Status of migration in Uttarakhand: A case study of Rudraprayag District

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Abstract
Migration is one of the important dimensions in constructing population dynamics in any region. Migration is often the outcome of numerous multidimensional factors. They might be physical, economic, socio-cultural political factors or blend of one or more. In the present time economic factors are main responsible factors behind the migration in the developing and under developed countries. Migration has a direct impact on the population size of areas of origin and destination (Goldscheider, 1987). The entire Himalayan region is completely affected by migration and the state of Uttarakhand is no expection to this, which has shown a constant increasing trend in intra rural urban migration since its formation in 2000. The Rudraprayag region in Uttarakhand is one of the rugged terrain areas with harsh climatic conditions and limited employment opportunities. Therefore, the study tries to analyses the migration trend in the area based on the primary survey of 16 villages. The maximum share of migrants is due to job and employment which makes up to 13.58% in the region. Education is the second most important region with 11.13% due to which people tend to migrate in the region especially the younger population. The migration condition of Rudraprayag district is presented in this paper.

Key Words: Migration, demography, Rudraprayag, Uttarakhand

Introduction
Migration is one of the responsible factors to define the demographic of any area among three factors – birth, death and migration. The human population of any area is increased by increasing of births and immigration while it is decreased by increasing of deaths and emigration. Thus, the immigration and emigration of population in a particular region is called migration and it plays a very important role in the population change of any region. Therefore, migration has been regarded as the step child of demography (Bhowmik, 1984). Human migration is deeply embedded in both the history and present functioning of modern society. (Ogden, 1984). It is one of the important elements of human nature which is directly related to man and different livelihood amenities. People attracts towards such regions where they can easily be live. The prosperity in any region acts as a magnet, attracting workers from poorer hinterlands and regions (Dasgupta, 1971). They come to the urban areas, which aresocio-economically developed, in search of jobs, education and other social amenities. The increasing concentration of population in urban areas has become a feature of most countries in both the developed and developing worlds. (Ogden, 1984). Migration have significant impact on the Economic production, consumption patterns, labor markets, household and family networks, political power and authority structures, and other social, economic, and political aspects of society that are linked to population size (Goldscheider, 1987).

Uttarakhand emerged as 27th state of India on November 9, 2000 with 13 districts where 9 district to be completely hilly areas and remaining 4 districts (Nainital, Haridwar, Dehradun and Udham Singh Nagar) have larger share of plain area. This geographical inequality between the hills and the plains have divided the state critically with Districts in the plains being far ahead on various development indicators as compared to the hilly ones. The hill region districts are less developed in terms of infrastructure, i.e., electricity, roads and irrigation. Also more than 60% of Uttarakhand population is dependent upon agriculture for their livelihood sustenance which is also is also vulnerable to fragmented small land holdings, harsh climatic conditions, rugged terrain, changing weather patterns. As a result, the majority of the rural population in the hills either survives on subsistence agriculture or migrates to other parts of...
the state/country for employment. These challenges have also created inter-district inequality in infrastructure leading to increasing disparity in terms of income and livelihood between the hills and the plains districts, thereby increasing rural to urban migration or hill to plain migration. Today the nature of migration has become more intense and permanent in Nature with mountain villages becoming abandoned slowly. Better education, better jobs and better health facilities force the people to settle down permanently in the urban areas. Huge number of people have settled in metro cities like Delhi, Mumbai, Chandigarh and Chennai and settled permanently. Lack of improvement in farming methods, and low economic output from agriculture have made migration a compulsory phenomenon associated with hill regions. (Negi, 1982). The impact of migration can be seen very clearly with changes in rural population structure, the abandoned houses, agricultural land and forests. For physical, geographical and environmental reasons, the scope for agricultural policies based on modern input-intensive agriculture is also severely constrained in the hill regions. Soil and water conservation Strategies are another issue for inclusive development. However, the state faces the challenge of promoting livelihoods to retain people through local employment, income generation to enhance their quality of life and to check rural urban migration.

**Study Area:** Rudraprayag district is located in the central part of the Garhwal region. It is located from 30°10’ N – 30°47’N latitude and 78°45’ E – 79°30’ E longitude. It covers 1990 km² area of the ground. The altitude of the region ranges from 670 M. to 6968 M. Uttarkashi lies on the North and North-Western side, Tehri lies on the Western side, Pauri lies on the Southern side and Chamoli lies on the Eastern side. The almost part of the district is covered by the MandakiniRiver catchments. The Mandakini and its tributaries, i.e. MadhyamaheshwarRiver, KaliRiver, Lastar Gad etc. made different structures and landforms in the valley and people are living and establishing their colonies on the river terraces side by the river. The Geographical location of Rudraprayag district is presented in the Fig-1.

![Fig 1. The location of the study area (Source: Aster DEM & Arc Gis 9.3 Software)](image-url)
Research methodology
The present study attempts to present the observed migration condition as demographic changes in Rudraprayag district. To study the status of migration in Rudraprayag district, 16 villages have been selected. The demographic and migration data were delineated using primary survey. Field survey using portable handheld Garmin Montana 650 GPS has been conducted for ground thruthing. The spatial mappings of demographic characteristics and migration conditions have been done using Arcgis 9.3 software.

Results and Discussion
Traditionally, migration is known as the responsible factor to affect the population of any area (Wood, 1982). According to United Nations, “Migration is changes over places for more than one year.” Rudraprayag, a part of Uttarakhand state is not untouched by migration. 16 villages have been selected for the study of migration and will help in understanding the geographical dynamics of the region along with the factors which are prevalent for migration conditions of Rudraprayag district. The total population of these villages is 5713 and there are 34.17% population (primary survey data) is involved in migration. Only 65.82% people are still in the village which are mainly younger dependent population and older dependent people. The lack of primary and basic needs, i.e. education, employment, health, market etc. force people to migrate. Table 1 reveals the migration condition in the villages of the study area. The migration of the villages is dependent on many factors i.e. the distance from the district headquarter and the altitudinal conditions etc. It also depends on the quality of the population.

Table 1: The sample villages for the study of migration in Rudraprayag district, 2011 & 2014

| SN | Villages     | Distance from road (km) | Altitude | Total Population | Out-Migration (%) | In-Migration (%) |
|----|--------------|-------------------------|----------|-----------------|-------------------|------------------|
| 1  | Jurani       | 0                       | 2000<    | 86              | 22.4              | 0                |
| 2  | Sisau        | 1                       | >1000    | 508             | 23.05             | 1.1              |
| 3  | Mathya       | 8                       | 1000-2000| 344             | 24.18             | 1.2              |
| 4  | Dhariyanj    | 0                       | 1000-2000| 347             | 25.32             | 2.3              |
| 5  | Arkhund      | 2                       | 1000-2000| 833             | 27.13             | 2.7              |
| 6  | Bhainsgawn   | 2                       | 1000-2000| 285             | 27.4              | 0                |
| 7  | Sirwadi      | 5                       | 2000<    | 817             | 29                | 3.8              |
| 8  | Kapaniya     | 0                       | 1000-2000| 568             | 29.12             | 1.9              |
| 9  | Balsundi     | 0                       | 1000-2000| 119             | 30.5              | 2.4              |
| 10 | Dovalya      | 1.5                     | >1000    | 98              | 30.6              | 0                |
| 11 | Ghengad      | 0                       | 1000-2000| 1084            | 34.77             | 2.5              |
| 12 | Baraw Talla  | 2                       | 1000-2000| 107             | 40.9              | 0                |
| 13 | Jai Khanda   | 1                       | 2000<    | 118             | 40.9              | 1.6              |
| 14 | Tankila      | 1                       | 1000-2000| 88              | 42.9              | 3.7              |
| 15 | Hyuna        | 0                       | 2000<    | 108             | 59.3              | 0                |
| 16 | TemariyaPalla| 3                       | 1000-2000| 81              | 59.4              | 2.6              |

Source: Census of India, 2011, Rurakhosh & Primary survey Data

The above table reveals that the highest migration in Rudraprayag district is in TemariyaPalla village. The total population of this village is 81 and 59.4% population are migrated outside. Hyuna village has 108 populations and its total migration is 59.3%. Tankila has the total migration of 42.9% while its total population is 88. These villages are very far from district headquarter but is on the way
to Kedarnath temple. Villages located either near to accessible road or market place show low levels of migration as compared to the ones located in the remote locations. The lowest migration (22.4%) is found in Jurani village which is located near to road side and only 10 km far from Guptakshi market place. Sisau village also has only 23.05% migration and is located in close proximity to Tilwada market. Mathya village is the remotest among all villages and is located 8 km far from the road side. Although a kaccha road construction has been started for the village.

**Migration and Time Duration:** It is very important to classify the migration according to time. It helps to understand the time duration (how much migration took place in a particular time) taken by migrants. The total migration of Rudraprayag district is 34.17% (average) and it is seen a different pattern of migration among the migrants.

| Villages         | Daily | Weekly | Monthly | Half yearly | Yearly | Total Migration |
|------------------|-------|--------|---------|-------------|--------|-----------------|
| Balsundi         | 5.12  | 0.2    | 8.4     | 14.28       | 72     | 30.5            |
| Baraw Talla      | 7.54  | 1.4    | 11.06   | 39.1        | 40.9   | 40.9            |
| Bhainsgawn       | 10.75 | 2.68   | 15      | 14.57       | 57     | 27.4            |
| Dovalya          | 5.1   | 0.79   | 9.64    | 19.47       | 65     | 30.6            |
| Tankila          | 9.02  | 2.7    | 17.25   | 28.13       | 42.9   | 42.9            |
| TemariyaPalla    | 8     | 1.9    | 12.05   | 30.25       | 47.8   | 59.4            |
| Hyuna            | 10.11 | 3.47   | 13.8    | 17.02       | 55.6   | 59.3            |
| Jai Khanda       | 12    | 4.01   | 21.74   | 32.15       | 30.1   | 40.9            |
| Jurani           | 6.01  | 2      | 14.22   | 34.67       | 43.1   | 22.4            |
| Mathya           | 2.54  | 0.61   | 8.75    | 2.4         | 85.7   | 24.18           |
| Dhariani         | 1.7   | 0.1    | 3.01    | 6.59        | 88.6   | 25.32           |
| Sirwadi          | 2.75  | 0      | 1.4     | 6.85        | 89     | 29              |
| Kapaniya         | 3.2   | 1.8    | 4.5     | 3.4         | 87.1   | 29.12           |
| Sisau            | 4.03  | 0      | 2.9     | 13.88       | 79.19  | 23.05           |
| Ghengad          | 3.4   | 0.4    | 4.8     | 12.4        | 79     | 34.77           |
| Arkhund          | 4.6   | 2.4    | 8.15    | 17.45       | 67.4   | 27.13           |
| Average          | 5.84  | 1.52   | 9.79    | 18.28       | 64.54  | 34.17           |

Source: Primary Survey Data

**Daily migration:** Some people goes to the market and return home every day. Such type of migration comes under daily migration. Daily migration is renowned as commuting. Most of the daily migration is found in those villages which are very close to the market and the people visit there for different types of business, masonry work, labor work etc. There is only 5.84% population involve in daily migration. The highest daily migration is found in Bhainsgawn. There are 10.75% people migrated daily to the market, which is double to the average rate of the district. It is because that Rudraprayag district headquarters is only 4 km and tilwada market is only 2 km far from the village. Many persons have shops in tilwada market. They go for business in the morning and return in the evening. Some are teachers in the nearby schools and some do labor work. Daily migration rate is also high in Hyuna village. It is because of that many aviation companies have hired the land of this village for operating helicopter services to Kedarnath temple. The villages are hired for the job. They go in the morning and return in the evening. Therefore, the daily migration rate is so high. Generally, daily migration is found in those villages which are nearby the market/town.

**Weekly migration:** The percentage of weekly migration in the Rudraprayag district is 1.52%. The maximum migration is occurred in Jai Khanda village. There are 4.01% people who migrate weekly, which is 4\textsuperscript{th} time higher than average. The most of the people of this village are involve in
transport and other individual activities in the surrounding area of 14-15 km. Some people have shops in Ukhimath and some people work in the different activities in Kedarnath and Gaurikund. There are many small regional centers (Fata and Guptkashi), teaching institutions (Government and private), small service centers (Agastyamuni, Guptkashi, Ukhimath etc.) where the local people get jobs. Their families members live in the villages, therefore these migrants visit their home town in every weekend. Hyuna has 3.47%, Bhainsgawn has 2.68%, Arkhund has 2.4% migrants who participated in the weekly migration. The weekly migration of the rest villages are less than 1%.

**Monthly migration:** The percentage of monthly migration is low. The average monthly migrants are 9.79% which is just half to half-yearly migration, i.e. 18.28%. The maximum monthly migration is found in Tankila village. There are 17.25% migrants who come back to their village monthly. The government servants and the students who are taking higher education come back home monthly. There are many students of this village who are getting education in Agastyamuni Degree College and Birla campus of Sringar Garhwal. Generally, monthly migration is found in those people who are involved in education and government sectors. These people are near to their villages and therefore, they can come to their villages monthly. Their family members live in the villages.

**Half yearly migration:** The percentage of half yearly migration is 18.28%. This is higher than weekly and monthly migrants. Baraw Talla has 39.1%, TemariyaPalla has 30.25%, Jurani has 34.67% migrants who migrate within 6 months period. Jurani is on the way to Kedarnath temple. Kedarnath temple is opened for the visitors in May to October, only for 6 months. The winter period is so tough here that it has to be close for 6 months for visitors. Therefore, the villagers come back to their villages for 6 months and involve in other occupation. The high rate of half yearly migration in Jurani village is that it has 15.3% population of SC category. These people work in the Gaurikund and Kedarnath during Kedarnathyatra and they work as a laborer. TemariyaPalla has 100% population of Brahmin category. They are involved in the government sectors in the surrounding areas. Therefore, occasionally they visit their villages within 6 months’ period.

**Yearly migration:** The maximum share of migrants is in yearly migration. There are 64.54% migration is occurred yearly. In this condition, the migrants come to their villages for one to two months after a long period. Basically, such type of migration is found with the people who are involved in defence services (army, navy etc.) and private sectors. Some migrants bring their family members with them after some time period. The maximum yearly migration is found in Sirwadi (89%), Dhariyanj (88.6%), Kapniya (87.6%) and Ghengad village (79%). The people are migrated in Delhi, dehradun, Mumbari, Kanpur and Chandigarh etc and work in different government and private sectors.

**Migration and Place (area):** Migration is the result of transformation of man from one place to another. Man carries the knowledge, technique and culture of the place from where he starts and spreads this all to the place where he moves. He tries to protect them. In this way, he is influenced by the new culture and he makes an adjustment with the new society. Migration has been the strongest factor behind the development of culture and racial structure in all over the world. It has been existed in all the periods of history. Migration is one of the important elements of human nature which is directly related to man and different livelihood amenities. People attracts towards such regions where they can easily be live. The prosperity in any region acts as a magnet, attracting workers from poorer hinterlands and regions (Dasgupta, 1971). They come to the urban areas, which is developed by socio-economically, in search of jobs, education and other social amenities. Area wise migration represents the destination preferred by migrants. If a person moves within the country boundary, it is called inland migration. But if he/she crosses the country boundary and enters other country is called international migration. Migration is the process which produces the possibilities of development; either it is of an area or man himself. Therefore, it is well said that migration is the symbol of development. Table 3 shows the migration and place conditions of the sample villages. Micro level analysis focuses on the migration which occurred within Uttarakhand state.
Table 3: Migration & place conditions of the sample villages during 2014

| Villages        | Intra State | Inter State | Inter National |
|-----------------|-------------|-------------|----------------|
| Balsundi        | 87.8        | 12.2        | 0              |
| Baraw Talla     | 87.5        | 12.5        | 0              |
| Bhainsgawn      | 89.5        | 10.5        | 0              |
| Dovalya         | 94.1        | 5.9         | 0              |
| Tankila         | 97.4        | 2.6         | 0              |
| Temariya Palla  | 94.2        | 5.8         | 0              |
| Hyuna           | 70.4        | 29.6        | 0              |
| Jai Khanda      | 84.9        | 11.9        | 3.2            |
| Jurani          | 96.5        | 3.5         | 0              |
| Mathya          | 75.75       | 24.24       | 0              |
| Dhariyanj       | 67.08       | 32.91       | 0              |
| Sirwadi         | 73.88       | 23.3        | 2.81           |
| Kapaniya        | 53.12       | 44.82       | 2.05           |
| Sisau           | 47.13       | 52.58       | 0.28           |
| Ghengad         | 63.75       | 35.38       | 0.87           |
| Arkhund         | 64.93       | 35.06       | 0              |
| Average         | 77.99       | 21.42       | 0.57           |

Fig 2.
Intrastate Migration: The above table and diagram shows that a lot of people preferred to migrate within the state. There are 77.99% people who migrated within the state. According to the primary survey, the rural service centers are the primary choice of the people. These service centers fulfill all the basic needs of the villagers. There is 14.23% migrants’ preferred Agstyamuni market, 10.76% migrants to Rudraprayag market, 0.96% migrants to Chandrapuri, 32.58% migrants to Dehradun, 2.11% migrants to Gopeshwar, 6.92% migrants to Haridwar and 6.63% migrants to Rishikesh as their destination place. These market places are not so far from their native villages and they can keep in touch with their villages. Education sector is going to boost the out-migration in the present time. There are 11.13% migration is due to the education (Primary survey data). Dehradun, Rishikesh and Haridwar were the biggest educational hub since starting. But now, the small urban/rurban areas like Srinagar, Agastyaumni, Rudraprayag, Chandrapuri, Gopeshwar etc. are providing the education facilities very well. The local people have not to move outside for getting good education. There are many government and private schools established in these rurban centers. There was only one degree college in Agstyaumni, but now there are total 4 higher education institutes have been established in the different part of the district.

Medical facility is another issue to approach the urban/rurban centers. In this point of view the plain regions are still the attracting centers for the people. Srinagar, Dehradun, Haridwar and Rishikesh are the biggest town where medical facilities are in well condition. There are only 0.13% migration took place due to this reason, but the hill sides urban/rurban centers are lacking behind in this point of view. Although different medical camps organized by government are conducted in these centers and the villagers take a good advantage of it. These rural service centers provide many jobs to the local people. They open different types of shops in these centers like electrician, plumber, mobile repairing, TV mechanic, granary and vegetable shops etc. Now some entrepreneurs have started the horticulture program and these service centers provide a good market facility to them.

Interstates Migration: Interstate migrants migrate from one state to another. This type of migration increased after the independence. A lot of people have shifted in the different states of India after coming from Pakistan. Even today, different people move towards another state in search of jobs and better livelihood conditions. The above table and diagram shows that there are 21.42% people migrated in the different states of India. Actually the cities of Uttarakhand and many other small urban and rurban centers are well facilitated; therefore, people are taking interest to migrate within Uttarakhand.
Fig 4. (Source: Census of India Maps & Primary Survey Data, 2014)
Status of migration in Uttarakhand

Fig 5. (Source: Census of India Maps & Primay Survey Data, 2014)
Fig 6. (Source: Primary Survey Data, 2014)
In this way, they can be close their native place. The maximum interstate migrants are in Sisau village. There are 52.58% migrants who are outside of the state. The basic reason is that there are a lot of people involved in the private sectors in Gudgaun, Ambala, Ludhiyana etc. They have shifted their family with them. They come back to village once in a year and after some time they return to their job. Kapaniya village has same condition. There are 44.82% interstate migrants. Ghengad has 35.38%, Arkhund has 35.06%, Dhariyanj has 32.91% and Mathya village has 24.24% interstate migrants. The rate of family migration is high in interstate migration. Dhariyanj has 50.12% family migration, Kapaniya has 35.44%, Ghengad has 45.07%, Arkhund has 36.60% family migration. There have been the attractions of the industrial regions for the unemployed people since starting. Uttarakhand, before as a state had very less opportunities for jobs. Therefore a drift of unemployed people moved towards the industrial regions in Gudgaun, Ambala, Kanpur, and Delhi etc. Now after the formation of Uttarakhand state, there have been started a lot of opportunities in government as well as private sectors. Now the private sectors have reached very near to the villages. This is the reason that the intrastate migration rate is higher than interstate migration. Even the people of other states are getting jobs in Uttarakhand. Sirwadi has 2.81%, Kapaniya has 2.05%, Sisau has 0.28% and Ghengad has 0.87% international migrants. Although the international migration is occurred by many physical, economic, socio-cultural and political factors, but in the context of the present study, it is occurred due to economic situations. Most of the migrants are involved in hotel industry. They work in Iraq, Saudi Arab, Japan, Libiya etc. It is easily reveal with the help of fig 5.6 that the drift of international migration is towards West and South-West direction. People took very little interest in the North and North-East direction because Tibet is attached towards North side and Nepal is towards Eastern side. We can conclude that employment opportunities always attract the crowd and this is found in South, South-West, South-East and West direction more rather than North, North-East and East direction side. Such type of migration is done individually.

**Conclusion**

It is evident from the analysis that while 34.17% people migrated from the villages, 65.82% people are still in the villages. Although nearly 65% of the population have not migrated, the demographic analysis of the village population reveal that these are primarily older and younger generation which are dependent on the adults (majority of them have migrated). Since the creation of the state of Uttarakhand in 2009, the share of migrants from rural to urban areas have constantly increased which was 7.79% in 2000 – 2005, increased to 14.50% in 2005 - 2010 swelled up to 33.09% between 2010 to 2015 (Primary survey data). The percentage of intra state migration (78%) was seen to be higher than interstate migration (22%). This higher share is attributed to migration of people primarily to rural/town as well as urban service centers with in the state which have developed exponentially post creation of the state. Many large size rural service centers turned into Nagar panchayat (like Agastyamuni, Guptkashi etc.) and an increasing stream of migrants from lower order settlements to higher order settlements is evident in the state. While nearly 24% of people migrate from rural to urban areas, a small percentage (1.5%) also returned back from urban to rural area. One of the prominent feature of migration in Uttarakhand is the concept of minimum distance
i.e. the people prefer to cover the minimum distance while they migrate outside (Revenstein’s Law of Migration). Nearly 18.42% people migrated within 200 km of their source (study area) and the ratio decreases when the distance increases. 4.88% people migrated up to 500 km range while this ratio is only 3.51% people up to maximum, i.e. more than 2000 km.

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