

both sides of this Nullah and, as the distant view from a high ridge subsequently showed, in the other side valleys also. From the steep ridge just referred to we skirted the head of the Dalgīn Nullah north-westwards by an almost level track leading through beautiful forest, where the luxuriance of the vegetation with its carpet of alpine flowers vividly recalled the glories of familiar Kashmir 'Margs'. We camped that evening on a stretch of lovely mountain meadows edged by grand firs and pines at an elevation of just under 10,900 feet (Fig. 12). The distant view which lay open to the east and south-east allowed us not only to locate high triangulated points above Chilās but, when all the clouds had lifted towards sunset, to sight, in its full majesty, the wonderful ice-clad pyramid of Nangaparbat itself. It was a scene of overpowering grandeur, and made me forget all the trying marches near the Indus and the constant plague of mosquitoes which had followed us even to this height.

Climatic
advantages
of Darēl
and Tangīr.

The fact that I found at our Dalgīn camp the identical flora with which I had become familiar during successive summers at Mohand Marg, my favourite alp above the Sind valley of Kashmir, at exactly the same elevation, suggested to me at the time an important geographical conclusion. As it soon received abundant confirmation from what I saw at Darēl and Tangīr, it may as well be briefly recorded here; for I have had no opportunity, then or since, of collecting more exact data. It had already been made clear by what I have noted as to the present aspect of the Domōt Nullah, that the abandonment of the once extensive cultivation in the Khanbarī valley and its branches could not be ascribed to want of adequate water for irrigation, i. e. increased aridity of climatic conditions or 'desiccation', to use a brief expression. But it is the magnificent forest growth to be found everywhere from Khanbarī to Tangīr at elevations between 7,000 and 11,000 feet that demonstrates most plainly that in the matter of rain and snowfall these valleys enjoy climatic conditions wholly different from those prevailing higher up the Indus or elsewhere between the great Indus bend and the Hindukush.

Abundance
of forest
growth.

The contrast between the latter regions, practically devoid of all forest, and the abundantly wooded upper valleys of Darēl and Tangīr is quite as striking as it is for the traveller who passes into Kashmir from the barren rocky valleys of Ladākh, Baltistān, or Gilgit. It was of Kashmir, and more particularly of its alpine plateaux and side valleys, that I was constantly reminded by all the main physical aspects of Darēl and Tangīr. As far as I could judge without expert physiographic knowledge, the conditions of vegetation and climate in these valleys beyond the Indus corresponded closely to those to be met with at similar elevations within the territory of Kashmir proper.

Adequate
moisture
accounted
for.

Looking at the map I am strongly inclined to connect the abundant moisture that the valleys of Darēl and Tangīr undoubtedly receive—whether mainly in the form of heavy winter snowfall or of summer rains also I am not in a position to assert—with the peculiar configuration of the Indus valley to the south and the orography of the high ranges adjoining it. The map shows that the Darēl and Tangīr valleys fall just within the mountain area to which the valley of the Indus, stretching north and south from its great bend below the mouth of the Tangīr river to the plains of Yusufzai and Attock, admits the winter rains of the North-West Frontier and those of the monsoon. Farther north and east the moisture-carrying clouds are stopped by the intervening mountain chains. We know that, probably for exactly corresponding reasons, the high valleys at the head-waters of the Swāt river, flowing from north to south, are similarly well wooded, whereas Chitrāl and Mastūj, lying beyond high ranges to the north-west and north, though at no great distance, are almost as bare of tree growth as the valleys farther up the Indus.

Watershed
towards
Darēl.

Our march of August 15th, which took us over high ground into Darēl proper, was long and trying, but offered exceptional advantages for surveying operations. First the ascent led