

**DEPARTMENT OF GEOGRAPHY**  
**GOVERNMENT DEGREE COLLEGE KULGAM**

No.:

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As a part of the curriculum, the students of B.Sc/B.A 6<sup>th</sup> Semester, Department of Geography, conducted a day-long field tour to Pahalgam on **06<sup>th</sup> October 2021**. At the outset, the students got an opportunity to catch the sight of the geographical and ecological diversity of the visited area. They observed the pastoral life-style and socio-economic conditions of the population, in the nearby hamlet. The in-charge teachers namely **Dr. Jahangeer Afzal, Dr. Aadil M. Nanda** and others assisted the students to understand the impact of deforestation and human exposure on the landuse/landcover pattern of the fragile ecosystem. The students were explained the process of meadow formation and were given to understand a brief idea of flora and fauna in the area.



The man-environment relationship forms the base of geographical inquiry which man has strived since times immemorial because of his intrinsic curiosity to know his surroundings and the processes which shape and influence it. However, it may be pointed out that differential processes give rise to differential landscapes owing to diversity of geographical factors across the space. To comprehend the geographical realities pertaining to particular places or whatever the case may be, it is highly suggested that field trips should be employed as a method of study to understand the processes that influences man directly or indirectly. The famous proverb

Geographers lab is everywhere holds true in this context because he/she can understand geography only through direct observations or by taking purposeful field trips. We selected Pahalgam for our field trip which all the students were more or less familiar with since it directly affects the economy of the area. Geographically, Pahalgam offers us an excellent opportunity to analyse different geomorphic processes that are responsible for formation of different landforms in the region. We started with the significance of glaciers for maintaining river flows and thereby providing us water which is essential for our survival. For the observational purpose, we went to Chandanwari so that students could get a basic idea how glaciers work and sustain hydrological cycle at a catchment level. The presence of glacial moraines demonstrates the depositional work of glaciers. The students also got familiar with the idea of glacial mouth or snout, fernification of snow, valley glaciers, hanging valleys, braided stream, glacial striations, rochemountaine, alpine meadows, and rock outcrops. Importantly, the rock-outcrops along the road provided a glimpse of folding processes as slate rock was found abundantly in the entire stretch from Frislun to Chandanwari.



The visit to Betaab valley also added to the geographical experience of the team. The students learned that as gradient of a stream decreases abruptly from a mountainous passage, the bed load of a river gets deposited as stream loses its competence to carry large particles. The presence of a braided stream in the middle portion of Betaab valley demonstrates this significant fluvial process. The upper slopes of Betaab consisted of weathered rocks and rocky debris. The students were demonstrated with live examples that how frost action facilitates the mechanical weathering and which in turn, increases the likelihood of mass wasting processes. The exposed rock cliffs too helped students to understand the role of slope in landslides both at Frislun and Batakot. Since the area lies in the alpine mountainous zone of the Himalayas, the response to prevailing climatic conditions is well exhibited by vegetation of an area. The moist-climatic regime on the slopes supports evergreen coniferous forests of temperate origin. To comprehend the role of aspect, students were asked to have keen observation on the adret and ubac sides of mountain ranges so that they could comprehend how location specific factors contribute to the development of micro-climates which, in turn, interact with other physical attributes to create unique ecological zones. The students were also given information about the etymology of Dushunpora (Exposed to sunlight) and Khoripora (Exposed to shadow) so that they get familiar with the role of geography in human societies. The role of slope was also demonstrated to the students by showing them J-shaped conifers that result due to creep on the slopes.



At Pahalgam, the confluence of the east Lidder and the west Lidder offered a practical experience of a working micro-watershed in a large drainage basin. Lidder stream passes through a narrow Valley, studded with massive boulders and overlooked by dense forests till it debouches into a wide alluvial fan. At the head of its delta, the main stream divides itself into a number of channels, braiding being a common characteristic of all the rivers in the Valley which fan out to form a wide alluvial plain and merge with the Jhelum between Khanabal and Gur. By observing such processes directly helped the students to conceptualize things in a better way and with long lasting imprints to make the field trip memorable. The students and the staff also did enjoy angling as a recreational activity which aroused the realisation of river being a significant natural resource. It was followed by collection of rock samples whereby samples were identified as sedimentary rocks, igneous rocks, and metamorphic rocks. At Batakot village, the presence of erratic boulders led the students to comprehend the spatial extent of glaciers and glacial activity in the geological past. While travelling back home, we also showed them the importance of Lidder in the development of agriculture and other allied activities in the lower catchment of the affluent. The negative impacts of human activities were also highlighted which has led many disasters in the recent past in the form of 2014 flood, decrease in river flow, channel shift, water borne diseases etc.



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