalaya, 1991

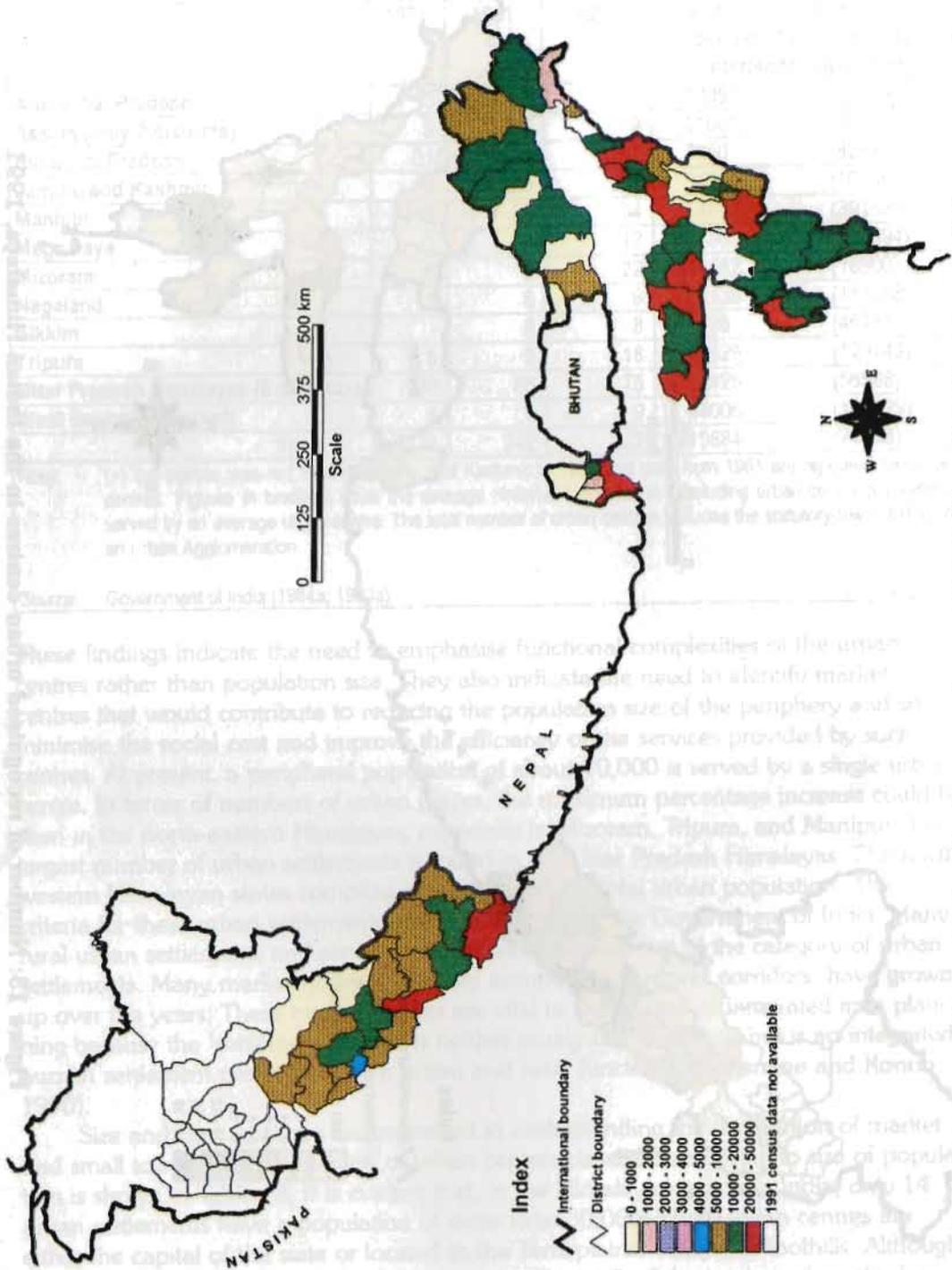


Figure 14: Population per urban centre in the Indian Himalaya, 1991

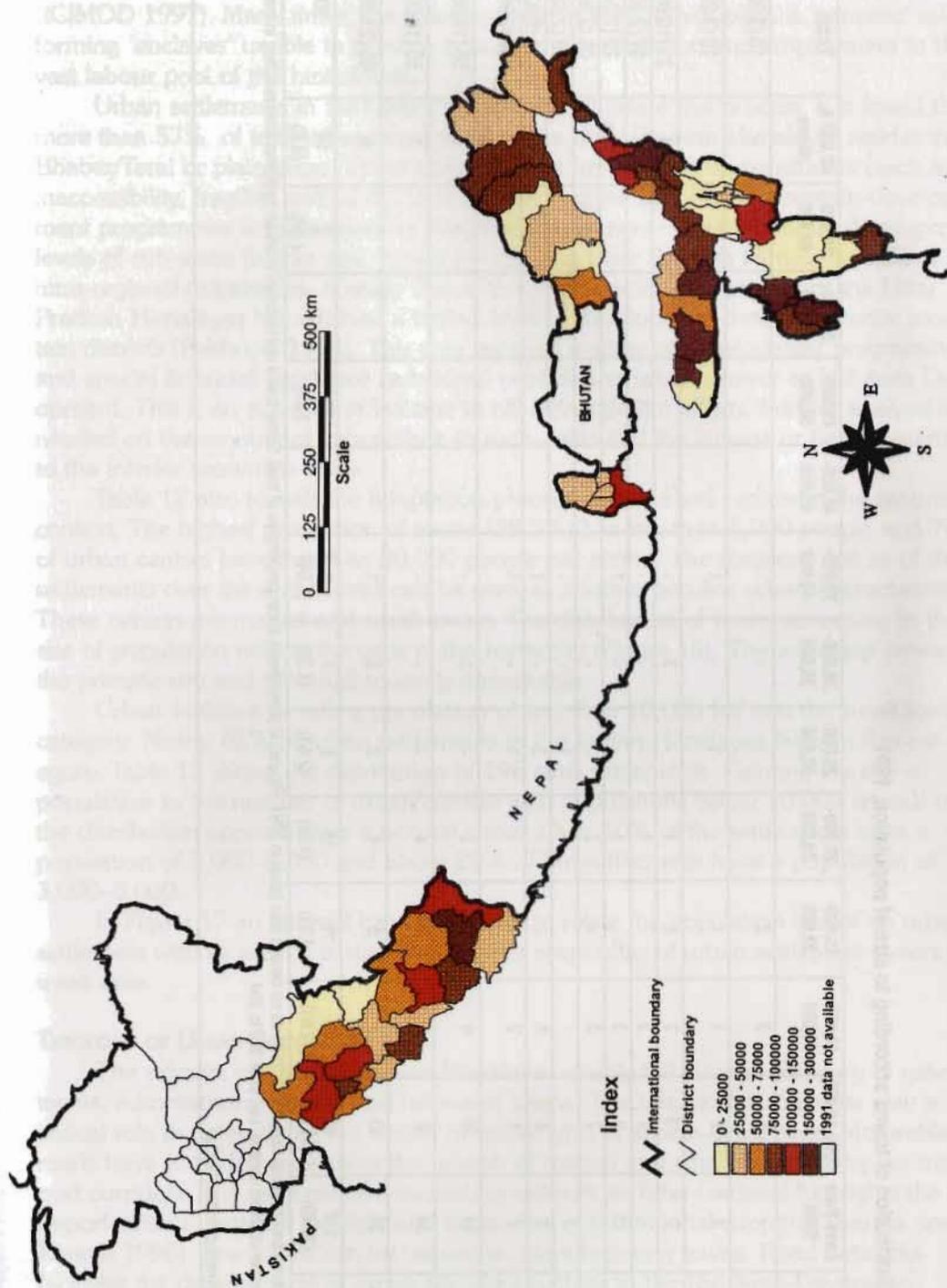


Figure 15: Average hinterland population served by single urban centre in the Indian Himalaya, 1991 (Excluding urban centre population)

Table 12: Distribution of towns according to size of population, 1991

	Less than 5000	5000-10,000	10,000-15,000	15,000-20,000	20,000-25,000	25,000-30,000	30,000-35,000	35,000-40,000	40,000-45,000	45,000-50,000	50,000-55,000	55,000-60,000	60,000 & above	Total
Himalayan state and district														
Arunachal Pradesh	-	5	3	2	-	-	-	-	-	-	-	-	-	10 (3.29)
Assam (two districts)	4	2	1	1	-	1	-	-	-	-	-	-	-	10 (3.29)
Manipur	7	18	2	2	1	-	2	-	-	-	-	-	1	33 (10.86)
Meghalaya	-	2	2	-	1	-	-	-	-	1	-	-	-	07 (2.30)
Mizoram	11	5	3	-	1	-	-	1	-	-	-	-	1	22 (7.24)
Nagaland	-	2	3	-	2	-	-	-	-	-	-	2	-	09 (2.96)
Sikkim	7	-	-	-	-	1	-	-	-	-	-	-	-	08 (2.63)
Tripura	2	4	5	2	-	3	-	1	-	-	-	-	1	18 (5.92)
West Bengal (one district)	2	1	2	-	-	1	-	1	-	-	-	-	2	09 (2.96)
Jammu and Kashmir	24	20	6	1	2	-	3	-	-	-	-	-	2	58 (19.08)
Himachal Pradesh	34	9	5	2	4	-	-	-	-	-	-	-	1	55 (18.09)
Uttar Pradesh	26	13	7	5	4	2	2	1	-	-	-	-	5	65 (21.38)
Himalayas	117 (38.49)	81 (26.64)	39 (12.83)	15 (4.93)	15 (4.93)	8 (2.63)	7 (2.30)	5 (1.64)	-	1 (-.33)	-	2 (.66)	14 (4.6)	304

Note: Jammu and Kashmir data are for 1981 as no census was taken in 1991. Figures in parenthesis show percentage of total. Some towns are included in urban agglomeration resulting in lower number of urban centres, i.e., from 322 to 304.

Source: Government of India (1993a)

forward spatial linkages, the big centres sometimes contribute more to the 'leakage' of development efforts rather than to the 'linking' of development with the hinterlands (ICIMOD 1997). Many times, the gateway town in the foothills plays a 'parasitic' role by forming 'enclaves' unable to provide economic diversification and employment to the vast labour pool of the hinterlands.

Urban settlements in the Uttar Pradesh hills elucidate this process. It is found that more than 57% of total urban population of the Uttar Pradesh Himalayas resides in the Bhabar/Terai or plain areas. These areas are free from mountain constraints (such as inaccessibility, fragility, and so on) and also receive the benefits of mountain development programmes implemented by the state government. Variation in the development levels of sub-areas (blocks and 'tehsils') within the Uttar Pradesh Himalayas reflects intra-regional imbalances. A study shows that the Terai/Bhabar portion of the Uttar Pradesh Himalayas has attained a higher level of development than the interior mountain districts (Pokhriyal 1994). This area receives a share of development programmes and special financial assistance (subsidies) provided to urban centres as Hill Area Development. This is an example of leakage in hill development efforts. Further analysis is needed on the amount of expenditure in such areas and the linkage or benefit accrued to the interior mountain areas.

Table 12 also reveals the adaptation process of the urban centres to the mountain context. The highest proportion of towns (38.5%) has less than 5,000 people and 78% of urban centres have less than 20,000 people per centre. The scattered nature of these settlements over the area/district can be seen as another peculiar urban characteristic. These centres are market and small towns. The distribution of towns according to the size of population reflects the gaps in the hierarchy (Figure 16). The wide gap between the primate city and the small towns is remarkable.

Urban settlements with a population of less than 10,000 fall into the small-town category. Nearly 65% of urban settlements in the Indian Himalayas fall into this category. Table 13 shows the distribution of 198 such settlements. Relating the size of population to the number of urban centres with populations below 10,000 reveals that the distribution approximates a normal curve. Over 50% of the settlements have a population of 2,000–3,000 and about 29% of the settlements have a population of 3,000–5,000.

In Figure 17 an attempt has been made to relate the population size of an urban settlement with its area. It is clear that a large proportion of urban settlement covers a small area.

TYPOLGY OF URBAN SETTLEMENTS

The primate cities in the Indian Himalayas mainly fall into the category of gateway towns, administrative towns, and hill resort towns. The transportation routes play a critical role in determining the vitality of settlements in almost every state. Motorable roads have provided impetus to the growth of market and small towns along the transport corridors. The example of a marketing network in Tehri Garhwal highlights the importance of transport facilities and expansion of institutional support (Sharma and Khanal 1996). Few towns can be viewed as manufacturing towns. Road networks facilitate the development of urban corridors such as in the Rishikesh-Devprayag-Kirtinagar-Srinagar-Rudraprayag-Karnaprayag-Chamoli-Badrinath link in the Uttar Pradesh hills.

Towns in the Indian Himalayas can also be classified according to the nature of institutional framework supporting the urban centre (Table 14), i.e., the statutory nature

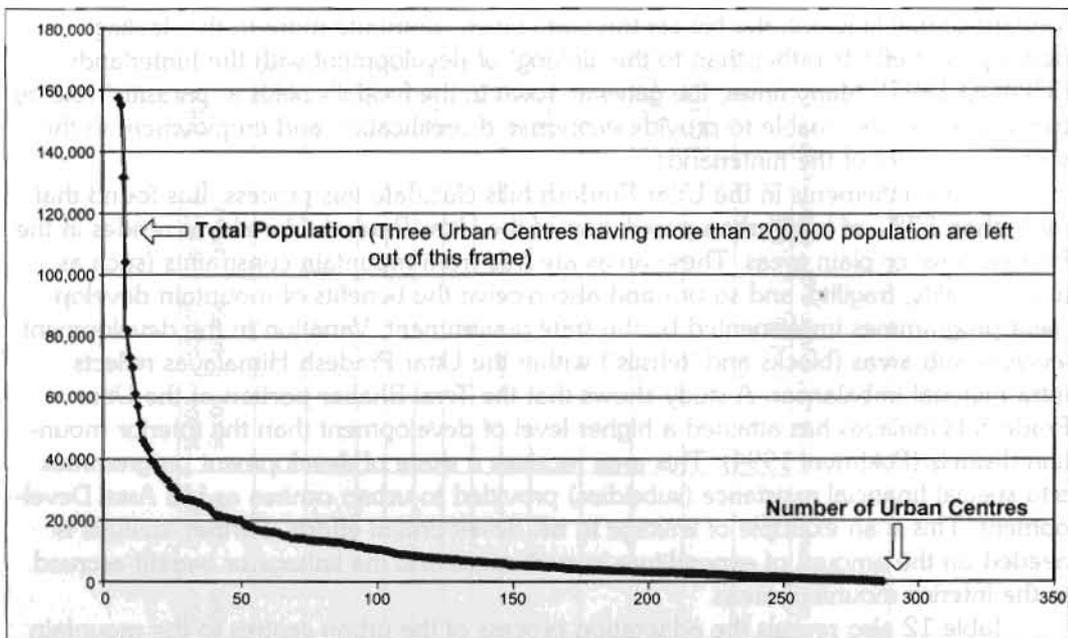


Figure 16: Distribution of urban centres

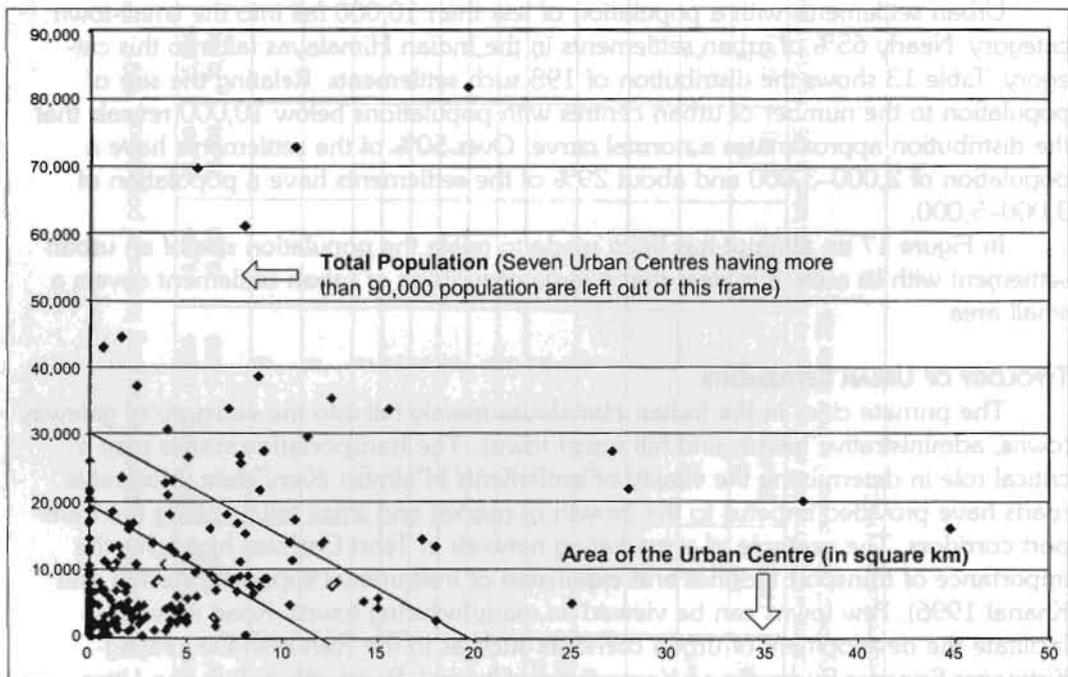


Figure 17: Area and population of urban centres

Table 13: Details of urban centres with a population of less than 10,000

State	Less than 1000	1000 to 2000	2000 to 3000	3000 to 4000	4000 to 5000	5000 to 6000	6000 to 7000	7000 to 8000	8000 to 9000	9000 to 10000	Total
Arunachal Pradesh	-	-	-	-	-	1	1	2	1	-	5 (5.53)
Assam (2 districts)	-	-	1	2	1	1	-	-	1	-	6 (3.03)
Manipur	-	2	-	3	3	6	3	3	2	3	25 (12.62)
Meghalaya	-	-	-	-	-	1	-	1	-	-	2 (1.01)
Mizoram	-	1	4	5	1	3	-	1	1	-	16 (8.08)
Nagaland	-	-	-	-	-	-	-	-	2	-	2 (1.01)
Sikkim	3	2	1	1	-	-	-	-	-	-	7 (3.54)
Tripura	-	-	-	-	2	-	-	1	2	1	6 (3.30)
West Bengal (1 district)	-	-	-	-	2	-	-	1	-	-	3 (1.15)
Jammu & Kashmir	2	4	8	5	5	5	5	4	5	2	44 (22.22)
Himachal Pradesh	3	11	6	8	6	2	2	2	1	2	43 (21.72)
Uttar Pradesh Himalayas	4	4	5	5	8	3	3	2	1	1	39 (19.70)
Total	12 (6.06)	24(12.12)	25 (12.63)	29 (14.65)	28 (14.14)	24 (12.12)	14 (7.07)	17 (8.59)	16 (8.08)	9 (4.55)	198

Note: Jammu and Kashmir data are for 1981 as no census was taken in 1991. Figures in parenthesis show percentage of total. Some towns are included in urban agglomeration resulting in lower number of urban centres, i.e., from 322 to 304.

Source: Government of India (1993a).

Table 14: Institutional typology of urban settlements

State	Census town	TC/TA NAC/NTAC	Cantonment Board	M/MC/M Corp.	Not classified	Total urban centres	No. of districts without urban centres
Arunachal Pradesh	11	-	-	-	-	11	3
Assam (two districts)	-	9	-	-	-	9	-
Himachal Pradesh	-	30	9	18	-	57	2
Manipur	3	23	-	8	-	34	1
Meghalaya	2	3	1	2	4	12	-
Mizoram	-	-	-	-	22	22	-
Nagaland	1	8	-	-	-	9	-
Sikkim	-	8	-	-	-	8	-
Tripura	6	11	-	1	-	18	-
UP Himalaya	11	29	8	27	-	75	-
West Bengal (1 district)	-	1	-	4	4	9	-
Total	34 (13)	122 (46)	18 (7)	60 (23)	30 (11)	264	6

Note: TC = Town Committee; TA = Town Area; NAC = Notified Area Committee; NTAC = Notified Town Area Committee; M = Municipality; MC = Municipality Council; M Corp. = Municipal Corporation. Information on 58 urban centres of Jammu and Kashmir is not available for 1991. Figures in brackets are percentages of total.

Source: Government of India (1994)

of institution/organisation in the urban centre. This dimension is relevant in the context of urban management and financial resource mobilisation.

A maximum number (46%) of towns falls under the notified town area committees. The state government, keeping in view socioeconomic requirements and administrative convenience, generally makes this notification. As a result, many smaller centres (such as Kedarnath, population 350) have been identified as towns. Census towns, however, have to fulfil the size of population, non-agricultural workers, and population density criteria for declaration as an urban centre. Especially in the north-western Himalayan region, after a constitutional amendment, 'nagar panchayats' have been formed in many of the census towns and notified town area committees.

The role of the military is significant in the Indian Himalayan region. As a result of military settlements, cantonment boards were established (mainly in the north-west). This has led to road construction and expansion of other infrastructural facilities. The transportation network and maintenance of border roads by the military has meant that market centres have emerged. This dimension is also evident in the north-east although cantonment status has not been given to many small towns because of the autonomy given to traditional tribal institutions.

OCCUPATIONAL STRUCTURE IN THE TOWNS

The occupational structure of towns indicates their functional characteristics. Urban centres with a high proportion of workers engaged in small-scale manufacturing activities and multifunctional trade and services can help in the diversification and economic development of the rural hinterland. The analysis of the workers (by gender) employed in the secondary (household manufacturing and small industries) and tertiary (workers

engaged in trade and commerce, and services—mainly jobs in government and private enterprises) sectors provides an idea of this role played by a town.

Occupational structure of urban areas in the Indian Himalayas is presented in Table 15. There is a higher proportion of male workers than female workers in the total population. Average participation rate is 48.30% for male workers; the highest percentage is found in Sikkim (54.04%) and the lowest in Manipur (40.53%). Average participation rate for women workers is 11% for the whole Himalayan region with the highest percentage in Mizoram (31.42%) and the lowest in Tripura (7.03%). The low participation of women is partially due to definitional problems and the invisibility of women's contribution to household manufacturing activities.

Table 15: Urban workers and their percentage distribution in industrial and commercial activities of the secondary and tertiary sectors, 1991

State	Worker percentage of total population		Workers in manufacturing and processing household industries		Workers in manufacturing and processing other than household industries		Workers engaged in trade and commerce		Workers in other services	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Arunachal Pradesh	54.00	11.59	0.30	0.42	6.40	7.05	13.49	3.71	54.62	61.29
Assam (two districts)	51.00	9.34	0.66	2.69	7.49	3.03	19.07	4.00	28.95	52.90
Himachal Pradesh	52.25	10.64	1.29	1.15	8.49	3.97	21.44	6.26	39.05	64.90
Manipur	40.53	24.46	1.90	18.14	4.77	3.91	5.15	7.98	22.45	8.27
Meghalaya	44.31	15.12	0.54	1.18	9.95	1.93	16.23	19.30	47.08	55.33
Mizoram	46.38	31.42	1.32	0.85	1.69	0.66	3.53	7.37	24.15	11.16
Nagaland	47.70	12.68	0.52	4.21	3.13	1.87	14.65	4.33	60.22	45.11
Sikkim	54.04	12.61	4.02	1.45	10.69	4.80	47.48	24.25	19.09	50.99
Tripura	46.71	7.03	1.30	3.76	7.53	4.89	21.32	3.47	39.32	76.67
Uttar Pradesh Himalayas	52.31	8.78	0.78	4.36	11.09	5.41	18.02	4.26	39.58	55.12
West Bengal (one district)	41.44	8.74	1.02	0.77	9.39	3.44	21.80	13.52	42.77	59.60
Total Indian Himalayas	48.30	11.00	1.24	3.54	6.60	3.72	18.38	8.95	37.93	49.21
All Indian Average	51.00	16.03	2.61	0.96	8.71	4.54	15.80	2.78	18.87	11.52

Note: Jammu and Kashmir data for 1991 is not available. The occupational categories of workers was decided on the basis of 1991 Census data.

Source: Government of India (1994).

A large concentration of workers in household and other manufacturing activities can be taken as a positive indicator of development with the possibility of wider interaction between the urban centre and the peripheral population. High concentrations in this sector also point towards the value-addition processes during manufacturing. A low level of employment is found in the cottage sector with an average of 1.24% of total male workers with a higher proportion of female workers (3.54%). The proportion of workers engaged in other types of manufacturing industries compared to the household (cottage) sector is higher for males but almost equal for females. The average of the sum of both industrial categories for the whole Himalayan region comes to 7.84% for male workers and 7.26% for female workers. This indicates that only limited diversification, in terms of industrialisation, is found in the urban areas of the Indian Himalayas. This has implications for industrialisation strategies, particularly in terms of enhancing backward and forward linkages between small towns and their hinterlands.

Another dimension is related to workers engaged in trade and commercial activities. In this category, the male average (18.38%) is considerably higher than the female average (8.95%). As a whole, the trade and services' sector provides more employment than the industrial sector. Work participation in trade and services can be seen in association with participation in manufacturing activities. This means that manufacturing activities generate trade and commercial activities as a natural sequence resulting in value addition.

Other services include mainly employment in educational and other private and public (government) institutions. It contributes the maximum to employment (male 37.93% and female 49.21%).

The occupational structure in bigger towns and cities has also been analysed to examine the role of bigger urban centres in radiating spread effects to smaller nodes (market and small towns) and periphery areas. Twenty-two urban centres have been selected, including all the bigger urban centres in the Indian Himalayas. At least two urban centres from each state have been selected. The details are shown in Table 16. Around two million of the total urban population live in these 22 major towns, covering more than 30% of the total urban population. The comparative analysis shows that, in the north-eastern Himalayan belt, there is a higher proportion of women workers in bigger cities compared to the north-western Himalayas. In all the big cities, the contribution of household industries to employment is negligible.

It should be noted that these towns are located in the Terai and plains. Many incentives, in terms of loans and establishing industrial states, were given by the state government. However, these industrial growth points have largely behaved as enclaves and are parasitic rather than radiating spread effects to the interior of mountain areas. The trade and commercial activities have provided considerable working opportunities to male workers in the entire Himalayan region. Women workers have benefited through trade and commercial activities, mainly in the north-east.

Service employment forms the major component of the occupational structure in almost all major hill towns, particularly with respect to females. The involvement of male workers in the primary sector is also considerable, varying from 20 to 30% in the bigger cities. The primary sector and other services play a considerable role in providing working opportunities to both male and female workers. Trade and commerce provide relatively more opportunities compared to household and other-than-household industries.

Some of the results, based on data tabulated on occupational categories, are further summarised in Table 17. This reveals that employment in the primary sector (agriculture, livestock, forestry, mining and quarrying) is high in many states of the Himalayan region. This is important because, in the methodology adopted for the 1991 census, delineation of an urban area depended on the condition that more than 75% of the male working population was engaged in non-agricultural pursuits (Government of India 1994). This also means that many urban centres come under the statutory town category.

The higher concentration of male and female workers in the primary sector and other service sector (other than in industrial sector, trade and commercial activities) also indicates that industrial and commercial activities are still not taking off. The rural-urban character of small towns calls for the establishment of agro-processing centres (for value-addition and transport-cost minimisation) and capacity-building through training. The concentration of workers in other services (supply side) indicates that workers are mainly

Table 16: Occupational distribution in the major urban centres, 1991

Urban Centre	State	Population	Percentage workers of total population		Manufacturing household industries		Manufacturing other than household industries		Trade and commerce		Workers engaged in other services		Primary sector	
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Itanagar, CT	AP	16,545	53.40	15.12	0.29	1.34	2.17	0.45	7.49	1.61	60.79	73.88	29.26	22.71
Tezu, CT	AP	15,271	59.31	7.92	0.16	0.43	4.64	0.64	14.46	3.00	56.78	69.59	23.96	25.90
Shimla, MB	HP	82,054	65.44	8.72	0.00	0.00	10.65	3.90	20.50	27.27	51.56	58.75	17.23	10.82
Mandi, MC	HP	23,202	51.10	13.82	0.40	0.60	8.46	1.00	31.51	6.58	54.41	60.55	5.22	31.27
Imphal, M	Manipur	198,535	36.31	15.39	2.26	1.64	10.11	11.71	19.11	21.32	46.57	40.92	21.95	24.41
Charuchand, CT	Manipur	33,666	37.47	19.26	4.79	18.77	2.72	1.34	10.15	6.54	38.60	23.84	43.74	49.51
Shillong, M	Meghalaya	131,719	49.57	16.93	0.62	1.03	8.45	2.98	22.62	20.52	48.75	66.24	19.56	9.23
Tura, M	Meghalaya	46,066	40.32	11.51	0.33	1.47	5.50	1.94	19.52	8.10	47.42	63.77	27.23	24.72
Aizawl	Mizoram	155,240	47.22	25.84	2.12	3.05	7.04	2.94	9.68	31.04	51.57	63.77	29.59	23.38
Lunglu	Mizoram	34,609	42.29	12.81	1.16	0.87	0.44	0.00	12.96	8.91	44.52	24.75	40.92	65.47
Kohima, TC	Nagaland	51,418	49.96	14.47	0.30	0.45	1.12	0.77	9.27	5.36	77.48	63.46	11.83	29.96
Dinapur, TC	Nagaland	57,182	49.59	7.87	0.16	3.77	10.83	3.56	31.97	11.81	29.31	58.35	27.73	22.51
Gangtok, NTAC	Sikkim	25,021	53.81	20.99	1.68	0.79	10.78	8.62	30.09	12.88	34.80	61.47	22.65	16.54
Agartalla	Tripura	157,358	48.31	12.27	0.72	0.68	7.93	2.48	25.47	3.25	49.90	90.90	15.98	2.69
Teliamura, NA	Tripura	27,668	46.61	5.46	3.10	6.04	7.17	3.30	22.60	3.30	23.62	57.14	43.51	36.82
Rishikesh, MB	UP Him.	44,487	50.30	5.08	0.46	2.12	20.65	11.59	31.27	13.61	22.16	67.34	25.46	5.34
Dehradun, MB	UP Him.	270,159	47.48	6.56	0.63	2.04	15.02	7.04	26.57	8.80	38.32	75.79	19.46	6.32
Kashipur, MB	UP Him.	69,870	49.39	2.74	1.17	2.14	22.16	11.95	24.87	5.75	25.88	71.25	26.00	8.91
Haldwani	UP Him.	104,195	49.37	3.92	0.91	2.36	13.48	3.37	30.02	10.49	28.30	72.91	27.29	10.87
Kathgodown														
Rudrapur, MB	UP Him.	61,280	51.03	5.65	1.96	7.67	12.94	2.78	19.67	3.65	19.43	32.71	46.00	53.10
Darjeeling, M	WB	73,062	38.85	9.94	1.45	1.48	7.22	5.21	25.41	17.95	47.38	63.93	18.54	11.48
Shilliguri, M	WB	216,950	54.13	8.06	0.52	1.47	13.22	3.95	39.67	10.92	21.43	75.78	25.16	7.88

Note: Except for total population, all other figures show percentage distribution. Minimum of two biggest urban centres from each state were taken.

CT - Census Town, MB - Municipality Board, MC - Municipal Committee, M - Municipalities, TC - Town Committee, NTAC - Notified Town Area Committee

AP - Arunachal Pradesh, HP - Himachal Pradesh, UP Him. - Uttar Pradesh Himalayas, WB - West Bengal

Source: Government of India (1994).

Table 17: Distribution of workers in main sectors

State	Industrial sector and trade		Other services		Primary sector	
	Male	Female	Male	Female	Male	Female
Arunachal Pradesh	20.19	11.18	54.64	61.29	25.17	27.53
Assam (two districts)	27.22	9.72	28.95	52.90	43.83	37.38
Himachal Pradesh	31.22	11.38	39.05	64.9	29.73	27.72
Manipur	11.82	30.03	22.45	8.27	6.73	61.70
Meghalaya	26.72	22.41	47.08	55.33	26.2	22.26
Mizoram	6.54	8.88	24.15	11.16	69.31	79.96
Nagaland	18.3	10.41	60.22	45.11	21.48	44.48
Sikkim	62.19	30.5	19.09	50.99	18.72	18.51
Tripura	30.15	12.12	39.32	76.67	30.53	11.21
Uttar Pradesh Himalayas	29.89	14.03	39.58	55.12	30.53	30.85
West Bengal (Darjeeling)	32.21	17.73	42.77	59.60	25.02	22.67
Total Indian Himalayas	26.22	16.30	37.93	49.21	35.85	34.49
All India Average	60.6		25.06		19.52	

Note: Primary sector includes cultivation, agricultural labour, livestock, forestry, mining and quarrying
Source: Government of India (1994).

employed in jobs provided by the government. Policy initiatives are needed to shift workers from activities of the primary sector to industrial, trade, and commercial activities. This can be done by supporting the urban centre through the provision of infrastructure and links with the transportation network, and by strengthening the rural base so that it can generate surpluses to be processed in these market and small towns.

A correlation matrix of various occupational characteristics and urban settlements is presented in Table 18. It is clear from the table that the male and female worker participation in household manufacturing activities is closely correlated with male and female literacy. Female workers engaged in trade and commerce are also positively associated with the numbers of female workers engaged in the other services. Interestingly, the scheduled caste population is positively correlated with female workers. The male workers engaged in trade and commerce are positively correlated with the male workers engaged in manufacturing activities and female non-workers. As a whole, literacy seems to be the most important correlation for workers engaged in manufacturing and commercial activities. Marginal workers (those partly employed, i.e., for less than six months per year) are positively correlated with agricultural labour and workers engaged in trade and commerce.

Because of the criteria used in the census, many service centres and central settlements are left out. As market and small towns, these settlements have a critical role to play in integrated planning in the Himalayas. Many service centres and marketing places located along motorable roads are neither villages nor census towns. Generally, the population of these centres is included in the adjoining village population.

Three independent case studies conducted by Tripathi and Khan (1976) and

CEMPRES (1996) in Garhwal and Chakrata block of Dehradun district and by Sharma and Khanal (1996) in the Uttar Pradesh hills show the wide gap in the perception of market and small towns (Table 19).

Table 19: **Urban centres and central settlements identified in the census and other primary data based studies in the Uttar Pradesh Himalayas**

District	Urban centre/town 1991 census	Higher-level service centres identified through independent research studies	
		Service centres	Growth centres
Chakrata Block (Dehradun District)	1	22	2
Pithoragarh	5	49**	
Tehri Garhwal	5	16**	
Garhwal District	6	59*	45
Note: * In Garhwal district, the central villages (168) are additional to the above service centres. ** In Pithoragarh and Tehri Garhwal, market and small towns are identified.			
Source : CEMPRES (1996); Khan and Tripathi (1976); Sharma and Khanal (1996).			

Compared to the census report, there are large numbers of service centres (excluding central villages) and growth centres in the districts under study. Although census data can be taken as a benchmark, further micro-level investigations and research are called for if small towns and market centres are to play a role in the integrated development of mountain areas.

POLICY INITIATIVES FOR SPATIAL ECONOMIC DEVELOPMENT

In the Indian Himalayas, there have been no deliberate attempts to identify the most suitable locations for policy functions (supply) and establishment of backward-forward linkages (demand). Also, efforts to promote market and small towns as part of a regional development strategy have been limited to addressing issues of decentralisation and participation. In the 1960s, policy initiatives were taken by the central government to decentralise the planning process so that better rural-urban linkages could be established. These efforts can be viewed in two ways: one dealing with methodology for integrated area planning, and the other specifically dealing with mountain development policy.

Some guidelines were prepared on the methodology of rural-urban integrated planning and sent to all states in 1969 by the Planning Commission. Efforts were made in 1978 to set up a working group on block-level planning below the district level (Government of India 1978). The district planning approach to integrated area development was adopted in 1984. District planning was taken as area-based, sub-state planning. Spatial planning has been accepted and incorporated into the framework of decentralised development (Government of India 1984b).

Besides these efforts, some methodological studies and manuals were also published. The critical question of identifying the hierarchy of market centres (central places) was addressed in these studies. These studies focus on the role of small towns and urban centres as functional nodes to the service area, and efforts were made to view the complementary role of rural and urban areas with the objective of decentralisation and balanced regional development. Leading efforts were made by Sen (1971) and Roy and Patil (1978) to establish the emerging need for integrated planning at the block (district)

level. Roy and Patil standardised the approach to integrated area planning by producing a manual where the role of the service centre was seen as critical for area development, and where various levels (village, cluster, block and district), sectors (agricultural, industrial and service sectors) and sections (poor, scheduled caste, marginal farmers, etc.) could be integrated.

These efforts were seen as good normative concepts but were difficult to implement since this approach needs devolution of resources and functions to local-level government. The institutional base to integrated area planning was prepared in 1992 through the introduction of amendments to the constitution. Most state governments have amended their acts and statutes accordingly. A mandatory provision for a District Planning Committee has been made for taking care of all integrated rural-urban planning. To strengthen the process, various rural and urban functions (central functions) are to be handed over to the rural and urban local bodies by further amendment to the constitution. Apart from these amendments, more autonomy has been given to Tribal Councils in the north-east. This will lead towards more decentralisation, empowerment of local communities, and integrated rural-urban area development. With these amendments, decentralised planning has been made mandatory. However, between 1993 and 1999 progress has been slow; this is because of the complex nature of socioeconomic change and attitudinal rigidity on the part of politicians and bureaucrats. Besides these problems, capacity-building of local authorities has become a critical concern.

With the constitutional amendments, the institutional framework for every urban settlement has been provided through a municipality or some other suitable urban local body. Even the transitional areas, which are mainly marketing centres, have been provided with nagar panchayats (lower-level body to support small town) status. Some of the tribal areas of the north-eastern Himalayas still have tribal village councils to manage the demarcated urban area. Efforts are needed to modify such inefficient structures and implement suitable programmes in the light of constitutional provisions. The capacity-building and training of the representatives is another critical element in the sustainable management of small towns.

Rural-urban integration is a major component of sustainable development planning. Policy initiatives under the broader terms of Hill Area Development have been taken from time to time by the government. Main initiatives were taken during the Sixth Five-Year Plan (1980-85) (GOI 1981) by separately allocating funds for mountain development. In the Seventh Five-Year Plan (1985-90) (GOI 1986) and Eighth Five-Year Plan (1992-97) (GOI 1993b) more focused attention was given to hill areas. However, no specific mention of urban development is found in the plan documents.

A hill area development strategy was first mentioned in the Fifth Five-Year Plan (1974-79) (Government of India 1975). This was mainly concerned with allocation of funds for hill area development. In the Sixth Five-Year Plan (1980-85) emphasis was placed on proper utilisation of resources of hill areas. A paramount need for conceiving 'an integrated strategy for the development of hill areas based on sound principles of ecology and economics' was highlighted (Government of India 1981). The environmental impact of degradation of the hills on the plains was considered as a major problem to be tackled through planning efforts. However, the need for integration of the regional rural-urban economy within the Himalayan region was not emphasised. The Seventh Five-Year Plan (1985-90) broadened the scope of hill area development. Some policy functions, such as energy, fuel and fodder, drinking water, health, and education, were identified as basic needs. Issues such as integration of highland and lowland were also mentioned (Government of India 1986).

The Eighth Five-Year Plan (1992-97) prioritised hill area development objectives as 'socioeconomic development in harmony with ecological development'. Again, emphasis was placed on halting degradation, family planning, financial and physical monitoring, afforestation, and watershed development. For the first time, the need for area-specific marketing infrastructure (for processing and storage), transport linkages, and appropriate industrial development were recognised. The male migration issue and dependency on women were also highlighted. However, an integrated framework for rural-urban planning was missing (Government of India 1993b). Policy initiatives have largely been taken from an outsider's perception. The insider's needs, and consequent efforts have not been fully taken into consideration.

The Ninth Five-Year Plan (1997-2002) (GOI 1998) does not add much to the idea of urban-rural integration. Deforestation, soil erosion, and intensive human and live-stock pressure on land are identified as major problems in the mountains. The integration of rural-urban areas and diffusion of spread effects are more concerned with strengthening of the rural base by planning for self-employment, poverty eradication, and income-generation programmes.

It is clear from plan documents that the hill states are treated as special category states and financial assistance from central government is liberally allocated to these areas. The Ninth Five-Year Plan (1997-2002) emphasised the sub-plan approach and integrated watershed approach for the development of mountains. Transportation was mentioned as one of the infrastructure services but there was no strategy for planning a transportation network, connecting service, and marketing centres (Government of India 1998).

Special mention of the North-Eastern Council is found in the latest policy prescription, the North-Eastern Council was constituted in 1972 to discuss planning and solve the problems of the states in the north-eastern Himalayas. The regional planning dimension is mentioned in the Ninth Five-Year Plan without elaborating upon the context and modalities. The North-Eastern Council has taken some initiative by sponsoring studies and workshops on formulation of regional plans and industrialisation. The basic question of integrating the results of these studies with the district planning exercise is largely ignored.

The question of rural-urban integration, in terms of suitable location of service centres/market towns, has not been fully interwoven with policy for mountain development. Although methodologies are available on integrated area development, no effort has been made to implement these policies and institutionalise the planning mechanism within the administrative structure. The coming decade will be a major transitional phase for the operationalisation of the integrated area approach at the grass roots' level, and market and small towns have to be given due recognition. The constitutional base has provided both the push and pull to facilitate decentralisation. The pull can be seen in terms of elected representatives to rural and urban local bodies and their demand to solve local needs. The push is associated with the policy initiatives and conditions imposed by central government over state governments through allocation of financial resources for integrated area planning.

INFORMATION GAP AND STRATEGIC INTERVENTIONS

The information gap on market/service centres in the mountains is a critical concern for future planning processes. Micro-level studies, conducted at district level, can shed light on the regional spatio-economic structure such as the hierarchy of central

places and central functions. The regional potential, in terms of agro-industrial base, along with various constraints, can be analysed. These are the necessary conditions for planning for multifunctional market/service centres.

It is equally important to analyse the impact of the constitutional amendments at the district level. There are two important implications. One is related to participatory planning at the micro-level, involving both rural and urban stakeholders, and the other is the formation of District Planning Committees for integrated area planning in non-tribal areas. In the tribal districts of the north-east, the district-level planning mechanism needs to be studied in detail. It is important to analyse the role played by block-level and village-level committees in channelling insiders' needs and priorities.

The methodology for integrated area development has been standardised over the last twenty years (Government of India 1984b; Roy and Patil 1978; Sen 1971). However, experience and information on the methodology, tools, and techniques in the mountains have to be shared. A few examples and case studies (CEMPRES 1996; Papola 1996) highlight the need to initiate such projects in every district. More importantly, efforts also need to be made to integrate insiders' needs and the stakeholder approach to integrated area development. Even the district-level database is not sufficient to fulfil the needs for participatory integrated area planning. A more disaggregated database is required. Equally important is the generation of a micro-level database at village, cluster, service centre, and block levels. Participatory rural appraisal techniques can be used to collect information and to implement many components of integrated area development. In many ways, participatory rural appraisal has the potential to generate a qualitative information base within a short period of time. The output of these studies could be used in the planning process at the district level. It is important to institutionalise the new approaches to area development of market centres. Development administrators must be involved in every stage of planning.

There are a number of policy level inadequacies and gaps that must be mentioned. At least in principle, the Eighth Five-Year Plan (1992-97) focused on the need to provide exclusive attention to the mountains. However, implementation by the state governments has been weak, especially in those states where the mountains have been treated as political sub-regions such as in the Uttar Pradesh Himalayas, Darjeeling in West Bengal, and Ladakh in Jammu and Kashmir. As a result of poor political will, indifferent attitudes and negligence of state governments in these areas, voices for separate statehood are being raised. In Uttar Pradesh, the central government has agreed to form a separate state for the hills. Even in exclusive mountain states, imbalance in the power structure has made it difficult to implement an integrated approach. Integrated planning for rural-urban linkages demands participation by the poorer section of society, specifically women, and transparency in implementation of development projects.

The constitutional amendments provide a platform that can be used by state governments and local rural and urban bodies. Initiatives have to come from the local level. The capacity-building issue, therefore, is vital and needs attention. Training programmes at district, block, municipality, and small town (nagar panchayats) levels are required for area-based planning.

The secondary database for studying the role of these service/market centres and small towns is inadequate and needs to be supplemented by micro-level database studies. It is clear that urban centres are largely statutory/administrative in nature and able, in only a limited manner, to generate and mobilise demand in the rural hinterland. The concentration of workers in the other services' category can be seen as an indicator

of weak interaction between the large urban centres and the rural hinterland. Greater coordination between the agricultural development strategy and strengthening of market and small town area development planning is needed. Coordinated implementation of programmes by government officers, elected representatives of local self-governments, and non-government organisations is lacking. Interlinked development of manufacturing, trade and commercial activities, with improved literacy (especially female literacy) and expansion of infrastructural support, are priority areas emerging from the present analysis. Macro-policy initiatives are apparent but there is a need for a grass roots' approach. The future of sustainable urban development in mountain areas will depend on how insiders' needs are incorporated into policy and programmes adopted by state and local-level governments.

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