

CONCEPT NOTE

ON

OBSERVATIONS ON SOME BASIC PHYSICAL AND CHEMICAL PROPERTIES OF SOIL IN HIMALAYAN-TEMPERATE- ALPINE GRASSLAND

SESSION: 2017-2018

Introduction:

The subject Geography studies the man nature interaction over the earth surface. Thus, field visit is necessary for better understanding of the subject. It is very helpful for clear understanding of its theoretical part which we get in book. It aids to interlink the facts with practical field and teaches its significance. It builds interest of the students to get more about the places and world around us. The Himalayan region is well known for its diverse landscapes and aesthetic, culture, biological and hydrological values. The region has undergone through a series of changes in its geomorphology, climate and biota since its origin during Cretaceous –Oligocene periods (Vishnu-Mittre, 1984). These changes coupled with human activities, have shaped the present day vegetation which ranges from lower montane, wet evergreen forests to cold, arid, steppe communities and several secondary formations (Singh & Singh, 1988, Mani Gupta (1990), Numata (1986), Ram et al (1989), Rikhari et al (1978) are well circulated in the available literatures. These studies have focused on the flora resource. Their use as grazing for domestic livestock and biomass production in the alpine meadows for the western and central Himalaya.

Objectives:

The present study aims to fulfill the following objectives.

- To assess the basic physical, chemical, biological properties of the soil in five altitude temperature grassland in the study area.
- To examine the factors affecting those physical and chemical properties in the study area.
- To investigate the significance of geomorphologic attributes in determining the inherent soil of the study area.
- To study the interrelationship between soil properties and human livelihood in the study area.
- To prepare a plan for better management utilization of the soil in the study area.
- Field surveys enhance our understanding about patterns and spatial distributions, their associations and relationships at the local level.
- It is very important as it helps to gather required information so as the problems under investigation are studied in depth as per the predefined objectives.
- All the geographical skills are used in practical during field work. You get to learn and apply the skills of sampling, data collection, data processing, making questionnaires, map making, statistical techniques to derive results, observational skills and skills of interviewing etc.
- It helps you understand the theoretical concepts better.

Study Area

Uttarakhand formerly known as **Uttaranchal** is a state in the northern part of India. It is often referred to as the "Devabhumi" (literally "Land of the Gods") due to numerous Hindu temples and pilgrimage centres found throughout the state. Uttarakhand is known for the natural environment of the Himalayas, the Bhabar and the Terai regions. It borders the Tibet Autonomous Region of China to the north; the Suddurpashchim Pradesh of Nepal to the east; the Indian states

of Uttar Pradesh to the south and Himachal Pradesh to the west and north-west. The state is divided into two divisions, Garhwal and Kumaon, with a total of 13 districts. The winter capital of Uttarakhand is Dehradun, the largest city of the state, which is a rail head. Gairsain, a town in Chamoli district is the summer capital of Uttarakhand.

Rudraprayag district is located at 30.28°N 78.98°E. It has an average elevation of 895 metres (2,936 feet).

Many of the newer buildings and particularly the *Sangam* (confluence) area was severely damaged in the 2013 Uttarakhand floods. A footbridge over the Mandakini river, and also a road bridge six km downstream at Raitoli was washed away. The layout of the Sangam has altered significantly. The road along the Mandakini valley, leading to Kedarnath, was damaged at many points.

Ukhimath - Winter Seat of Kedarnath. **Ukhimath** is situated at an elevation of 1317 mts above sea level in Rudraprayag district of Uttarakhand .

Itinerary

We started our journey from Raiganj railway station on 4th September 2017 at 6:30pm. After 10 hours of journey, we reached Bandal railway junction on 5th September at 4:20 am via Radhikapur Express . From there we headed towards Howrah Jn. via local train. After reached Howrah Jn. again we started our journey via Upasana Express and reached at Haridwar Railway station on 6th September 2017 at 4:30 pm. We reached our destination next day of Bus journey. Then we conducted field survey through sample collection. Then, next day in the morning time we started towards Rishikesh , it took almost few hours to reach there. The road was very narrow and full of risk but surrounding nature was very beautiful. The relative relief of the topography was very high. Two nearest mountainous ranges were bisected by flowing water.

Participants Statistics: 31

No of Boys: 16

No of Girls: 11

No of Field Supervisor and Mentors: 4

Outcome

- It gives you a chance to enjoy a wide variety of environments and landscapes
- Students got practical knowledge
- Experienced Himalayan topography on naked eyes
- Learned how to conduct field survey
- Developed the capacity to work with teaching staff and peer group.
- Students are understand relationship between theoretical concept and practical concept.