**Dr. Rajesh Kumari**
Associate Professor,
Department of Geography
Government College for Girls,
Sector -14, Gurugram,
Haryana, India

**Hasina MA**
Geography, Government
College for Girls, Sector-14,
Gurugram, Haryana, India

# Comparative analysis of socio-economic status in sunderkhal village of Kumauni Himalayan region A Case Study of Sunderkhal village in Dhari Block in Nainital District of Uttarakhand

## Dr. Rajesh Kumari and Hasina MA

### Abstract
The village of Sunderkhal on the Eastern boundary of Corbett Tiger Reserve Ramnagar Forest Division-Uttarakhand. These villages have stunning natural beauty. This study is to find the working and living condition of the people. The objectives of this study to know all the aspects of the socio-economic condition. The work is mainly based on the primary data resources which are collected with the help of questionnaire, interview and personal observation methods. The condition of this area is represented with the help of some visual statistical tools. It is observed a large number of people are unskilled. Many of them are stressed with the health care facilities, education, unemployment making their survival difficult. They could not maintain their livelihood due to their low income. Therefore, it is very important to explore the socio-economic status of these areas concerning their demography, occupational structure, education, employment, income, housing characteristics, and Government schemes. There are many natural resources available to use in their sustainable livelihood development. Therefore, in this paper an attempt has been made to analyze the socio-economic condition of Kumauni region.

**Keywords:** Socio-economic condition, lack of facilities, sustainable development

## Introductions
The Great Himalayan region holds a special place in the mountainous ecosystem. This region is crucial for the climate perspective; it is essential as a life provider. This region gives water bodies, flora, fauna, cultural diversity, and human communities to the Indian subcontinent. In the Himalayan region, Uttarakhand has a great place in this area.

Uttarakhand has stunning natural beauty in mountains, glaciers, rivers, forests, and unique ecosystems. Uttarakhand has all the specialties of the Himalayas in one state. Uttarakhand is called "Devbhumi" or "Land of God" for its rich religious culture. This state is not only known for religious culture; it's also famous for the natural beauty that feels like heaven. Uttarakhand predominantly states with 69.77% workforce residing in rural areas. (Census 2011) [1, 2-3] Agriculture is an important sector of the Uttarakhand economy as it contributes about 10.20% to the total GDP and provides employment to half of the population.

The primary sector growth rate in 2019-20 is 4.15 % compare to 2018-19. (Economics Survey 2020-21) Forests play a significant role in Uttarakhand Economy. Forest cover covers approximately 63% of Uttarakhand's recorded land-use area. "Forest areas in the proximity of population centers or villages are reported to be shrinking and degrading faster due to the collection of fuelwood and cattle grazing. Compared to forests situated away from population centers and located in inaccessible areas" (FSI 2000).

The Kumaon region consists of a large Himalayan tract, together with two submontane strips called the Terai and the Bhabar. The Himalayan Section of Kumaon is approximately 225 Km long and 65 Km wide. This tract accommodates more than 30 major peaks, with some rising as high as 5500 meters above mean sea level. Major river in the region, such as Goriganga, Dhauliganga, and Kali originate from the Himalayan peaks, bordering the Tibet Autonomous Region of China. Above this altitude, there are fewer outcomes from agriculture, so the resource pressure is shifted from agriculture to forest. Most people live in rural areas; they draw their livelihood from agriculture and allied sectors. So, the term rural development contains the overall development of the rural regions to improve the quality of life of rural people.

**Corresponding Author:**
**Dr. Rajesh Kumari**
Associate Professor,
Department of Geography
Government College for Girls,
Sector -14, Gurugram,
Haryana, India

In this sense, it is a comprehensive and multidimensional concept that includes Developing agriculture and allied activities, cottage industries, crafts, socio-economic infrastructure, community services and facilities, and human resources in rural areas. Rural growth is the product of interactions between various physical, technological, economic, social, cultural, and institutional factors. Thus, the growth and development of the rural economy and population are essential to the state's overall growth and inclusive development.

## Study Area
The Geographical location of Sunderkhal village is longitude 79.6829°E, latitude 29.4093°N.

Sunderkhal Village as the name suggests, is a charming village on the outskirts of Jim Corbett National Park. Flanked by river Kosi on one side and the hills of Corbett on the other, Sunderkhal gets normally overlooked by tourists zipping from Ramnagar to Dhangarhi –the main entry point to the world-famous national park.

It is located between Jim Corbett National Park and Ramnagar Forest Reserve. Sunderkhal is a Village in Dhari Block in Nainital District of Uttarakhand State, India.

It is located 24 KM towards East from District headquarters Nainital. 4 KM from Dhari. 221 KM from State capital Dehradun. Sunderkhal Pin code is 263132 and postal head office is Bhowali. Dhanchuli (3 KM), Majuli (5 KM), Chaukhuta (5 KM), Naie (5 KM), Gajar (5 KM) are the nearby Villages to Sunderkhal. Sunderkhal is surrounded by Okhalkanda Block towards East, Bhimtal Block towards west, Lamgara Block towards North, Ramgarh Block towards North.

Nainital, Almora, Haldwani, Champawat are the nearby cities to Sunderkhal village. Total area of village is 75 hectares, Number of households in the village 400, total Population is 1009, male's total population is 552, female's population is 457, population of age group (0-6) persons 147 in which males are 84 and females are 63 (Data collected from DCH, NAINITAL). Hindi, Urdu, Garhwali and Kumauni are the local language of the village.

There is no railway station near to Sunderkhal in less than 10 km.

**Climate:** The summer temperatures in the village from 20 °C to 25 °C, while winter temperatures remain between 7 °C and -1 °C.

## Soils
Are mainly alluvial type and are very good fertile especially for the crops and fruits agricultural. As most of the soil is rich in mineral and nutrients as due to the availability of forest.

## Flora
The plant life of Tehri Garhwal can be divided into six main categories of tropical dry deciduous forests, Sal forests, Chir forests, oak deodar, fir and spruce forests, and finally the Alpine pastures. The variety of forests is perhaps enough to make anyone realize the sheer multiplicity of the flora species. These forests not provide a safe haven for animals but also help the villagers to maintain the ecological balance and give them firewood and food.

The scent of damp earth, leaves and the noise of grasshopper are the essence of Garhwali forests. There are many trees like chir, Oaks, Conifers, Sal, Deodar, Haldu, Yew, Cypress, Rhododendron, Birch, Horse-Chestnut, Willow and Alder are found here. A large variety of medicinal herbs, shrubs and bushes like Brahmi and Ashwagandha are found in abundance here. One can also savour fruits like Cornel, Figs, Kaiphal, Mulberry, Kingora, Raspberry, Blackberry, Currants, Medlars, Gooseberries, Hazelnuts, Apples, Pears, Cherries, Apricots, Plums, Peaches, Oranges, Limes, Bananas, Pomegranates and Walnuts.

## Fauna
The Village is full of rich animal life which includes mammals, reptiles, Pisceans and birds. The forests are full of animals like Monkey, Langur, Wild-Cat, Goat, Pig, Fox, Wild-Dog, Black Bear and the Flying Squirrel. Elephants are found only in the Terai forests when entering from Dehradun. A number of carnivore species live in Tehri Garhwal region like the Snow Leopard, Leopard and sometimes Tigers. The Snow Leopard is rare and seriously endangered. The avian species consist of Pheasants, Kalij, Koklas, Cheers, Monal, Wild Fowls, Garial Parrots, Chatak, Papiha, Haldu, Neelkanth, Pigeons, Partridges, Kala Titar, Chakor and Neora. The reptile population is represented by Cobra, Ancistrodon Himalayans, Rat Snake, Leech and Blood-Sucking Lizard.
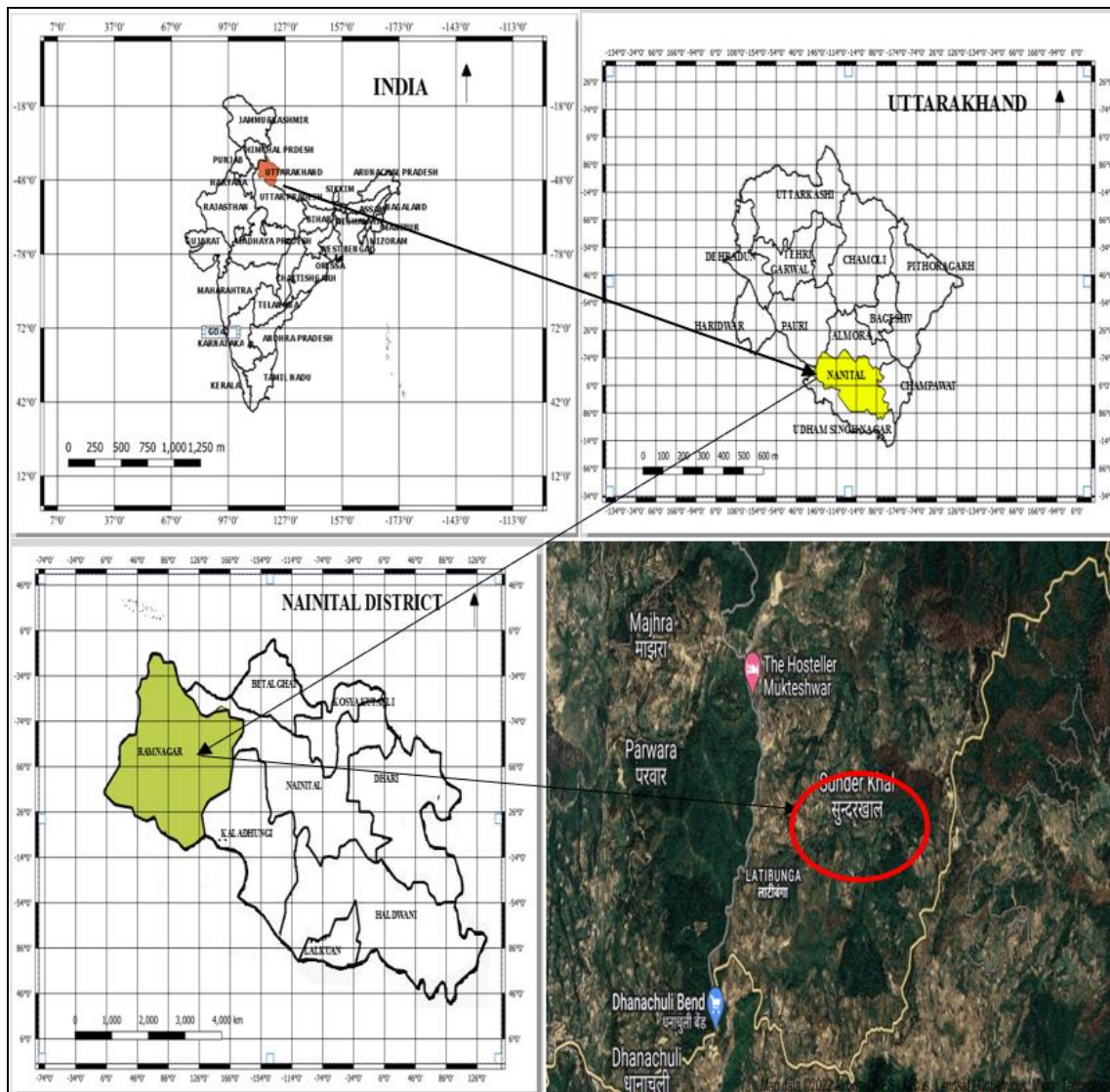
**Map 1:** Location map of study area

## Kosi River

Kosi is a perennial river that originates from Dharpani Dhar, perched at 2,500 metres in Baramandal region of Almora district. This pristine river graciously flows through the verdant valleys and towns of Ramnagar, Uttarakhand, thereafter entering the Tarai regions of Uttar Pradesh, where it joins Ramganga River. This Himalayan River is famous by the name of 'Kosila' among the local populace. Having a length of 168 metres, Kosi River replenishes the farmlands of Kumaon and is a source of water for the wildlife thriving in the Corbett National Park. The river basin is surrounded by ridges which separate it from the Yarlung Tsangpo River in the north, the Gandaki in the west and the Mahananda in the east. The river is joined by major tributaries in the Mahabharat Range approximately 48 km north of the Indo-Nepal border. Below the Siwaliks, the river has built up a megafan some 15,000 km$^2$ in extent, breaking into more than 12 distinct channels, all with shifting courses due to flooding. Kamalā, Bāgmati (Kareh) are the major tributaries of Kosi River in India, besides minor tributaries such as Bhutahi Balān.

Its unstable nature has been attributed to the power it can build up as it passes through the steep and narrow Chatra Gorge in Nepal. During the monsoon season, it picks up a heavy silt load, which it redeposits at times, causing it to change its channel. This leads to flooding in India with extreme effects. Fishing is an important enterprise on the river but fishing resources are being depleted and youth are leaving for other areas of work.

## Research Objectives

1. To examine the socio-economic status of villages.
2. To study the economic background of the villagers.
3. To find out the role of agriculture in socio-economic development.
4. To study the relationship between villagers and nearby forest.
5. To study the specific constraints related to the development of the village.
6. To analyze the level of education.
7. To examine the Government schemes implementation.
8. To investigate the housing situation.

## Hypothesis

1. The agriculture sector plays a vital role in village economic status.
2. Unemployment is the main cause of poverty in villages.

3. Various Government schemes are implementing properly.
4. Out- Migration is a significant problem in Hilly areas.

## Research Methodology

Population studies have for long been the subject of concern for social scientists including geographers. The varying content and methodologies of different disciplines studying population notwithstanding, each social science has made valuable contributions towards the understanding of spatial-temporal patterns of population. In geography, the study of population attributes has been the focus of traditional geographers since long. The people of the village are very simple, hardworking, traditional, enterprising and above all valiant defenders of the motherland. Some important aspects for getting out the result is employment, income, health, education, population, religious condition, migration, property, assets, infrastructure, and house types. These characteristics are helpful to find out the socio-economic status of the villages.

## Data Base and Methodology

**Sampling Procedure:** For the selection of samples, simple random sampling technique is adopted. Firstly, a complete list of households of village Sunderkhal prepared and then randomly samples selected. Total number of families is 509 and 38% are selected as sampling units. Thus, a total number of 190 Households are selected randomly for study.

## Data

The field study is based on the primary source of data (see Fig.1). The data has been collected through questionnaire, interview and personal observation. Observation has formally been incorporated into geography through fieldwork. Fieldwork is nothing more than systematic observation by a geographer of his or her subject matter. Anyone can do fieldwork and every good geographer does. Virtually anyone can do it because fieldwork is, at its most fundamental, just going out and looking at the land. The field study survey is conducted during 3 October 2022 to 07 October 2022 in village Sunderkhal in Ramnagar Tehsil of Nainital district, Uttarakhand and secondary data, which is published and unpublished sources. The source of secondary data is govt. MNREGA website.
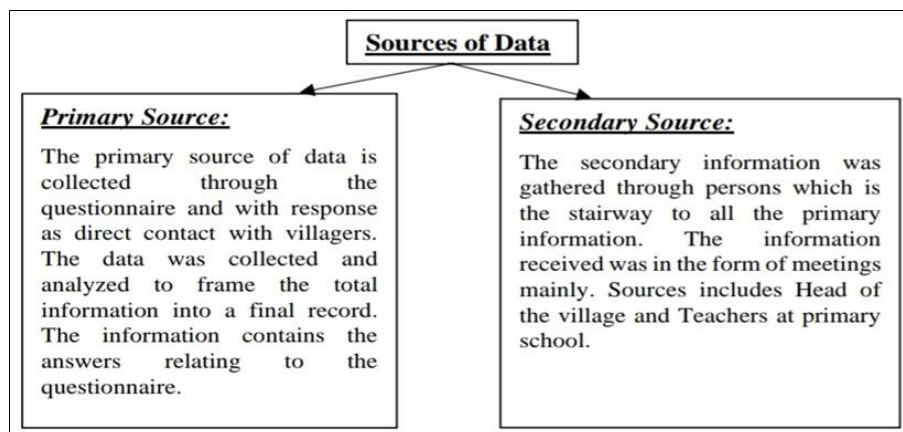


**Fig 1:** Sources of data

The family head specifically is the main source for the collection of the data. All the information regarding cultural system, literacy status, age structure, sex ratio, health and hygiene, sports, economic aspects-occupational structure, domestic production, income, house type and settlement pattern, transport and communication are collected. Local peoples, various reference books are others sources of consolidating information for the socio-economic survey of the area. The detailed questionnaire which has been formulated to analyze the study as Annexure-I.

## Methodology

The collected data is tabulated and processed with the help of statistical techniques. The processed data is cartographically represented with the help of diagram. The demographic & social characteristics have been studied in relation to social and economic status of households. All the household of the village have been classified into four caste groups. These caste groups are General, OBC, SC and ST.

## Results and Discussion

### Distribution of Population by Social Group:

As per field survey on 03 October, 2022, it is also taken as an indicator of the stage of development of the society. Table: 1 reveals that 1005 peoples, out of which male population is 532 (52.9%) while female population is 473 (47.1%). Male population is Highest as compare to Females.

**Table 1:** Population Structure by Social Group

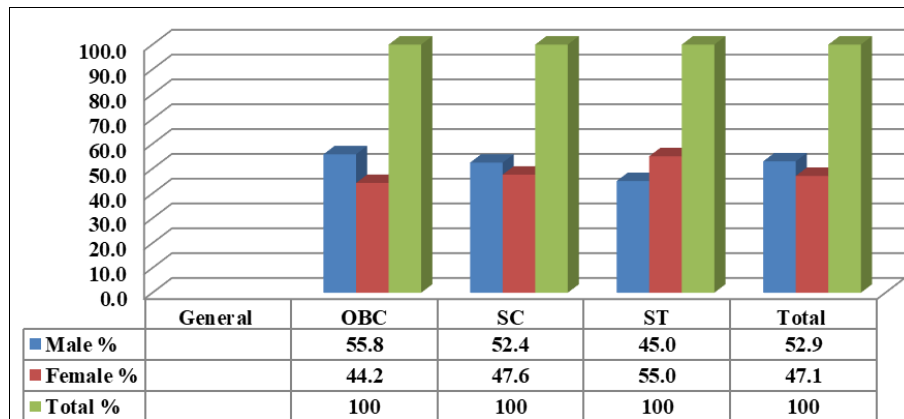| Social Group | Male | Percentage | Female | Percentage | Total | Percentage |
|---|---|---|---|---|---|---|
| OBC | 111 | 55.8 | 88 | 44.2 | 199 | 100 |
| SC | 412 | 52.4 | 374 | 47.6 | 786 | 100 |
| ST | 9 | 45.0 | 11 | 55.0 | 20 | 100 |
| Total | 532 | 52.9 | 473 | 47.1 | 1005 | 100 |

***Source*:** Primary Field Work, October 2022

**Fig 1:** Population structure by social group

## Distribution of Family Type by Social Group

It is also taken as an indicator of the stage of development of the society. Table: 2 reveals that

**Table 2:** Distribution of Family Type by Social Group

| Social Group | Male | Percentage | Female | Percentage | Total | Percentage |
|---|---|---|---|---|---|---|
| OBC | 22 | 71.0 | 9 | 29.0 | 31 | 100 |
| SC | 99 | 67.8 | 47 | 32.2 | 146 | 100 |
| ST | 2 | 50.0 | 2 | 50.0 | 4 | 100 |
| Total | 123 | 68.0 | 58 | 32.0 | 181 | 100 |

*Source*: Primary Field Work, October 2022

Most families in Sunder Khal village are nuclear families. Scheduled castes have highest proportion 146 (80%), where 31 persons belong to the Other Backward Caste, 4 are Scheduled Tribe. (See Table. 2)
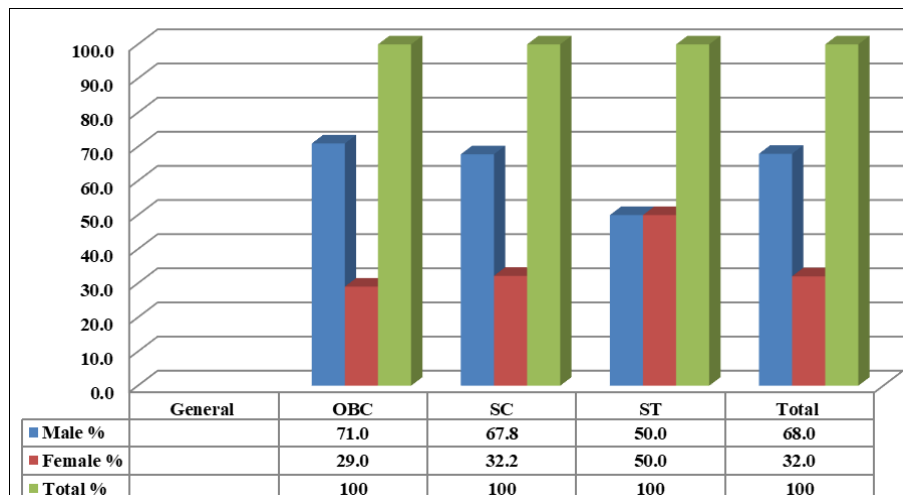


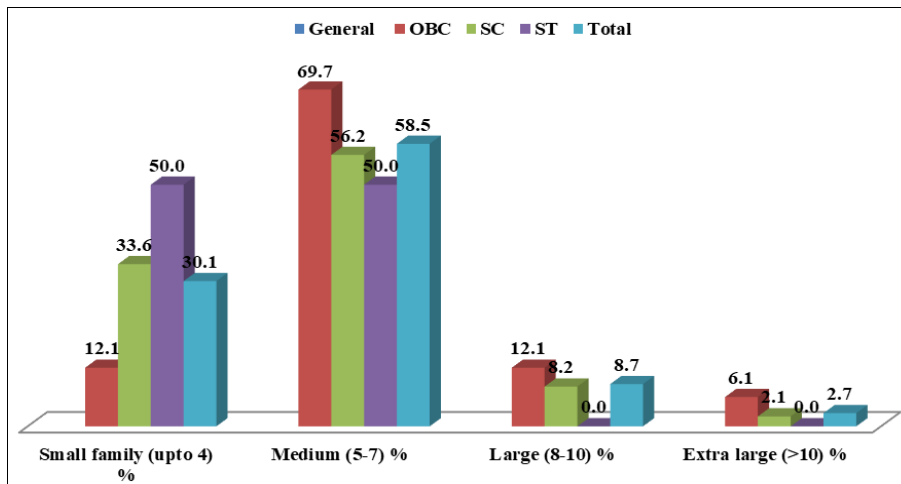**Fig 2:** Distribution of family type by social group

## Distribution of Family Size by Social Group

Size of the family is a parameter that indicates stage of social development. Table: 3 reveals that most of the families in Sunder Khal village are medium size. About 58.5 percent families in the village are medium (up to 5-7 members) sized followed by large size, small size and very large size. The proportion of large size family is lowest among scheduled castes (0 percent) and general castes (0 percent). About 69.7 percent families in the village are medium sized of OBC Caste, Schedule Tribes has higher proportion of population in small families and 12.1 percent of large size families only about 6.1 percent families are very large sized.

**Table 3:** Distribution of Family Size by Social Group

| Social Group | Small Family (Up to 4) | %Age | Medium (5-7) | %Age | Large (8-10) | %Age | Very Large (Above 10) | %Age | Total | Percentage |
|---|---|---|---|---|---|---|---|---|---|---|
| OBC | 4 | 12.1 | 23 | 69.7 | 4 | 12.1 | 2 | 6.1 | 33 | 100 |
| SC | 49 | 33.6 | 82 | 56.2 | 12 | 8.2 | 3 | 2.1 | 146 | 100 |
| ST | 2 | 50.0 | 2 | 50.0 | | 0.0 | | 0.0 | 4 | 100 |
| Total | 55 | 30.1 | 107 | 58.5 | 16 | 8.7 | 5 | 2.7 | 183 | 100 |

*Source*: Primary Field Work, October2022

**Fig 3:** Distribution of family size by social group

**Sex Ratio by Age Group and Social Status:**
The numerical measurement of sex composition of a population is often expressed in terms of sex ratio. In India, the sex ratio is calculated in terms of number of females per thousand of males and child sex ratio in terms of number of girls per hundred boys. It is calculated under:

$$\frac{\text{Total Female Population}}{\text{Total Male Population}} \times 100 \quad OR \quad \frac{\text{Total Girls Population (0-6)}}{\text{Total Girls Population (0-6)}} \times 100$$

Table:4 shows that the total 993 Age sex composition where 3.3 percent of girls (0-6) per hundred 4.9 percent boys (0-6), at the age group of (7-14) males are 61 and females are52, (15-59) age group females are 32.9 percent over males 36.5, (60+) female population is 6.8 percent more than male population 5.0 percent. Scheduled Caste has highest sex-ratio 80 percent and Scheduled Tribes have least1.9 percent.

**Table 4:** Sex-ratio by age group and social status

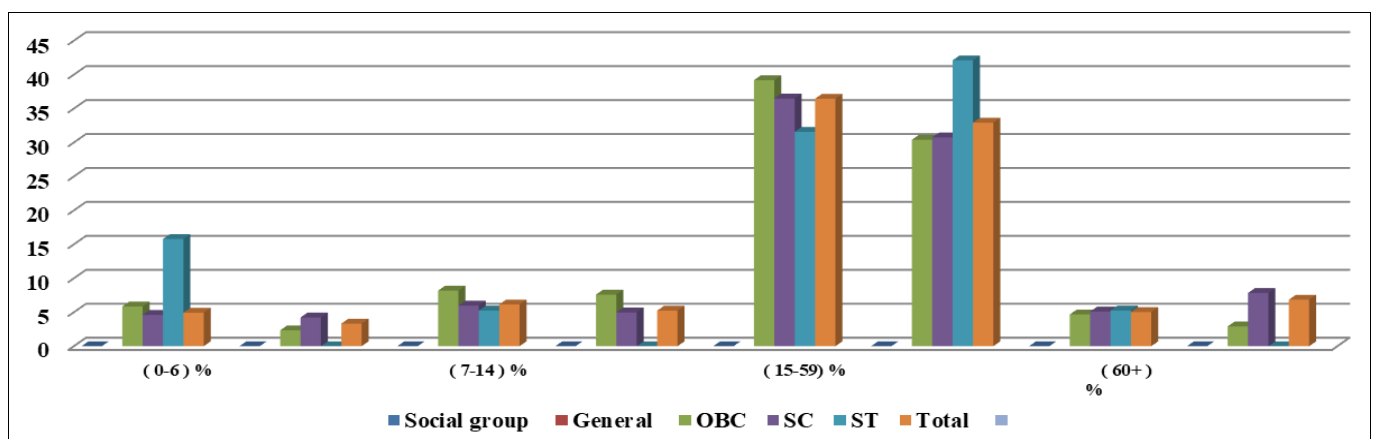| | (0-6) | | | | (7-14) | | | | (15-59) | | | | (60+) | | | | Total | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Social group | M | % | F | % | M | % | F | % | M | % | F | % | M | % | F | % | | |
| OBC | 10 | 5.8 | 4 | 2.3 | 14 | 8.2 | 13 | 7.6 | 67 | 39.2 | 52 | 30.4 | 8 | 4.7 | 5 | 2.9 | 171 | 100 |
| SC | 37 | 4.6 | 34 | 4.2 | 48 | 6.0 | 40 | 5.0 | 293 | 36.5 | 247 | 30.8 | 41 | 5.1 | 63 | 7.8 | 803 | 100 |
| ST | 3 | 15.8 | | 0.0 | 1 | 5.3 | | 0.0 | 6 | 31.6 | 8 | 42.1 | 1 | 5.3 | | 0.0 | 19 | 100 |
| Total | 49 | 4.9 | 33 | 3.3 | 61 | 6.1 | 52 | 5.2 | 362 | 36.5 | 327 | 32.9 | 50 | 5.0 | 68 | 6.8 | 993 | 100 |

*Source*: Primary Field Work, October2022



**Fig 4:** Sex-ratio by age group and social group

**Literacy and Education**
"Education is the most powerful weapon; you can use to change the world". (Nelson Mandela)**.**
Fig: 5 according to the field report, only 265 people out of 380 people aged seven years and above are literate (70 percent of population, who could read, write and understand), while the rest of the 30 percent population is

illiterate. Significant gender gap in the literacy rate exists, as literacy rate is 75.12 percent for males and 62.01 percent for females. Gender gap is 13.11 percent. This is very high gender gap. Fig. 5 shows that scheduled caste Female literacy rates are low in the village as compared to Scheduled Tribe and other backward caste.

**Table 5:** Literacy rate by social group

| Social group | Literate | | | | Illiterate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | M | % | F | % | M | % | F | % | Total | % |
| OBC | 77 | 48.4 | 42 | 26.4 | 16 | 10.1 | 24 | 15.1 | 159 | 100 |
| SC | 220 | 47.3 | 151 | 32.5 | 41 | 8.8 | 53 | 11.4 | 465 | 100 |
| ST | 9 | 42.9 | 6 | 28.6 | 2 | 9.5 | 4 | 19.0 | 21 | 100 |
| Total | 306 | 47.4 | 199 | 30.9 | 59 | 9.1 | 81 | 12.6 | 645 | 100 |

*Source***:** Primary Field Work, October 2022
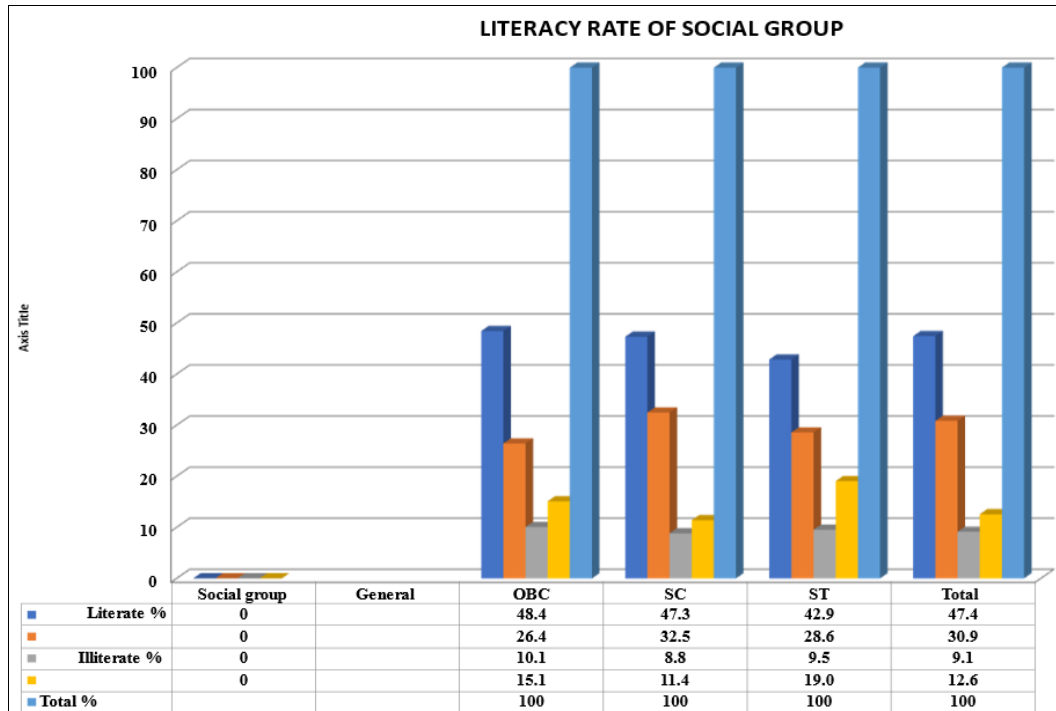


**Note:** The Percentage of Literacy rate has been calculated on the population aged 7 + years.

**Fig 5:** Literacy rate of social group

**Education**

Education is one of the essential indirect variables influencing socio-economic behavior and workforce participation. Education is supposed to be the backbone of every community, and it is a process that helps to learn or acquire knowledge, skills, and habits. It also conveys the content of the human person. The development of villages depends on the literacy rate of the inhabitants. To get socio-economic structure, everyone has to know about the literacy rate. All the four villages literacy rates:-

Besides all these, there are many dropout students from school and college because colleges are not nearby areas. If someone wants to higher study, then they have to leave the village. However, some do not get this opportunity because if they are going for college studies, how can their family afford it? Because of distance, girls are not allowed to study outside the area.

Table. 6 shows that importantly the male 11.8 percent and female 7.4 percent of the attainment are only primary level and upper primary level, while male 14.6 percent and female 10.4 percent are up to secondary level 26.0 percent male and female 19.0 and graduate level 8.3 percent and female 2.5 percent attainment, has degree or above degree level. The girls Constitute 39.3 percent of the total enrolment at primary and upper primary level, secondary and graduate. The attainment is lower for scheduled caste population (85.8 percent) OBC caste population (16.2 percent) in higher education and secondary & senior secondary level. Thus, the attainment for scheduled caste population is less in higher education and secondary & senior secondary level and high in primary and upper primary level.

**Table 6:** Completed Education by Social Group

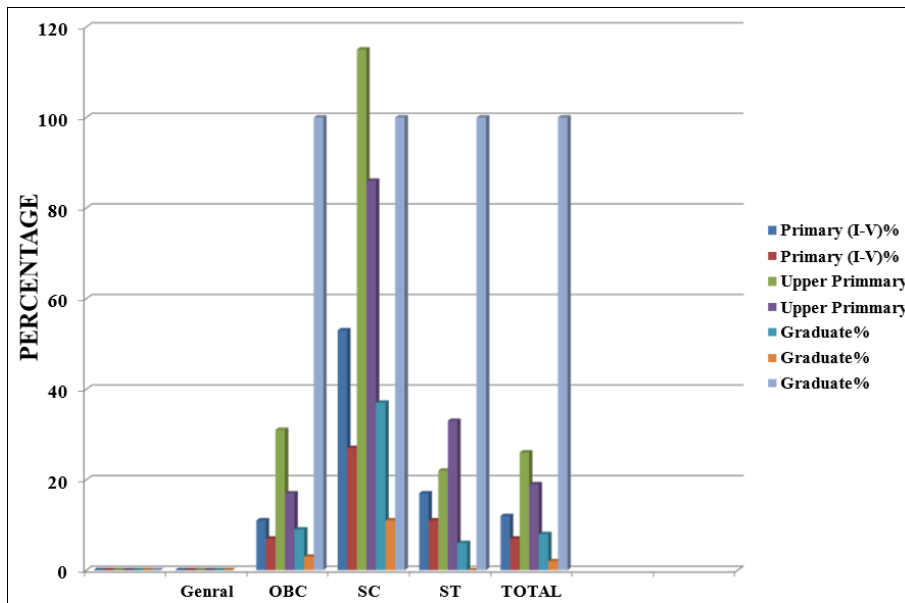| Social group | Primary (I-V) | | | | Upper primary (VI-VIII) | | | | Secondary (IX-XII) | | | | Graduate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | % | F | % | M | % | F | % | M | % | F | % | M | % | F | % | Total | % |
| **General** | | | | | | | | | | | | | | | | | | |
| OBC | 13 | 11.0 | 8 | 10.2 | 14 | 11.9 | 12 | 10.2 | 36 | 30.5 | 20 | 16.9 | 11 | 9.3 | 4 | 3.4 | 118 | 100 |
| SC | 79 | 53.4 | 40 | 48.6 | 100 | 67.6 | 72 | 48.6 | 170 | 114.9 | 127 | 85.8 | 55 | 37.2 | 16 | 10.8 | 148 | 100 |
| ST | 3 | 16.7 | 2 | 0.0 | 2 | 11.1 | | 0.0 | 4 | 22.2 | 6 | 33.3 | 1 | 5.6 | | 0.0 | 18 | 100 |
| Total | 95 | 11.8 | 60 | 10.4 | 118 | 14.6 | 84 | 10.4 | 210 | 26.0 | 153 | 19.0 | 67 | 8.3 | 20 | 2.5 | 807 | 100 |

*Source***:** Primary Field Work, October2022

**Fig 6:** Completed education by social group

**Housing characteristics**

To check the condition of house, the most houses are kaccha house and some houses are semi pukka house have been Considered like no light facility they use of solar panel, light facility, drainage system of houses etc. During the survey, it is learned that their houses were made by woods, stone pieces, floor by mud earlier. According to these houses, the houses are divided into two categories i.e., good and bad. It is clear that there are more houses which are in bad condition. Fig. 7 shows that about 37.1 percent houses are in good condition. About 62.9 percent houses are in bad situation. These houses are not well structured and poorly managed. Houses in bad conditions houses are in the communities of lower costs, because these people are not economically sound. Most of the money is spent on bread. So, their houses are in bad condition.

**Table 7:** Condition of Housing in Sunderkhal Village

| Social group | No. of household | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | Good | % | Bad | % | Total | % |
| OBC | 15 | 53.6 | 13 | 46.4 | 28 | 100 |
| SC | 49 | 34.3 | 94 | 65.7 | 143 | 100 |
| ST | 1 | 25.0 | 3 | 75.0 | 4 | 100 |
| Total | 65 | 37.1 | 110 | 62.9 | 175 | 100 |

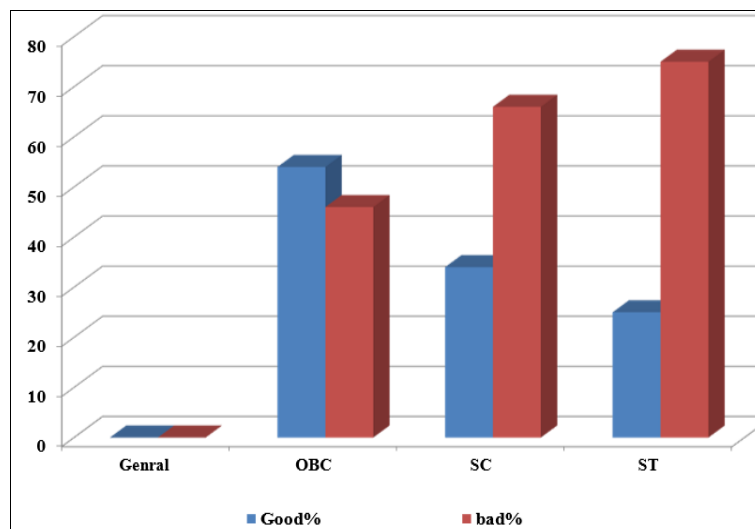*Source***:** Primary Field Work, October2022



**Fig 7:** Condition of housing in sunder Khal village

**Sources of drinking water**

(Table. 8) show condition the source of drinking water in the village. As we know that the study area is located in plain zone so most of the water supply in the houses by the pipe water and hand pump. Almost 1.2 percent pipe water and 74.3 percent hand pump water and other 9.6 percent distribution of water sources.

**Table 8:** Source of Drinking Water in Sunderkhal Village

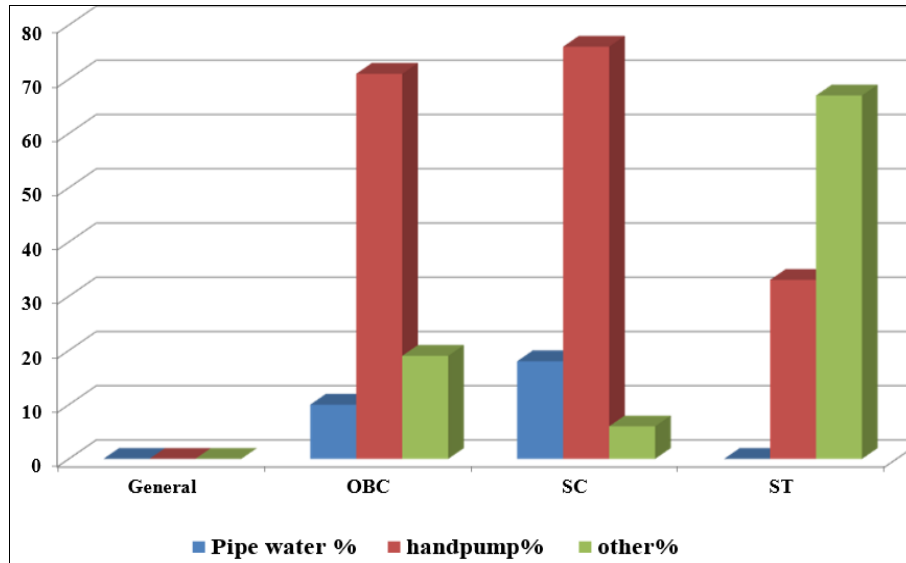| Social group | No. of household | | | | | | | |
| | Pipe water | % | Handpump | % | Other | % | Total | % |
|---|---|---|---|---|---|---|---|---|
| OBC | 3 | 9.7 | 22 | 71.0 | 6 | 19.4 | 31 | 100 |
| SC | 24 | 18.0 | 101 | 75.9 | 8 | 6.0 | 133 | 100 |
| ST | | 0.0 | 1 | 33.3 | 2 | 66.7 | 3 | 100 |
| Total | 2 | 1.2 | 124 | 74.3 | 16 | 9.6 | 167 | 100 |

*Source*: Primary Field Work, October2022



**Fig 8:** Sources of drinking water in Sunder Khal

## Types of animals

According to the survey Fig: 9 there are only 244 animals. There are 3.6 percent buffalos, 47.3 percent cows and 35.6 percent 1goats, and others 13.5 percent which fulfil the requirement of the village people.

Regular trekking on the mountain is strenuous, but women regularly trek on mountainous forests to get fodder for livestock

**Table 9:** Types of Animals in Sunderkhal Village

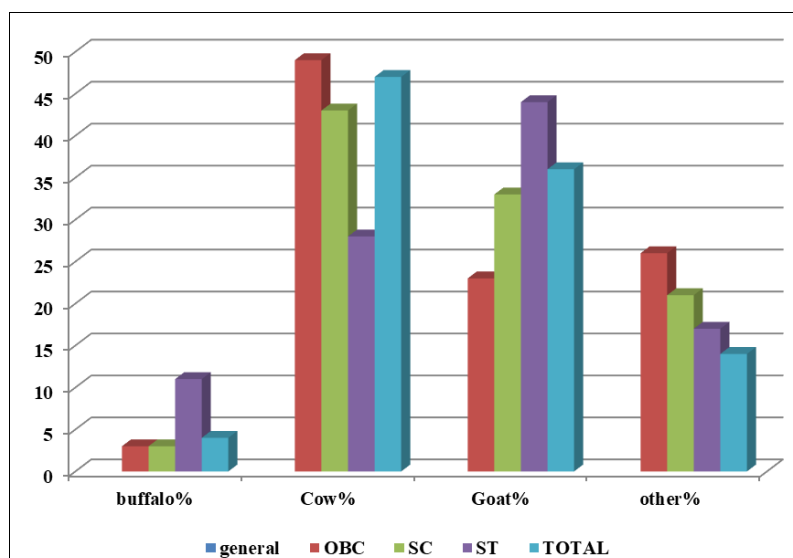| Social group | No. of household | | | | | | | | | |
| | Buffalo | % | Cow | % | Goat | % | Other | % | Total | % |
|---|---|---|---|---|---|---|---|---|---|---|
| OBC | 1 | 2.9 | 17 | 48.6 | 8 | 22.9 | 9 | 25.7 | 35 | 100 |
| SC | 5 | 2.6 | 83 | 43.5 | 63 | 33.0 | 40 | 20.9 | 191 | 100 |
| ST | 2 | 11.1 | 5 | 27.8 | 8 | 44.4 | 3 | 16.7 | 18 | 100 |
| Total | 8 | 3.6 | 105 | 47.3 | 79 | 35.6 | 30 | 13.5 | 244 | 100 |

*Source*: Primary Field Work, October2022



**Fig 9:** type of animals by social groups

## Means of Transportation

The public transport facility is not so good. It is clear that most of transport mode is by motorcycle, bicycle and public transport. In the village there are only 6 percent tractors used for agriculture and for rent because the village economy is primarily based on private job & secondary based on agriculture and livestock. In the village there are 22.7 percent motorcycle, it is because the economic condition is good. Table.10 shows that in village, there are 65.9 percent cycle, these motorcycles are used personally and jobs. 11.4 percent people used other local conveyance. So, in short, the transportation system of the village is not satisfactory and they also depend on public transport.

**Table 10:** No. of household

| Social group | Car | % | Motorcycle | % | Bicycle | % | Other | % | Total | % |
|---|---|---|---|---|---|---|---|---|---|---|
| OBC | | | 3 | 18.8 | 10 | 62.5 | 3 | 18.8 | 16 | 100 |
| SC | | | 16 | 23.5 | 45 | 66.2 | 7 | 10.3 | 68 | 100 |
| ST | | | 1 | 25.0 | 3 | 75.0 | | 0.0 | 4 | 100 |
| Total | | | 20 | 22.7 | 58 | 65.9 | 10 | 11.4 | 88 | 100 |
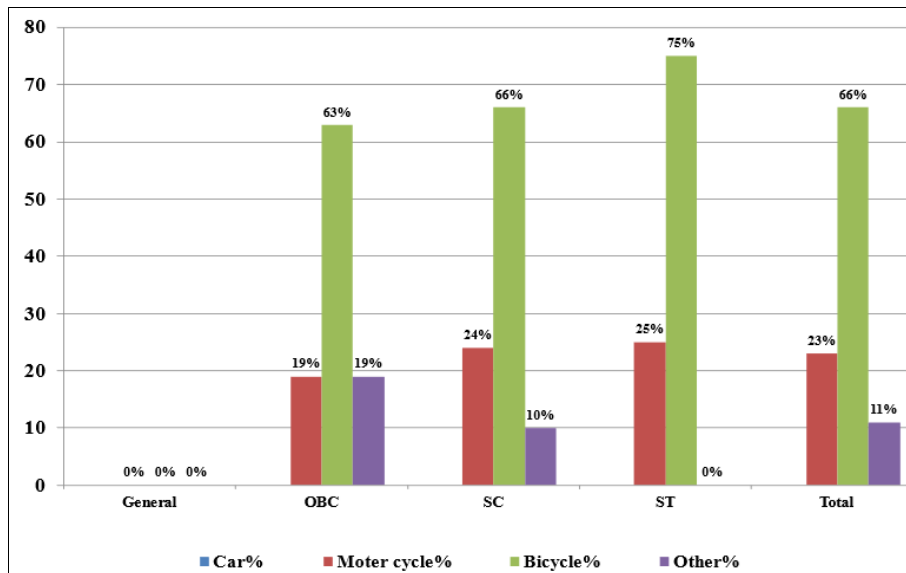


*Source***:** Primary Field Work, October2022

**Fig 10:** Means of transportation in sunder khal village

## Communication and Entertainment

According to field work data, only 1 percent radio is used for entertainment. Only 7 percent villagers are well connected through internet facilities. So they are well connected by the information of world. But most of the internet facilities are used by the mean of mobile. In short the communication system of the village is at not good level. Villagers use only mobile modes of entertainment to connect with other people to obtain the information.

## Type of Fuel used

Most of the villagers use fuel wood due to near Ramnagar forest and Jim Corbett national park forest.

## Testing of hypothesis

1. The hypothesis "The Agriculture sector plays a vital role in village economic status" stands disproved because they don't have sufficient land for agriculture; and they also have fear of wild animals to attack on their land.
2. The Hypothesis "Unemployment is the main cause of poverty in villages" stands proved as data saws that the maximum percentage of villagers are labor. Villagers mainly work in the Hotels, and private sector; they do not get enough income to live a simple life and are trapped in the poverty cycle.

3. The hypothesis "Various Government schemes are implementing properly" stands disproved. As in data, we can say that only two schemes are implementing properly in these villages. Villagers do not know about other schemes properly. They are not benefited from various schemes like soil health card, PM Ujjwala Yojana, Kisan credit card scheme, agriculture irrigation scheme.
4. The hypothesis "Out- Migration is a significant problem in Hilly areas" stands proved. In the lack of employment opportunities and higher studies institutions, villagers migrate to cities like Srinagar, Dehradun, Delhi, Mumbai for a better future and survival.

## Problems

By the field observation and household survey there are some significant problems in this area are given below: -

- The prime riddle of these villages is road connectivity and transportation. There is irregular public transport in these villages, and some villages are not connected to any road.
- In this area, there is no nearby market for agriculture and horticulture products for sale.
- Primary Health care centers are not available in all villages. So, the villagers are not benefited by health care facilities.

- Out-migration is also a significant problem in this area cause of the lack of employment and career opportunities.
- Sanitation is also a problem in these villages because authorized bodies are not working well.
- There is lack of higher education institutions.
- Villagers are not aware about the government schemes and they do not get benefits of it.
- Unemployment is not only a mountain area problem; it is a global problem that is mainly faced by developing countries and their states. Villagers working outside the village get back at the period of COVID-19 because they lose their jobs. Before COVID-19, unemployment is a significant problem in these villages.

**Suggestions**
There are some suggestions to improve the socio-economic status of these villages.
- The area should be accessible at least by the road connectivity and regular public transportations.
- A nearby local market should be open for villagers to sell their products.
- An authorized body should be responsible for sanitation.
- There is the availability of natural resources, so villagers have to get the knowledge and skill to uplift their socio-economic status.
- Villagers have to get knowledge about government schemes and get benefits of schemes.
- Some agriculture pattern and skill development training are needed in this area.
- Some house industries like food processing industries, bio briquette industry should be open by SHG (Self Help Group) for development.
- The villagers are by and large religious minded, God fearing and vegetarian in their food habits. All peoples in the village are Hindu.
- Accessibility to school, senior secondary school and colleges/universities in cantonment are not available within the village. There are no basic need facilities are present in the Sunder Khal village. Only One or two small shops, are available and other facilities such as medical, post-office, telephone, bank, newspaper/magazine, rest house and market etc. are not available within the village.

**Conclusion**
Although these villages are developing, there are some socio-economic problems which are not solved yet. There are many natural resources like water, land, forest, suitable climate, man force. These resources are potential to change the economic status of these villages, but it only happens when the human resources know how to use resources for sustainable development. If the natural resources are used responsibly, then they can get a clean and green economy. These village have some excellent characteristics like natural resources, they comprehend many problems like sanitation, health conditions, transportation, and unemployment. Though their daily life environment is in modernization and some aspects, they are in a primitive state. So, whenever they suffer from these problems, we cannot uplift our society. If all the problems are solved, not only villages but also our country can achieve the SDG (Sustainable Development Goals) no. 1, 2, 3,4,6,8,10,13, 15, and rural development in an absolute sense. So, these are the findings that explain the real scenario of the village and our study suggests that the village Sunder Khal required certain development programmers and awareness, so that each villager can satisfactorily enjoy every facility in the village.

**References**
1. Census of India. Series 1, India, Registrar General of India, Haryana; c2011.
2. Census of India, NCT. Director of Census Operation, Haryana; c2011.
3. Census of India, NCT. DCH, Director of Census Operation, Haryana; c2011.
4. Kothari CR. Research Methodology: Method and Techniques, New & International Publication, New Delhi; c2009.
5. Denscombe M. The Good Research Guide, 2nd ed. Glasgow: Open University Press; c2003.
6. Gay LR. Educational Research, 5th ed. Ohaio: Merrill Publisher; c1996.
7. Harrison S, Herbohn J, Mangaoang E, Vanclay J. Socio-economic Research Methods in Forestry, Philippines; c2002.
8. Teshome Y, Negussie B. Challenges and prospects of climate change and agricultural land management practices in Ben Seshangul Gomez region Asosa zone, North West, Ethiopia. Int. J. Agric. Food Sci. 2021;3(1):14-20. DOI: 10.33545/2664844X.2021.v3.i1a.45
9. Jones PA. Fieldwork in Geography, London: Longmans; c1968.
10. Kala CP. Ecotourism and sustainable development of mountain communities: A study of Dhanolti Ecopark in Uttarakhand State of India. Applied Ecology and Environmental Sciences. 2013;1(5):98-103.
11. Kundu A, Rao JM. Inequity in Educational Development Issues in Measurement, Changing Structure and its Socio Economic Correlates with Special Reference to India, Paper Presented at Regional Workshop in Long Term Educational Planning NIEPA, New Delhi, January, 1982, 435-466.
12. Mishra AS. Participatory agro-eco-system analysis: A case study of Dehradun; c1998.
13. Mattews MH, Foster IDL. Fieldwork Exercises in Human and Physical Geography, London: Edward Arnold; c1987.
14. Nanad Kishor. Social-Economic Geography, Pointer Publisher, Jaipur (Rajasthan); c1994.
15. Ravinder Mukhraji. Philosophy of Research, Vivak Publisher, New Delhi; c2009.
16. Singh RL. Basic Element of Practical Geography Kalyani Publishers, New Delhi; c1991.
17. William Thomas A, Christopher AJ. Rural Development: Concept and Recent Approaches, Jaipur: Rawat Publications; c2011.
18. Sanjeev Mahajan. "Social Research Survey and Statistical)", Arjun Publishing House, Delhi; c2008.
19. Uttarakhand Economic Survey 2020-21
20. SDG (Sustainable Development Goal) by UN (United Nation) and NITI Ayog, New Delhi.
21. Mgnrega Website: - https://nrega.nic.in/netnrega/Progofficer/PoIndexFrame.aspx?
22. Hoggart K, Lees L, Davies A. Researching Human Geography, London: Arnold Publishers; c2002.