Some Characteristics of Migration in Mountain Society:·Case Studies from Garhwal Himalaya

S.C. SINGH*

Migration is recognized as one of the most important areas of contemporary research in population. The word migration denotes movement of population with the change of residence. However, the operational definition of migration require both temporal and locational criteria. The phenomenon of migration has recorded phenomenal increase and this is quite interesting and alarming as well in the society of Garhwal Himalaya. Migration is one of the most conspicuous processes of the modern world. With the twin processes of industrialization and urbanization a majority of rural population has made a shift from the rural areas to various towns. India's population has been characterised as non-mobile, traditional and rural-oriented, however, recently internal migration has recorded phenomenal increase. Bose reported that over 30 percent of India's population was born outside the town or village in which they resided in 1961. In the rural society of Garhwal the phenomenon of migration is in positive since which, interned obviously to better educational and economic environment, and job opportunities in this mountainous part of the country. Here we have experienced seasonal, rural-urban and outmigration in different parts of the region.

THE GARHWAL HIMALAYA

Garhwal Himalaya comprises five districts of Uttar Pradesh, Chamoli, Pauri, Uttarkashi, Tehri and Dehradun. The Region is positioned almost centrally in the long sweep of the mighty Himalaya, between 29°26'N and 31°28'N and 77° and 9'E to 80°6'E. Its estimated area is 30090 km², which is more than a half (90 percent) of the U.P. Himalaya and 7.1 percent of the total Indian Himalaya. On account of the abrupt altitudinal variations (ranging from 300 m in terai to 7817 m at Nanda Devipeak), and subsequent climatic and edaphic controls, the Region shows remarkable heterogeneity in all its natural and cultural environments. Because of its unique central position in the Himalayan Range and situation of holy shrines Badri Nath, Kedar Nath, Gangotri, Yamunotri and Hemkund in this Region, it has witnessed very interesting patterns of cultural mileu and impact of cross culture in particular.

SEASONAL MIGRATION

Seasonal migration in the higher caste in Tehri Garhwal at Jal-Kur Basin is a traditional interesting factor in the study of migration at this Region. This throws light towards the dominance of the Hindu tradition still living in this part of the country. Though Garhwal Region

*Dr. S.C. Singh is the Head, Department of Geography, Garhwal University Campus, Srinagar (Garhwal), U.P., India.

presents a generalised problem of migration but this basin-Jal-Kur is peculiar to itself, in relation to India. The males of this area migrate every year, to some specific parts in the plains to practice their part-time vocation of astrology. During October to May (Agricultural off season) they beg for ritual alms and sell the Ganga Jal. In local tongue astrologers are called 'Phigwals' and Ganga Jal Sellers as 'Pan-Baychu'. They are the strong followers of Lord Krishna, Nagraja and accept grains and cash from the donors. This activity is performed in the winter months after that they return to their parent villages to pursue their agriculture.

This case study is based on the 39 households of 3 villages - Nukhem, Kandiyal Gaon and Paniyala (Tehri and Uttarkashi districts) selected on the basis of purposive sampling, keeping the historicity, rate of outmigration, wandering routes of migrants and changing nature of migration pattern, the survey was conducted and the observations are as under:

(i) Mythological interpretation is that Ramoli region was ruled by Gangu Ramola in olden times, where the neighbouring areas were under the sway of Nag dynasty. The Nagraja (Lord Krishna) was worshipped in the area, excluding Ramoli Patti. Gangu Ramola was a Buddhist; legend has it that Lord Krishna, on his way back from his pilgrimage to Badrinath, came to Ramoli and begged Gangu Ramola to give him some land for founding a Nag temple. Gangu Ramola turned down this request. Thereupon Lord Krishna laid a curse on Gangu Ramola that he and his people would turn mendicant-beggars like himself.

(ii) Geographical interpretation of this area shows a bleak mountainous profile. Agriculture is the main source of livelihood. Only marginal farming is possible in a year with single Kharif Crop, which provides food for 3-6 months in a year. There are not other sources for supportive economy; therefore, people turn to astrology, Sale of holy water and seeking of alms for their living. In the period when transport facilities were not existing in the region these persons confined their off-seasonal forage to areas within Garhwal, but with the development of transportation their area of influence has been extended most reaches of the country. Generally they migrate in groups, with holy water and 'Bhrigu Sanhita'.

(iii) According to Ritual interpretation, Gangajal is recognised as a high position in the ritual and ceremonies of the Hindu faith from times immemorial. Gangajal is used from the birth ceremony to the last rites of a Hindu. King Ashoka and others also used Gangajal for the same purpose. This clearly indicates the need of holy water to the people of the plains. Water sellers from this area went upto Delhi in the Ashoka times. Basically, the trade of Gangajal started for Rameshwaram Temple as priests from there used to come across the length of the country to Gaumukh to take back holy water. After this, people of this area began to bring water to Haridwar for ritual use by others. Then this became the vocation for the people of the area. During Panwar reign (1300-1803 A.D.), in Tehri, the water sellers made a substantial income; they had to pay a small part of this to the Maharaja as Tax. It is to be noted that Gangajal sellers

are male members from both the Brahmin and Rajput castes whereas Astrology is confined to Brahmins of the area only.

RATE OF SEASONAL MIGRATION

The nature of migration and its consequential rate, vary in a genera- lised migration, region from place to place, on account of the characteris- tics of the place, and on account of the individual differences between people. The rate of migration depends upon factors like the attitudes of participants (i.e., innovative or conservative), location of place, the particular economic needs of the migrant, utility of the place, and the distance between the place of origin and destination, along-with modes of transport available. In the study area the factors responsible for the migration are not only religious but also population pressure on agriculture. The quality of forest resources also determines the rate of migration.

(A) In areas where non-fodder species are dominant, animal husbandry is not successful there. This, being a major factor of dependence for the mountain people, animal husbandry is replaced by occupations like astrology, Gangajal Trade, etc. Thus species of trees have a direct relationship with migration. This factor has been observed in the study area.

(B) Continuous growth of population is the most dominant factor of encouraging seasonal migration in the study area as is clear from Table 1.

Table 1
Population Growth of Sample Villages

Village	Year 1961	Year 1971	Growth Total	Percent
1. Mukhem	753	861	108	14.34
2. Kandiyal Gaon	877	1171	294	33.65
3. Paniyala	451	520	69	15.29

Table 1 shows that population growth is more in Kandiyal Gaon, Paniyala and Mukhem in comparison to other villages in Tehri District. Census 1961-71 figures for the district as a whole are 14.28 percent and 1971-81 shows an increase of 24.27 percent. The estimated percentage for the related period of the above villages are 22 percent and 29 percent respectively. Thus the pressure of population is the main factor which has turned to alternate remedy of income from astrology and holy water trade, and seasonal migration became the alternate pattern of life to the people of the study area. A researcher has made the well-founded observa- tion that a landless householder has priority in favour of migration, in comparison to arable farming.

Table 2 shows that 84.44 percent of the total adult male population of the study area is outmigrant. Phigwals and Panbechus constitute 83.65 percent of the outmigrants.

Table 2
Seasonal Migration Rate of Selected Villages 1980

	Village	No. of Studied household	Outmigrant as percentage of adult males	Seasonal Migrants as percentage of outmigration
1.	Mukhem	17	96.79	90.00
2.	Kandiyal Gaon	9	75.41	78.16
3.	Paniyala	13	81.23	82.79
	Total Average	-	84.44	83.65

(C) The itinerary of seasonal migrants like Phigwal is not fixed. It is irregular and the pattern is that of step migration. Now they prefer towns in place of villages owing to the higher paying capacity of developed settlements. But water sellers and astrologers have fixed itineraries and definite points of destinations. Their clients (Jajmans) are traditional from father to son on both sides. Field study shows that migrants from Kandiyal Gaon are bound for Ahmedabad, those from Mukhem to Bombay and from Paniyala to Chhatisgarh and Bilaspur. However, some of the migrants keep changing their itinerary and destination. Some of the families have permanently migrated to places like Ahmedabad, Bombay and Bilaspur, etc.; but they follow their traditional occupations though they have cut-off contacts from their native villages.

(D) Education is the changing factor on the traditional occupation of seasonal migrants in this area. Educated members from traditional families are turning to government services. Now the educated members are giving up their traditional occupations in favour of job in the army, industry and government services, but traditional occupations still have a hold over the illiterate people of the study area.

RURAL–URBAN MIGRATION

The present study deals to find out the patterns of rural–urban migration process from the rural society of the Garhwal Himalaya. For the purpose 291 outmigrants of two villages (Domaila 165 and Kamdai 126) of Bironkhal Block of District Pauri Garhwal have been selected at micro level. Out of the two villages one is at road side with developed infrastructure, while the next one is at remote without any infrastructural development.

We have no specific information as to when the migration started from rural to urban in these selected villages. But the data about out-migration in respect of the return migrants of the villages shows that the process has started much before but around 1920. Table 3 reveals that since 1920 the rate of outmigration has been increasing in each of the decades -- this is further supported by the data related to the current migrants. The increasing trend of outmigration in every subsequent decade is among the present migrants. Out of 291 migrants, 3.78 percent

migrated before 1940, whereas 30.24 percent during 1971-80 (Table 4) which is about eight times more. Thus villages have a similarity in respect of outmigration in each of decades. Migrants from the Garhwal Himalaya have been scattered all over the country living for themselves as well as for their dependents left behind in the villages. The data collected from the sample villages shows that almost all migrants from both the villages have moved within the country (Table 5). The maximum 38.14 percent concentration of migrants is at Delhi. The second highest concentration is at Lucknow. A large number of migrants is employed in armed services. The point that has come to notice is that migrants from both villages have moved to the urban areas rather than to the rural areas as the number of the rural to rural migrants is negligible (2.74 percent), which clearly indicates the low pace of rural development and low participation in agriculture by the male of rural Garhwal. The high rate of rural to urban migration shows the higher pace of urban development.

Table 3
Distribution of Return-migrants According to the Year of Outmigration

Year of out-migration	Domaila	Kamdai	Total
Before 1920	0	1 (4.55)	1 (1.52)
1921-30	4 (9.09)	2 (9.09)	6 (9.09)
1931-40	8 (18.18)	4 (18.18)	12 (18.18)
1941-50	10 (22.73)	8 (36.36)	18 (27.27)
1951-60	14 (31.82)	5 (22.73)	19 (28.79)
1961-70	8 (18.18)	2 (9.09)	10 (15.15)
Total	44 (100.00)	22 (100.00)	66 (100.00)

Table 4
Distribution of Present Outmigrants According to the Year of Emigration

Year of out-migration	Domaila	Kamadai	Total
Before 1940	8 (4.85)	3 (2.28)	11 (3.78)
1941-50	26 (15.76)	17 (13.49)	43 (14.78)
1951-60	35 (21.21)	32 (25.40)	67 (23.02)
1961-70	46 (27.88)	36 (28.57)	82 (28.18)
1971-80	50 (30.3)	38 (30-16)	88 (30.24)
Total	165 (100.00)	126 (100.00)	291 (100.00)

Table 5

Distribution of Migrants According to Their Place of Work (Statewise)

	State	Domaila	Kamdai	Total
1.	Assam	0 (0.00)	3 (2.38)	3 (1.03)
2.	Bihar	1 (0.60)	0 (0.00)	1 (0.34)
3.	Chandigarh	0 (0.00)	1 (0.79)	1 (0.34)
4.	Delhi	59 (35.76)	52 (41.27)	111 (38.14)
5.	Gujrat	1 (0.60)	2 (1.59)	3 (1.03)
6.	Haryana	17 (10.32)	3 (2.38)	20 (6.87)
7.	Himachal Pradesh	1 (0.60)	3 (2.38)	4 (1.38)
8.	Jammu and Kashmir	3 (1.82)	1 (0.79)	4 (1.38)
9.	Madhya Pradesh	2 (1.22)	1 (0.79)	3 (1.03)
10.	Maharashtra	11 (6.67)	7 (5.56)	18 (6.19)
11.	Mysore	0 (0.00)	1 (0.79)	1 (0.34)
12.	Punjab	3 (1.82)	9 (7.15)	12 (4.13)
13.	Rajasthan	1 (0.60)	2 (1.59)	3 (1.03)
14.	Uttar Pradesh	32 (10.30)	18 (14.29)	50 (17.19)
15.	West Bengal	1 (0.60)	0 (0.00)	1 (0.34)
16.	Military Services	26 (15.76)	19 (15.08)	45 (15.46)
17.	Iraq	1 (0.60)	1 (0.79)	2 (0.69)
18.	Unspecified	6 (3.64)	3 (2.38)	9 (3.09)
	Total	165(100.00)	126(100.00)	291(100.00)

The hypothesis of spatial distance may deter migration is not sup-
ported by the data here as the outmigrants from the sample villages have
migrated to far-off states (Table 5). Stauffer (1940) also holds that
distance is not as important a factor as the availability of economic
opportunities. However, the hypothesis of less educated people cover
less distance as compared to more educated ones in the case of our sample
migrants, who have moved to far-off places in spite of their low education.

The nature of employment and the distance covered by the migrants
determine the duration of their stay which is of three types -- short-
term, long-term and permanent. Short-term migration covers particularly
those who move in search of seasonal employment and returned to the vil-
lages during the peak seasons of agriculture and again leave the villages
during slack seasons are called 'circular' migrants. But such is not the
case in the study area. Long-term migration is relatively a permanent
move for full-time jobs throughout the year by the villagers. They re-
turn to the villages only during vacations for a short period. Majority

of the migrants from our sample villages are in this category. Permanent
migration is in negligible number (3.09 percent) of such migrants.

After reviewing the literature it was hypothesized that higher is
the caste, the greater is the number of migrants. The findings of the
sample villages confirm this hypothesis (Table 6). This phenomenon has
been observed by D'Souza (1977) also. This has also been observed that
migrants from our sample villages initially move singly and are joined by
their family members after they settle down with economic stability in
urban areas. Table 7 reveals the facts of the study area.

Table 6
Number of Outmigrants per Household in Each Caste Group

	Domaila			Kamdai		
	Number of households	Number of migrants	Proportion against each household	Number of households	Number of migrants	Proportion against each households
Brahmin	11	16	1:1.45	38	58	1:1.52
Rajput	130	141	1:1.08	44	46	1:1.04
Harijan	13	8	1:0.61	28	22	1:0.79
Total	154	165	1:1.07	110	126	1:1.14

This table also includes 30 absentee households of both the villages.

Table 7
Distribution of Migrants According to Present move

Move	Domaila	Kamdai	Total
Individual	101 (61.21)	68 (53.97)	169 (58.08)
Household	58 (35.15)	55 (43.65)	113 (38.83)
Unspecified	6 (3.64)	3 (2.38)	9 (3.09)
Total	165(100.00)	126(100.00)	291(100.00)

The hypothesis which was tested if the lower caste migrants move
with their households or the higher caste migrants move individually. In
the sample villages this hypothesis sustained 50 percent; a good number
of high caste migrants (Brahmins) moved with their households. Whereas
the second highest 45.45 percent with the households is among the Hari-
jans. The number of Rajputs comes the lowest in number (Table 8). This
indicates that the highest and the lowest castes have higher representa-
tion in the household move than that of the middle caste. This is because
the Rajputs have much land ownership in comparison to Brahmins and Hari-
jans who possess less land or no land (The Harijans).

Table 8
Caste-wise Distribution of Migrants who moved Individually or with their Households

Caste	Domaila			Kamdai		
	Individually	With households	Total	Individually	With households	Total
Brahmin	3 (18.75)	13 (81.25)	16 (100)	29 (50.00)	29 (50.00)	58 (100)
Rajputs	99 (70.21)	42 (29.79)	141 (100)	30 (65.22)	16 (34.78)	46 (100)
Harijan	5 (62.50)	3 (37.50)	8 (100)	12 (54.55)	10 (45.45)	22 (100)
Total	107 (64.85)	58 (35.15)	165 (100)	71 (56.35)	55 (43.65)	126 (100)

The study clearly indicates that process of chain migration is there as new migrants follow the old migrants who had moved earlier from the villages. These migrants are sponsored by family members, relatives, villagers and so on. Table 9 indicates this factor, clearly. The migrants who did not receive any sponsorship went to the army. Here, these soldiers become the source of inspiration to the potential migrants. Visits of migrants to native villages keep on maintaining ties with the families at their place of origin as many of them move alone and leave family members in the villages. They visit their native villages periodically (Table 10). Majority of the migrants visit their rural households once in a year, for a period of one month. Army people's visit duration is generally of two months at a stretch. Some of them get leave twice in a year for shorter durations. In spite of this they visit their family to attend various family functions and attending the ailing persons. It is also observed that frequency of visits is less in case of those who migrated with wives and children and left parents at home and also in the case of migrants who left no person in the village. The length of service and economic stability of the migrants increasingly affect their visit to rural households.

RURAL OUTMIGRATION

The study of outmigration is more complex than that of the other components responsible for population change because it involves at two places, the place of origin and the place of destination. In order to study the trend in outmigration from rural Garhwal a demographic survey has been conducted selecting 13 villages in the Pauri Tehsil of Garhwal district near Srinagar (Garhwal) town using a schedule for obtaining information on household structure, migration record, fertility and mortality record in order to study the existing trends of fertility and other components of population change. The selected villages are from three categories:

Table 9
Sponsorship of Migrants

Sponsored by	Domaila	Kamdai	Total
Family members	56 (33.94)	55 (43.65)	111 (38.14)
Close relatives	29 (17.58)	36 (28.57)	65 (22.34)
Villagers	30 (18.18)	8 (6.35)	38 (13.06)
Distant relatives	9 (5.45)	3 (2.38)	12 (4.12)
None	35 (21.21)	21 (16.67)	56 (19.25)
Unspecified	6 (3.64)	3 (2.38)	9 (3.09)
Total	165(100.00)	126(100.00)	291(100.00)

Table 10
Visits of Migrant to Native Villages

Visits	Domaila	Kamdai	Total
Quarterly	12 (7.27)	6 (4.76)	18 (6.19)
Half-yearly	20 (12.12)	10 (7.94)	30 (10.31)
Yearly	78 (47.27)	63 (50.00)	141 (48.45)
Once in two years	21 (12.73)	22 (17.46)	13 (14.78)
Once in five years	28 (16.97)	22 (17.46)	50 (17.18)
Never	6 (3.64)	3 (2.38)	9 (3.09)
Total	165(100.00)	126(100.00)	291(100.00)

Table 11
Migration Rates in Three Type of Villages According to Castes

Caste Group	Type of Villages			Total
	Road side	At Higher Elevation	In Valleys	
Brahmins	40.06	38.08	38.41	38.72
Rajputs	24.04	24.07	23.57	24.23
Scheduled Castes	11.74	14.69	7.41	12.04
Others	4.00	19.14	23.26	14.73
Total	23.91	29.95	25.50	26.50

(i) Villages on the road side, (ii) Remote villages at higher eleva-
tion, (iii) The remote village in the valley. The migration section of
the schedule included question on age, sex, education, occupation, place
of migration, year of migration, factors responsible for migration, fac-
tors responsible for migration, type of family and occupation prior to
and after the migration for each migrant of a household. This study is
concerned with the current residential status of persons, hence it does
not include information on return migration.

FINDINGS OF STUDY

Type of Villages and Migration

The total population of surveyed household is 3427, out of which
the total migrants are 908. The migration rates in the villages are
23.91 percent (Road side villages), 29.95 percent (Remote villages at
higher elevation) and 25.50 percent (Remote villages in the valleys)
with the overall migration rate of 26.50 percent. This indicates that
highest rate of migration is recorded at high elevation remote villages
followed by remote villages in the valleys and road-side villages respec-
tively. The situation is most acute in the highland remote villages.
This explains the highest migration in remote highland villages. The
road-side villages explain the lower migration rate as they are ideal
for starting small business and advantage of visiting the nearly towns
to work and return home on the same day.

Caste and Migration

In the rural set-up, caste plays a dominant role in the determina-
tion of occupation, education, ownership of land and economic status.
Table 11 represents the migration rate according to different castes in
the study area. It reveals that migration rate is highest in Brahmins
and lowest in scheduled castes. The existence of this pattern in migra-
tion rate may be due to different factors such as education, possession
of land, social contacts and the like.

Land Holding and Migration

Possession of land is one of the most important factors for the
study of outmigration. The unit of land is 'Nali' a local unit of
measurement (1 Acre = 20 Nalis). The analysis of Table 12 explains that
as the size of land possession increases, the migration rate also in-
creases. The highest migration comes for 15-24 land group and the lowest
migration is for no land group. Thus the possession of land factor also
cooperates higher caste migration factor in the present study.

Economy and Migration

The economic status of a household has been estimated using the
parameters of per capita income, housing condition, possession of presti-
gious goods and consumption of nutritional food stuffs by assigning appro-
priate weightage to them. The categorization of monthly economic status

Table 12
Migration Rates in Three Types of Villages According to Land Possession

Land Possession Group	Type of Villages			Total
	Road side	At Higher Elevation	In Valleys	
No-land	10.70	18.82	15.63	13.25
– 4 Nali	24.11	28.19	4.55	24.56
5 – 9 Nali	20.00	27.92	28.72	25.18
10–14 Nali	28.89	31.62	27. 2	29.76
15–24 Nali	43.46	27.18	30.47	34.38
25 and above Nali	25.31	41.09	18.69	31.41
Total	23.91	29.95	25.50	26.50

Source: Field Survey.

Table 13
Migration Rates in Three Types of Villages According to Economic Status

Economic Status	Type of Villages			Total
	Road side	At Higher Elevation	In Valleys	
Very Low	25.00	9.09	–	14.04
Low	13.04	20.16	14.89	16.79
Middle	18.70	24.94	26.40	22.99
High	28.91	35.72	25.61	30.52
Very High	15.28	43.90	40.00	31.61
Total	23.91	29.95	25.50	26.50

Source: Field Survey.

is as: (i) Rs. 25/-, (ii) Rs. 25–49, (iii) 50–99, (iv) Rs 100–199,
(v) Rs. 200 and above per capita income of household. The persons fall-
ing in the group are given in Table 13. It reveals that there is posi-
tive association between the level of economic status and the rate of
migration in all the three types of villages, except type 1 village,
where the migration rate for economic status group (even if very high)
is less than that of high top level. Table 13 does not conclude whether
the migration has increased the economic status of the household or higher
economic status is responsible for higher migration.

CONCLUSION

The foregoing analysis and discussion of all these case studies of migration clearly bringout the prime factors responsible for the seasonal, rural urban and outmigration in the study are pressure of population on limited agricultural land, dominance of Hindu and British rules, impact of forest species, demographic factors, impact of education, difficult mountain terrain life, situation of settlements, caste structure, nature of land holding and economic status are the main factors which have given birth to different types of migration in this mountainous part of the country. The first case study of Tehri Garhwal shows the dominance of Hindu culture in the form of astrology and holywater trade as life support system to the people of this area those are God fearing and such a system is still prevails with the concern society of rural Garhwal. This area has been dominated by the Hindu Kings of Tehri, whereas the rest two case studies from Pauri district shows a drastic change in the study of migration as this area has been in the dominance of Gorakha and after that by British people which has given birth to rural urban and outmigration to this region.

The rate of seasonal migration is going down year after year (Tehri). Formerly the motive of the seasonal migrants was based on religion, but now the motive is more so based on wage earning for seasonal labourers. This is changing the mobile migrant pattern to a semi-permanent migrant feature.

The findings of the outmigration study clearly indicate that persons belonging to Brahmin caste group, or those with larger land holding, and from village on highlands have higher tendency to outmigrate. In the Garhwal Himalaya, Brahmins have higher social and economic status than other three caste; therefore, they may be regarded as to belong to upper strata of society and then it can be said that the upper strata of the region is more mobile.

SELECTED REFERENCES

Atkinson, E.T. (1973), Himalayan Gazetteer, Cosmos Pub. Delhi.

Balkumar, K.C. (1985), "The Rural to Rural Migration in Nepal", Occasional Papers in the Humanities and Social Sciences, Vol. 2, pp. 1-19.

Balkumar, K.C. (1987), "Internal and International Migration in Nepal", The Economic Journal of Nepal, Vol. 10, No. 4, pp. 21-29.

Bose, A. (1970), "Urbanization in India: An Inventory of Source Material", Academic Books Ltd., Bombay.

Bose, A. (1978), "India's Urbanization 1901-2001", MacGraw Hill, New Delhi.

Census of India (1981), Series 22 U.P. Provisional, Population Table, Lucknow.

Dabral, S.P. (1971), "History of Uttarakhand (1223-1304)", (Garhwal), pp. 219-20.

D'Souza, V.S. (1975), "Scheduled Castes and Urbanization in Punjab: an Explanation", Sociological Bulletin, Vol. 24, No. 1, pp. 1-11.

Khan, Najma (1983), "Studies in Human Migration" Rajesh Publications, New Delhi, pp. 1-5.

Lee, E.S. (1966), "Theory of Migration", Demography, Vol. 3, pp. 47-57.

Mukherji, S. (1979), "A General Mobility Field Theory", Indian Journal of Regional Science, Vol. XI, No. 2.

Negi, P.S. (1981), "Geographical Analysis of Outmigration from Tehri Garhwal", D. Phil. Thesis, Garhwal University, Srinagar (Garhwal).

Singh, S.N.; Yadav, R.C. et. al (1980), "Outmigration from Varanasi Rural, Some Results on Differential", Demography, India, Vol. IX (1 & 2), pp. 28-34.

Singh, S.C. (1987), "Some Observations on the Development Projects (I.R.D.P.) in Garhwal Himalaya", The Economic Journal of Nepal, Vol. 10, No. 4, pp. 63-71.

Stiglitz, J.E. (1973), "Alternative Theories of Wage Determination and Employment in L.D.Cs.", I.D.S. Nairobi Discussion Paper.