

Anthropo-Demographic Study Among The Caste and Tribal Groups of Central Himalayas: 1. Population Structure

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ABSTRACT This study presents the population structure of the caste groups of Kumaun and Bhotia tribal groups of Kumaun-Garhwal Himalayas or the Central Himalayas. The three districts covered are Almora, Pithoragarh and Chamoli. The Bhotias traditionally have been transhumants migrating to lower altitudes in the winter and to high altitudes in the summer, though they are gradually settling down. The sex ratio, age composition of these populations give a picture of the structure/demographic pattern prevalent in the hill region of Uttar Pradesh.

Fertility, mortality and residential mobility can change the composition of a population within small areas or within a whole country. The age structure and to a certain extent the sex ratio of any population reflects its recent history of fertility, mortality and migration. However, the way in which population composition and change are really more of a circular process. High birth rates, for example, may create a younger population, which in time may again contribute to high birth rates or low mortality rates. The study of a population's composition acts as an indicator of its current population dynamics.

AREA AND PEOPLE

AREA

Location

Uttar Pradesh is a land-locked state lying between 23° 52' N and 31° 28' N latitude; and 77° 04' E and 84° 38' E longitude. It is bounded by the neighbouring countries of China and Nepal in the North, Haryana and Delhi in the west, Rajasthan in the southwest, Madhya Pradesh in the south and Bihar in the east. The total land area of Uttar Pradesh is 294,400 square kilometres, around one tenth of the land area of the country. The state capital is Lucknow. The state comprises of 14 administrative divisions, 66 districts. 305

tahsils, 901 development blocks and 1,12,814 villages. Uttar Pradesh can be divided into three regions (1) Uttar Pradesh Himalaya (2) Ganga Plain and (3) Uttar Pradesh Uplands. About one-sixth of the area of Uttar Pradesh lies in the Himalayan region covering the districts of Dehradun, Uttarkashi, Chamoli, Pithoragarh, Almora, Nainital, Garhwal and Tehri-Garhwal. This region may be divided into three zones, namely (1) Greater Himalayas, (2) Lesser Himalayas or Kumaun Himalaya East and (3) Sub-Himalayas or Siwalik.

Greater Himalayas are the northernmost zone with an average altitude of 6000m and above. The districts of Uttarkashi, Chamoli and Pithoragarh lie in this zone. The main peaks in this zone are Nanda Devi (7,817 metres), Kamet (7,756 metres), Badrinath (7,138 metres) and Trishul (7,120). The Lesser Himalayas region is situated at an average altitude of 3000 metres with the width varying from 80 to 100 km. These ranges abruptly rise from the Siwalik. Sub-Himalayas or Siwalik which are popularly referred to as the Terai region are constituted of small hills which run along the Ganga plain. The altitude of these ranges varies between 300 and 600 metres.

Pithoragarh district is situated in the north west of Uttar Pradesh and forms the north eastern part of the Kumaun Division. It lies between Lat. 29° 27' N. and 30° 49' N. and Long. 79° 50' E. and 81° 3' E. It is bounded by Tibet on the north, Nepal on the east, district Almora on the south and the districts Almora and Chamoli on the west. The total area of the district is 8856 sq km. Administratively it consists of five tehsils viz. Munsyari, Dharchula, Didihat, Pithoragarh and Champawat with the seat of district administration located at Pithoragarh town. In order of area Munsyari is the biggest (2784 sq km) and Didihat is the smallest (825 sq km) tahsil. There is one urban unit each in Dharchula, Didihat and

Pithoragarh tahsils and two units in Champawat tahsil. There are eleven development blocks (1981, Census).

Almora district occupies the middle portion of the Kumaun Division and lies between Lat. $29^{\circ} 3'$ and $30^{\circ} 19' N.$ and Long. $79^{\circ} 21'$ and $80^{\circ} 19' E.$ It is bounded on the north by district Chamoli, on the west by district Garhwal, on the south by district Nainital and on the east by district Pithoragarh and the territory of Nepal which is separated from it by the Kali river. The area of the district, as given by the Central Statistical Organizations 7004 sq km. It is the twelfth biggest district in the state of Uttar Pradesh.

Chamoli lies between latitude 30° and 31° north and longitude 79° and 80° east. On its north lies Tibet, while on its south lies the districts of Garhwal and Almora. Districts Almora and Pithoragarh bound it in the east and districts Uttarkashi and Tehri Garhwal on the west. The total area of the district is 9059 sq km. There are four tahsils in the district. These are Joshimath, Karnaprayag, Chamoli and Ukhimath. Gopeshwar town in tahsil Chamoli is the seat of district administration. There are nine Vikas Khand.

Climate: A large part of the three districts lies under perpetual snow and considerable area is rocky and barren. The elevation ranges from 500m above sea level in the valleys in the south to over 7000m in the snow bound Himalayas in the north and north-west. The climate, therefore, largely depends on altitude and varies according to aspect and elevation. Winter is severe and lasts from October to March. During the months of January at the height of 2000m, the maximum temperature remains around $10^{\circ} C$ and the minimum temperature reaches the freezing point ($0^{\circ} C$). June is the warmest month, when the mean maximum temperature of $25^{\circ} C$ and the mean minimum temperature of $15^{\circ} C$ are attained. Most of the rain occurs during the monsoon period *i.e.* from June to September. The average rainfall ranges between 100-150 cms. July and August are the rainiest months.

POPULATION

Kumauni Caste Groups

Kumaun the popular name of the region is said to be a corruption of Kurmachala, the name of the mountain standing to the east of Champawat in

Almora district, which is said to be associated with the Kurma (tortoise) avatar of Vishnu. The earlier inhabitants being perhaps, the Asuras, Nagas etc. who seem to have been superseded in course of time by the Kiratas, Khasa and Kunindas. The Khasas and Kiratas have been mentioned in Mahabharata. About the last quarter of the first century A.D. the region was included in the empire of Kushans under Kanishka. Tohar Chand (1261 - 1275 A.D.) was the first Chand Raja to start the Chand dynasty on the entire Kumaun region. The Chand dynasty continued its domination over Kumaun until 1790 when Gurkhas invaded Kumaun. In 1816 the Gurkhas lost Kumaun to East India Company. Kumaun along with the rest of India gained independence on August 15, 1947.

Throughout history waves of immigrants migrated to the hills. The Khasas are said to be among the oldest inhabitants of these parts. It is said that the present day Khasas are the descendants of those early immigrants of the northern part of India who were possibly Aryans but not of the vedic branch which they possibly preceded. Succeeding immigrants from the plains helped in the process of hinduisation. Perhaps there was an intermingling of blood too. As elsewhere the Hindu community in the hills comprise of the Brahmins, Rajputs and Scheduled Caste. There are also a few Vaish immigrants from the plains. The Brahmins and Rajputs, both of Khasa and plain extraction are together termed Biths in order to distinguish them from the Doms. The Shudras or Doms are now generally designated Shilpkars and classed among the Scheduled Castes.

According to Das and Raha (1981) in the Himalayan region of Kumaun and Garhwal the two fold division of castes into Bith and non Bith is sharp. The Bith category comprises the higher castes of the region who include all Brahmins and Rajputs irrespective of their being Khasiya or later immigrants from the plains.

Brahmins

Most of the Brahmins are immigrants from the plains, who have through the centuries migrated there for refuge or have been invited by the local rulers. Some of the subdivisions of the Brahmins are the Pant, Pandey, Joshi, Tiwari,

Upreti, Upadhyaya, Pathak, Duggal and Bhatt. Being the priests, the Brahmins have been traditionally holding the top position in the caste hierarchy. The immigrant Brahmins consider themselves superior to the Khasa Brahmins.

Rajputs

The immigrants Rajputs claim to be descendants of ancient Kshatriyas and belong mainly to the Raotela, Rajwar and Munral septs. The ancestors of most of the present day Rajputs migrated to Kumaun from the plains at different times. They particularly the Chands have been the rulers of almost the whole of Kumaun throughout the medieval period. The Khasa Rajputs, usually known as Khasiyas, though still looked down upon can marry into the best Rajput families. The main subdivisions of the Khasa Rajputs are the Negi, Bisht and Rawat.

Scheduled Castes

The Shudras or Doms are now usually designated Shilpkars and listed among the Scheduled castes in the census returns. They are supposed to be the descendants of the aborigines of this region and are still socially, educationally and economically backward.

Their Khasa conquerors reduced them to the status of serfs or slaves who came to constitute the bulk of agricultural labour and village artisans. Every village usually had its own artisans, labourers and menials who performed the work allotted to them for the village community. The Doms thus came to be split up into numerous occupational groups which coming into contact with the Hindu caste system came to be regarded as Shudra subcastes. Some of these groups or subcastes are *Chamar* (also known as *mochi* or Basurwa - cobbler and shoemaker), *Darji* (tailor), *Koli* (weaver), *Lohar* (blacksmith), *Orh* (carpenter) and *Tamta* (brass and coppersmith).

Bhotia Tribals

The northernmost part of Uttarakhand is also called the Bhot region and comprises of five valleys bordering Tibet. These five valleys are the home of the Bhotias and other ethnic groups. Bhotia is a generic term which is employed for the Mongoloid population inhabiting the border regions of Uttarakhand.

Language, physical traits, customs and tradition all assign to the Bhotias a common origin with the people of Hundes (Tibet). "Their language alone is almost sufficient to prove this, and the unmistakable peculiarities of feature that belong to the Mongolian race are as strongly marked in the Bhotia as in the Huniyas across the frontier" (Atkinson, 1886).

Depending on the area or valley they inhabit the Bhotias are known by different names. The main concentration of the Bhotias is in Mana on the Kishanganga and Niti on the western Dhauliganga in Chamoli district; and in Johar on the Goriganga, Darma on the eastern Dhauliganga and Byans and Chaudans on the Kali in Pithoragarh district. Nilang and Jadhang on the Janhavi in Uttarkashi district from the home of the Jadhs. However the Jadhs are numerically a small group.

The Uttarakhand Bhotias have developed and adjusted differently in their respective areas due to the distinctive cultural streams that obtain in these regions. Thus, the Bhotias of Pithoragarh district and the Bhotias of Chamoli district are quite distinct due to the dominant Kumauni and Garhwali cultures within which they are confined.

Marchas Bhotia

The Marchas of Chamoli inhabit the Mana and Niti valleys, both of which are also known as the Vishnuganga valley. The most important exclusively Marcha village in the Mana valley is Mana and in the Niti valley is Niti Village. The Marchas eat, drink and intermarry with the Juhar Bhotias but not with those of Dharchula. The inhabitants of the villages not occupied by Bhotias in the Mana and Niti valleys are called Duryals in the former and Tolchas in the latter. There are of Khasiya origin.

Juhar Bhotias

The Bhotias who are inhabitants of Goriganga valley are known as Juhar Bhotias. They are also known as Sokpas or Rawats. The valley of Gori ganga from Milam to Munsiyari is known as the Johar valley. Bhotias belonging to Milam and other villages on the Johar valley such as Martoli, Burphu, Mapa, Tola, Lawan, Sumtu, Laspa and Panchhu are known as Johar Bhotias. The Juhar Bhotias show the influence

of their Kumauni neighbours in their general customs and language. According to Bhandari (1981) "The Bhotias of each village were identified by their village name and thus became a distinct group of agnatic descendants of the founding family, exhibiting the characteristics of exogamous patri-clan villages. Inter-marriage between Bhotias of different villages bound the whole group in a network of ramifying relationships." The clans among the Bhotias of Juhar are named after the village their ancestors inhabited.

Dharchula Bhotias

The Kali river originates from a place near Kalapani in Pithoragarh district which is a short distance from Lipulekh pass which is like a trijunction between Tibet, Nepal and India. The Kali flows southwards separating Nepal on the east from Pithoragarh on the west. At a place called Jauljibi the Goriganga leaving behind the Johar valley joins the Kali. Further upstream about 10 miles beyond Dharchula is Tawaghat just below the village of Khela. It is at Tawaghat that the eastern Dhauli flowing from north west joins the Kali. The valley upstream along Dhauli Ganga from Khela is known as Darma valley. The Bhotias living in this valley are known as the Darma Bhotias. Villages in this valley are Sela, Goe, Sipu, Khimling, Tidang, Dugtu, Boling, Nagling etc. (Chatterjee, 1977). As one goes upstream along the Kali valley the villages along the Kali valley comprise the Chaudans Patti and Bhotias of these villages are called Chaudansi Bhotias. Some of these villages are Rung, Pangu, Jibti, Himkhola, Sirkha and Sosa. As one goes further upstream along the Kali river village Budi, Garbyang and Gunji are to be found. At Gunji the Kuti Yankti river joins the Kali. Upstream along the Kuti Yankti river villages Navi, Kuti, Napaichyun and Rongkong are found. All the villages from Kuti to Budi comprise the Byans Patti and the inhabitants are known as the Byansi Bhotias.

The Bhotias of Dharchula differ historically, culturally and socially from the other Bhotia groups. Marriage between the Darma, Byan and Choudans Bhotias is common and is socially approved. However, marriage between the Juharis and the other three groups is not approved, especially by the Juhar Bhotias who con-

sider them different as well as lower in status. The valleys of Darma, Byans and Chaudans are separated from each other by high mountain ranges and deep gorges and yet there is a high incidence of inter-marriage between the different subgroups of these valleys. This is due to the fact that in winter months all the different subgroups migrate to Dharchula and live in close proximity. Their subgroups are also named on the basis of the village they inhabit, e.g., Baunals from Baun. These Bhotias prefer to be known as the "Rang Jati." Das and Raha (1981) call these three groups collectively as the Eastern Bhotias.

Trade and Transhumance

Till 1962 the principal occupation of the Bhotias was trade with Tibet, Nepal and the Indian plains. In fact, they enjoyed a virtual monopoly in trade due to the difficulty in crossing the passes. The Bhotias would carry certain goods from India into Tibet and barter them there. Goods from Tibet in turn were bartered in India on their return.

The goods exported to Tibet was grain, coarse cotton cloth, sugar, spices, tobacco, copper, iron, hardware etc. The principal imports were borax, salt, gold dust, furs, wool, goats, sheep and yak tails. Towards the end of June the snow melts sufficiently to enable the Bhotias to cross the passes into Tibet. During the summer season *i.e.* from June to September they used to remain in the Tibetan Mandis or markets for effecting trade transactions. After the trade transactions were over, they used to get back to their own region for exchanging and selling the Tibetan goods with the Pahari People. In the winter they were required to go to the mandis of the plain areas near Dehradun, Rishikesh, Haldwani, Rampur etc. for buying the articles for export to Tibet.

Their trade with Tibet was earlier responsible for the Bhotias transhumance. Transhumance is a migrating movement among pastoral people but is distinct from permanent migration since it obeys a kind of rhythm that does not involve entire uprooting of the population. Besides trade the climate and environment of the Bhotia region has been responsible for their periodic migrations. In the Bhotia region we can distinguish between two kinds of settlements : Summer

settlement and winter settlement. The summer settlement of most Bhotias are situated at high altitude. During winter the summer settlements become inhabitable and the Bhotias move to lower altitudes where they establish their winter settlement.

MATERIALS AND METHODS

Field survey was conducted with the help of a predesigned information of general, demographic and socio-economic variables on two populations: the Kumauni caste groups and the Bhotia tribal groups. The information was collected from ever married women of a household from both rural and urban areas. The household interview schedule covered a wide spectrum of information. In fact in the interview schedule data could be said to be collected at three levels. At the first level information on each resident of the household were collected, this included age, marital status, sex, education, occupation, and relationship to the head of the household. Also, information on household conditions was collected such as toilet facilities etc. At the second level information relating to marriage history and complete birth history were collected from every married women of the household. Information on deaths in the household for the past five years were also collected. At the third level village level facilities like electricity, schools, hospitals etc were also collected.

Altogether a total of 847 nuclear families was covered, 531 Kumauni Caste Groups and 316 Bhotia Tribal Groups. As seen in table 1 the

number of nuclear families is more for the Bhotia Tribal Groups (87 per cent) than for the caste groups (76 per cent). Percentage of joint families are higher in the caste groups, 23 per cent. The total number of households covered is 693, (414 caste groups and 279 Bhotia Tribal Groups).

These households have been covered from various villages and urban centres in Pithoragarh, Chamoli and Almora districts. The urban centres are Dharchula, Badrinathpuri and Almora. The number of villages covered is large (31 villages) as the hill region is characterised by villages with small number of households. According to the 1981 census 67.2 per cent of villages in the hill region had population less than 200 compared to 19.9 per cent of Uttar Pradesh villages.

RESULTS AND DISCUSSION

POPULATION COMPOSITION

Age and sex composition are two important demographic characteristics of a population. Besides age and sex, the term population composition also refers to the distribution within a population of one or more traits or attributes such as education, income, marital status etc.

Sex Composition

Sex Ratio: The sex ratio (number of females per 1000 males) is a widely used measure of sex composition. The sex ratio for India is highly masculine (927 in 1991) compared to the other regions of the world, particularly Europe and North America. The sex ratio for India has been increasingly adverse for females as seen in the sex ratio over the years from 1901-1991.

Table 1 : Distribution (number and percentage) of Nuclear (NF) and Joint Families (JF) among Kumauni Caste Groups and Bhotia Tribal Groups of Uttarakhand

Group	Nuclear	Joint family (JF) with their NF		No. of household (HH)	Total No of NF
	family (NF)	JF	NF		
I.Kumauni Caste Groups					
Brahmins	97 (78.22)	27(21.77)	59	124	156
Rajputs	117 (78.00)	33 (22.00)	72	150	189
Scheduled Castes	103 (73.57)	37(26.42)	83	140	186
Kumauni (Total)	317 (76.57)	97 (23.42)	214	414	531
II.Bhotia Tribals Groups					
Marchas	73 (89.02)	9 (10.97)	18	82	91
Juhars	111 (85.38)	19 (14.61)	41	130	152
Dharchulas	61 (91.04)	6 (8.95)	12	67	73
Bhotias (Total)	245 (87.81)	34(12.18)	71	279	316
Total	562 (81.09)	131 (18.90)	285	693	847

However within India there is a lot of variation in sex ratio and a number of demographers have commented on the "north-south" divide which refers to the highly adverse sex ratio in the Northwestern states and the more favourable sex ratio in the south eastern states of India (Agnihotri, 1995). Uttar Pradesh (879) along with other north western states like Haryana (865), Punjab (882) and Rajasthan (911) have very low sex ratios whereas Kerala (1036) and other southern states have a comparatively high sex ratio (Bose, 1991). Researchers have attributed this to gender inequality. "These regional patterns of female-male ratios are consistent with what is known of the character of gender relations in different parts of the country. The north western states, for instance, are notorious for highly unequal gender relations, some symptoms of which include the continued practise of female seclusion, very low female labour force participation rates, a large gender gap in literacy rates, extremely restricted female property rights, strong boy preference in fertility decisions, widespread neglect of female children, and drastic separation of a married woman from her natal family. In all these aspects the social standing of women is somewhat better in south India" (Dreze and Sen, 1995).

Among the Kumauni caste groups the sex ratio is high for the Brahmins and Rajputs, indicating an excess of females over males in these two groups (Table 2). On the other hand, the Scheduled Castes (940) has a comparatively low sex ratio indicating an excess of males over females. Among the Bhotia tribal groups the

Marcha Bhotias (1005) have a high sex ratio, followed by the Dharchula Bhotias (993). The Juhar Bhotias (960) have a comparatively low sex ratio. The Kumauni caste groups have a higher sex ratio (998) than the Bhotia Tribals (981). The sex ratio for the population on the whole is on the higher side (992). The hill districts of Uttar Pradesh have a high sex ratio showing an excess of females over males in their gender composition. (Chamoli - 1059, Pithoragarh - 1031, Almora - 1106). This regional high sex ratio is a sharp contrast to the low sex ratio prevalent in almost all the other regions of Uttar Pradesh.

Masculinity Proportion

Masculinity proportion is another measure of sex composition. The present population has a masculinity proportion of 50.19 with the Kumauni caste groups and Bhotia tribal groups having a masculinity proportion of 50.04 and 50.47, respectively. The Brahmins, Rajputs and Marcha Bhotias have a masculinity proportion less than fifty whereas the Scheduled Castes, Dharchula Bhotias and Juhar Bhotias have higher masculinity proportion.

Age Composition

In less developed countries, continued high birth rates coupled with declining death rates have produced very young populations. The greater proportion of older people and the higher average age in developed than in developing countries are principally due to the long term decline in fertility. Lower birth rates mean relatively smaller number of people at the younger ages, with the reciprocal effect of relatively larger numbers at the older ages. Mortality reductions do not contribute to the aging of the population in spite of adding more people to the older segment of the population as mortality reductions are usually even greater during infancy and childhood than at older ages. Consequently it is typical of societies proceeding through the demographic transition that mortality control will lead to even younger populations.

The present population has an age distribution typical of populations with fertility on the higher side, with a high proportion of the population in the younger age groups. Forty per cent of the population is below 15 years of age and four per cent is 60 years and above.

Table 2 : Sex Ratios and Masculinity Proportion among the Kumauni Caste Groups and Bhotia Tribal Groups of Uttarakhand

Group	Sex Ratio	Masculinity P
I. Kumauni Caste Groups		
Brahmins	1019	49.52
Rajputs	1042	48.96
Scheduled Castes	940	51.53
Kumauni (Total)	998	50.04
II. Bhotia Tribal Groups		
Marchas	1005	49.87
Juhars	960	51.01
Dharchulas	993	50.15
Bhotia (Total)	981	50.47
Total	992	50.19

Among the caste groups of Kumaun the Brahmins have a comparatively lower proportion of population below 15 years (Table 3). Only 37 per cent of the Brahmins have a population below 15 years when compared to the Rajputs (44 per cent) and Scheduled Castes (43 per cent). Among the Bhotia tribal groups the Dharchula Bhotias has the highest proportion of the population below 15 years (43 per cent). Overall, the Bhotia tribal groups have a lower proportion of population below 15 (35 per cent) compared to the caste groups average (43 per cent). The population 65 years and above for the Kumauni caste groups and Bhotia tribal groups are only 3.9 per cent and 5.2 per cent, respectively.

India like a typical high fertility country has a significant proportion of its population in the young age group, thirty six per cent below 15 years (Sample Registration System, 1992). The age composition varies among Indian states signifying different fertility and mortality trends in them. Kerala has a much lower percentage of children below 15 years (29 per cent) compared to Uttar Pradesh (39 per cent). This young age structure variation between these two states can be accounted for by their substantive difference in birth rates, with Kerala having a much lower birth rate.

Table 3 : Age distribution - Kumauni Caste Groups and Bhotia Tribal Groups of Uttarakhand

Group	Below 15 yrs	15-59 yrs	60+ yrs
I. Kumauni Caste Groups			
Brahmins	276 37.55	420 57.14	39 5.30
Rajputs	385 44.45	448 51.73	33 3.81
Scheduled Castes	384 43.78	467 53.24	26 2.96
Kumauni (Total)	1045 42.17	1335 53.87	98 3.95
II. Bhotia Tribal Groups			
Marchas	124 31.87	240 61.69	25 6.24
Juhars	225 35.21	383 59.93	31 4.85
Dharchulas	144 43.50	172 1.96	15 4.85
Bhotias (Total)	493 36.27	795 58.49	71 5.22
Total	1538 40.08	2130 55.51	169 4.40

Dependency Ratios

Dependency ratios are another way of looking at the age composition of a population. The Total Dependency Ratio (TDR) is a measure of the age distribution of the population and describes the number of dependant persons that are supported by the active members of the population. A high Young Age Dependency Ratio (YADR) is found in developing countries corresponding to their high fertility whereas a comparatively higher Old Age Dependency Ratio (OADR) is to be seen in the developed countries or those countries who have reached the replacement level.

As seen in table 4 the Total Dependency Ratio is high for the population (73 per cent), this is characteristic of a population which has a high

Table 4 : Dependency Ratios and Index of Aging among the Kumauni Caste Groups and Bhotia Tribal Groups of Uttarakhand

Group	YADR	OADR	TDR	Index of Aging
I. Kumauni Caste Groups				
Brahmins	63.74	6.00	69.74	9.42
Rajputs	82.44	2.99	85.43	3.63
Scheduled Castes	80.00	2.70	82.70	3.38
Kumauni (Total)	74.72	3.84	79.56	5.07
II. Bhotia Tribal Groups				
Marchas	49.01	4.74	53.75	9.67
Juhars	56.53	4.02	60.55	7.11
Dharchulas	80.00	3.88	83.88	4.86
Bhotia (Total)	59.32	4.21	63.53	7.09
Total	69.56	3.98	73.54	5.72

proportion of the population below 15 years and above 60 years. The Rajputs (85) and the Scheduled Castes (82) have a high Total Dependency Ratio among the Kumauni caste groups. The Dharchula Bhotias also have a high Total Dependency Ratio (83). The Kumauni caste groups (79) have a significantly higher Total Dependency Ratio than the Bhotia tribal groups (63).

For all the population groups a significant proportion of the Total Dependency Ratio comprises of the YAD indicating that high fertility is prevalent in all these groups. Among the Kumauni caste groups the Brahmins (63) have a comparatively low YAD compared to the Scheduled Caste (80) and Rajputs (82). For the Bhotia tribal groups the Dharchula Bhotias have the highest YAD (80)

whereas the Marchas Bhotias and Juhar Bhotias have a much lower YAD of 49 and 56, respectively. The Bhotia tribal groups have a much lower YAD (59) compared to the Kumauni Caste groups (75).

The OAD is very low for all the population groups. The Brahmins have the highest OAD (6.0) whereas the Scheduled Caste have the least (2.7). The Rajputs (2.9) and Dharchula Bhotias also have low OAD. The Bhotia tribal groups have a slightly higher OAD (4.2) than the Kumauni caste groups (3.8).

Like in all other developing countries India too has a high overall total dependency ratio (82.5 in 1971) which is constituted of a high child dependency ratio (76.45 in 1971) and a low old age dependency ratio (6.12 in 1971). The dependency ratio for India in 1981 was 85.4, Kerala having a low dependency ratio of 73.8 whereas Uttar Pradesh had a high dependency ratio of 94.2 (1981 census). This is due to the higher proportion of children below 15 years in the state of Uttar Pradesh than Kerala. The dependency ratio for both the caste groups and the Bhotia tribal groups though high is much less than that of Uttar Pradesh, the reason could be due to lower fertility in these areas.

Index of Aging

Index of Aging is a measure describing the relative number of older people in the population. The index of aging is low in those populations in which a high proportion of the population is below 15 years. The index of aging for India in 1971 was a low 8 (1971 census). The present population having a low index of aging (5.7), with the Bhotia tribal groups having a higher index of aging (7.0) than the Kumauni caste groups (5.07).

The Marchas (9.6 per cent) among the Bhotia tribal groups and the Brahmins (9.4 per cent) among the caste groups have a comparatively higher Index of Ageing indicating a larger percentage of older people in these groups. The Scheduled Castes (3.3 per cent), the Rajputs (3.6 per cent) and Dharchula group of Bhotias (5.2 per cent) are the groups having a low Index of Aging.

Education

Education appears to be the most important factor influencing people's demographic behav-

iour. The important vital events, fertility and mortality, vary with the education attainment of the population or community.

The Crude Literacy Rate for the population on the whole is quite high (61) with a eight point difference existing between the two major groups, the Kumauni caste groups (58) and the Bhotia tribal groups (66). Table 5 shows that among the Kumauni caste groups the Brahmins have the highest Crude Literacy Rate (71.7) whereas the Scheduled Castes have the lowest Crude Literacy Rate (50). Among the Bhotia tribal groups, the Juhar Bhotias have the highest Crude Literacy Rate (74.4) whereas the Dharchula Bhotias have a very low Crude Literacy Rate (54).

Table 5 : Crude Literacy Rate among the Kumauni Caste Groups and Bhotia Tribal Groups of Uttarakhand

<i>Group</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
I. Kumauni Caste Groups			
Brahmins	85.71	57.95	71.70
Rajputs	75.47	39.36	57.04
Scheduled Castes	67.03	32.23	50.17
Kumauni (Total)	75.40	42.48	58.95
II. Bhotia Tribal Groups			
Marchas	72.68	53.84	63.23
Juhars	84.66	63.89	74.49
Dharchulas	71.08	36.96	54.07
Bhotias (Total)	77.98	54.38	66.29
Total	76.32	46.67	61.55

There is a very steep difference between the crude literacy rate for male (76.3) and female (46.6) for the total population. For the male population, the Brahmins (85.7) among the Kumauni caste groups and the Juhar Bhotia (84.6) among the Bhotia tribal groups have the highest Crude Literacy Rates. The Scheduled Castes (67) have the lowest male Crude Literacy Rate. The Bhotia tribal groups have a slightly higher male Crude Literacy Rate (77.9) than the Kumauni caste groups (75.4).

For the female population two groups, the Scheduled Castes (32.2) and Dharchula Bhotias (36.9) have very low crude literacy rate. The Brahmin and Juhar Bhotias are in a comparatively better position for female crude literacy rate. There is a substantial difference in the crude literacy rate for females in the major groups with the Bhotia females having a higher crude literacy rate (54.3) than the Kumauni caste groups (42.4).

Literacy Rate - Husband

As seen in table 6 only about one per cent of Brahmin husbands are illiterate, whereas 11 per cent of Rajput husbands and 32 per cent of Scheduled Caste husbands are illiterate. Among the Bhotia tribal groups 22 per cent of the Marcha Bhotia husbands are illiterate, this is closely followed by the Dharchula Bhotias (20 per cent) whereas only 7 per cent of the Juhar Bhotia husbands are illiterate. Between the two major groups, the Kumauni caste groups (15.9) have a slightly higher percentage of illiterate husbands than the Bhotia tribal groups (14.9).

The educational level of husbands also vary substantially. Among the Kumauni caste groups the Brahmin husbands have the maximum percentage of graduates (10.37) and the Scheduled Caste have the least (5 per cent). Among the Bhotias the Dharchula Bhotias have the least

percentage of graduates.

Literacy Rate (Wife)

Table 7 shows that for the population on the whole the percentage of wife's who are illiterate is quite high (64 per cent) and the level of education too is low, with only 2.5 per cent graduate wife's. Among the literate wife's 52 per cent have only primary level education. The two major groups show that the Bhotia Tribals are in a better position (58 per cent illiterate) than the Kumauni caste groups (68 per cent illiterate).

The wife's in the Kumauni caste groups show caste based education differentials with the high caste Brahmins having a much lower percentage of illiteracy (48 per cent) than the Scheduled Caste (83 per cent). Among the Bhotia tribal groups the Juhar Bhotias have the least percentage of illiterates (44 per cent) and the Dharchula Bhotias have the highest (79 per cent).

Table 6: Educational level of husband of Kumauni Caste Groups and Bhotia Tribal Groups of Uttarakhand

Educational level	Kumauni Caste Groups				Bhotia Tribal Groups				Total
	Brahmin	Rajput	S.Castes	Total	Marchas	Juhars	Dharchulas	Total	
Illiterate	2	19	51	72	18	9	12	39	111
	1.48	11.94	32.48	15.96	22.78	7.37	20.00	14.94	15.58
Primary	16	26	39	81	14	31	14	59	140
	11.85	16.35	24.84	17.96	17.72	25.40	23.33	22.60	19.66
Middle School	13	16	12	41	3	5	4	12	53
	9.62	10.06	7.64	9.09	3.79	4.09	6.66	4.59	7.44
High School	69	64	38	171	15	49	20	84	255
	51.11	40.25	24.20	37.91	18.98	40.15	33.33	32.18	35.81
Intermediate	21	21	12	54	11	13	6	30	84
	15.55	13.20	7.64	11.97	13.92	10.65	10.00	11.49	11.79
Graduation	7	9	3	19	11	10	3	24	43
	5.18	5.66	1.91	4.21	13.92	8.19	5.00	9.19	6.03
Post Graduate	7	4	2	13	7	5	1	13	26
	5.18	2.51	1.27	2.88	8.86	4.09	1.66	4.98	3.65

Table 7: Educational level of wife among Kumauni Caste Groups and Bhotia Tribal Groups of Uttarakhand

Educational level	Kumauni Caste Groups				Bhotia Tribal Groups				Total
	Brahmin	Rajput	S.Castes	Total	Marchas	Juhars	Dharchulas	Total	
Illiterate	75	136	155	366	58	68	184	184	550
	48.07	71.95	83.33	68.92	63.73	44.73	58.22	58.22	64.93
Primary	43	31	17	91	10	43	64	64	155
	27.56	16.40	9.13	17.13	10.98	28.28	20.25	20.25	18.29
Middle School	4	3	2	9	2	5	1	8	17
	2.56	1.58	1.07	1.69	2.19	3.28	1.36	2.53	2.00
High School	22	11	8	41	14	31	3	48	89
	14.10	5.82	4.30	7.72	15.38	20.39	4.10	15.18	10.50
Intermediate	4	3	2	9	2	3	0	5	14
	2.56	1.58	1.07	1.69	2.19	1.97	0.00	1.58	1.65
Graduation	4	3	2	9	5	2	0	7	16
	2.56	1.58	1.07	1.69	5.49	1.31	0.00	2.21	1.88
Post Graduate	4	2	0	6	0	0	0	0	6
	2.56	1.05		1.12					0.70

Income

Income wise distribution of households show that whereas only 8.9 per cent of Brahmin households have annual income below Rs 7000, around thirteen per cent of Scheduled Caste households have annual income below Rs. 7000. Likewise the proportion of Brahmin households at the higher income levels is more, around sixteen per cent of Brahmin households annual income is above Rs. 21001 whereas thirteen per cent of Rajput households and only around three per cent of Scheduled Caste households have an annual income above Rs. 21001.

Among the Bhotia tribal groups the Dharchula Bhotias have the maximum percentage of households below an annual income of Rs. 7000 (13 per cent) and only around six per cent of their households have an annual income above Rs. 21001. Twenty five per cent of the Marcha Bhotia households and sixteen per cent of Juhar Bhotia households have an annual income above Rs. 21001 (Table 8).

Rajputs too have a significant proportion of husbands employed in the services sector (51 per cent). The Scheduled Caste husbands mainly work as labourers (43 per cent), followed by the service sector (26 per cent).

Among the Bhotia tribal groups only 27 per cent husbands are in the services, this is in contrast to the 44 per cent of the Kumauni caste groups. Ten per cent of Bhotia tribals are involved in animal husbandry, sixteen per cent in agriculture, 19 per cent in business and only two per cent as labourers (Table 9).

In the hill region small land holdings, hard terrain, adverse weather conditions and poor irrigation facilities has made agriculture in these areas not so viable causing the local population to look for other alternatives. Hence in these areas the menfolk look for employment opportunities mainly in the service sector and do migrate to the plains, if need be. The Bhotia tribal groups traditional occupations, mainly trade and animal husbandry, has since 1962 come to a standstill

Table 8 : Income-wise distribution (number and percentage) of families among Kumauni Caste Groups and Bhotia Tribal Groups of Uttarakhand

Group	Income Group					Total
	Below 7000*	7001-14000	14001-21000	21001-28000	Above 28001	
I.Kumauni Caste Groups						
Brahmins	14 (8.97)	59 (37.82)	58 (37.18)	11 (7.05)	14 (8.97)	156
Rajputs	19 (10.05)	82 (43.39)	62 (32.80)	15 (7.94)	11 (5.82)	189
S. Castes	25 (13.44)	116 (62.37)	39 (20.97)	1 (0.54)	5 (2.69)	186
Kumaunit (Total)	58 (10.92)	257 (48.40)	159 (29.94)	27 (5.08)	30 (5.65)	531
II.Bhotia Tribal Groups						
Marchas	10 (10.99)	37 (40.66)	21 (23.08)	8 (8.79)	15 (16.48)	91
Juhars	19 (12.50)	70 (46.05)	40 (26.32)	17 (11.18)	6 (3.95)	152
Dharchulas	10 (13.70)	39 (53.42)	19 (26.03)	2 (2.74)	3 (4.11)	73
Bhotia (Total)	39 (12.24)	146 (46.20)	80 (25.32)	27 (8.54)	24 (7.59)	316
Total	97 (11.45)	403 (47.58)	239 (28.22)	54 (6.38)	54 (6.38)	847

*Annual income

Occupation (Husband and Wife)

The principal occupation for the present population appears to be in the service sector (38 per cent), followed by agriculture (13.8 per cent). Twelve per cent of the husbands are employed as labourers. The Brahmin husbands have the highest percentage who occupies in the service sector (56.4 per cent), followed by the agriculture sector (20.5 per cent). Only 0.64 per cent of Brahmin husband's work as labourers. The

with the closing of the border with Tibet. Since then being listed under the Scheduled tribes they have been availing opportunities in the service sector.

As can be observed in table 10 the wife's occupation is mainly in the traditional sector with predominance in agriculture and weaving. A very small percentage is involved in the services mainly as school teachers and anganwadi workers. For the caste groups farming appears to be the main occupation. As the men's quest for employment

Table 9 : Husband's occupation among Kumauni Caste Groups and Bhotia Tribal Groups of Uttarakhand

Group	Business	Agriculture	Service	Animal Husbandry
I.Kumauni Caste Groups				
Brahmins	10	32	88	1
	6.41	20.51	56.41	0.64
Rajputs	19	26	97	-
	10.05	13.76	51.32	-
Scheduled Castes	4	6	50	-
	2.15	3.23	26.88	-
Kumauni (Total)	33	64	235	1
	6.21	12.05	44.26	0.19
II.Bhotia Tribal Groups				
Marchas	12	24	27	12
	13.19	26.37	29.67	13.19
Juhars	35	21	42	8
	23.03	13.82	27.67	5.26
Dharchulas	14	8	18	12
	19.18	10.96	24.66	16.44
Bhotia (Total)	61	53	87	32
	19.30	16.77	27.53	10.13
Total	94	117	322	33
	11.10	13.81	38.02	3.90

Table 10 : Wife's occupation among Kumauni Caste Groups and Bhotia Tribal Groups of Uttarakhand

Group	Farming	Weaving	Farming & Weaving	Others
I.Kumauni Caste Groups				
Brahmins	66.66	0.64	-	-
Rajputs	65.60	-	-	1.05
Scheduled Castes	83.87	-	-	4.30
Kumauni (Total)	72.31	0.18	-	1.88
II.Bhotia Tribal Groups				
Marchas	-	4.39	91.2	-
Juhars	1.97	51.31	34.21	-
Dharchulas	1.36	60.27	35.61	-
Bhotia (Total)	1.26	39.87	50.94	-
Total	45.80	14.99	19.00	1.18

entails their migration out of the region majority of the farm work falls on the women. Consequently this region has a high women's labour force than compared to the rest of Uttar Pradesh. The Hill region has the highest female work participation rate (32.8) compared to other regions of Uttar Pradesh : Bundelkhand -24.4, East -16.5, Central - 12, Western -5.1. (State of Health in Uttar Pradesh, 1995).

Among the Bhotia Tribal groups the princi-

pal women's occupation is farming and weaving carpets, shawls etc. In fact this traditional occupation of weaving is very prevalent in all the Bhotia groups. Hence women's labour force participation rates among the Bhotias is very high (around 88 per cent). Around ninety per cent of Scheduled Caste women are employed in some activity. The other upper castes have a lower percentage of women employed, sixty nine per cent for the Brahmins and sixty eight per cent for the Rajputs.

A comparative look at education, occupation and other development factors of India, Kerala, Uttar Pradesh, the hill region of Uttar Pradesh is vital. Uttar Pradesh is one of the most educationally backward states in the country. The literacy rate (for the population age 7 years and above) according to the 1991 Census was 42 per cent in the state compared to 52 per cent in the country. The literacy rates were 56 per cent for males and 25 per cent for females in Uttar Pradesh compared to 64 per cent and 39 per cent for males and females, respectively for the whole of India.

Kerala on the other hand is one of the more progressive states of India. According to Mahadevan et al. (1992) Kerala progressed more in the field of infrastructure and social development compared to even Punjab and was far ahead of Uttar Pradesh. "The social dimensions where Kerala emerged as the most progressive state are male and female literacy, occupational mobility, employment of women, narrowing down of differences between rural and urban areas, negligible child labour activities, extensive utilization of modern health delivery system, longest life span, lowest infant mortality rate (highest degree of physical quality of life index) and small family norm." In his view the favourable infrastructural facilities coupled with social development contributed to the rapid decline in fertility, mortality and growth of population in Kerala. In the absence of adequate social and economic development and also inadequate infrastructural facilities Uttar Pradesh continued to be backward.

The state of Uttar Pradesh is large and heterogeneous and can be divided into five regions: Hill, Western, Central, Eastern and Bundelkhand. As far as development and infrastructure is considered the hill region is in a comparatively better position than the other regions of Uttar Pradesh.

The number of allopathic hospitals/Dispensaries including Primary Health Centers per lakh of population is 10.4 for the hill region and only 3.7 for Uttar Pradesh. This could be due to the low density of population in the hills.

The hill region has the highest number of literates in Uttar Pradesh, 59.6 per cent to the state's 41.6 per cent and the number of female literate (42.9 per cent) is also much higher than the other regions. The number of schools per lakh of population (142), the length of PWD roads per lakh of population (196.7 km) and per capita power consumption (232.1 kwh) is the highest among all regions in Uttar Pradesh (Annual Plan, 1995-96). However the percentage of net area irrigated to net area sown is the least for the hill region (33.7) showing poor irrigation facilities in this region.

This disparity in development and infrastructure between Kerala and Uttar Pradesh and also between the hill region of Uttar Pradesh *vis a vis* the other regions of Uttar Pradesh plays a role in the diverse demographic scenario prevalent in these states/regions.

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