Chamonix will even tell of "un anglais" who one night scored 40,000. Great fun, yes?

JOHN BOUCHARD

Saser Kangri Yellow Goddess of the Karakoram. Y. C. Khanna. The Chairman, Central Family Welfare Committee of the Indo-Tibetan Border Police, New Delhi, 1980. 144 pages, black-and-white and color photographs, map. Rupees 100.

In these days of solo alpine-style ascents of 8000-meter peaks, of helicopters, group air travel, widespread availability of porters, pack animals and organized mountain trekking, one wonders if any mountain, even in the Himalaya, could be termed inaccessible. Yet this is exactly what the Saser Kangri massif remains today. Forming the southeastern extension of the Karakoram between the Shyok and Nubra rivers, the Saser Range is guarded by complex glacier systems and defended to the east by the necessity of a 150-mile-long approach involving numerous river crossings.

Saser Kangri (also known by the Indians as Saser I) was, until 1973, the highest unclimbed peak in India—this is the story of its first ascent. Saser Kangri (25,170 feet), surrounded by its three satellites (Saser II, III and IV—respectively 24,650, 24,560 and 24,330 feet) had been previously explored by Tyndale-Biscoe in 1899, by Longstaff in 1909, by Vissets in 1929, attempted by Colonel J.O.M. Roberts in 1946, and by the Indians Tayal in 1956 and Harsh Bahuguna in 1970.

With the above difficulties and unsuccessful attempts in mind, the author summarizes the philosophy of the Indian expedition which placed fourteen (yes, fourteen!) members on the summit: "Saser Kangri was not a peak that might yield to a shoestring expedition for a first climb." Indeed Mr. Khanna did not exaggerate. The Indo-Tibetan Border Police Expedition (ITBP) was organized by Commander Joginder Singh. No porters were used for the 375-mile round trip from Leh and return, but instead a support party from the ITBP was followed by a main party of climbers, all carrying 134 loads of 40 kg each. Of special note is the achievement of Rigzen Mutup Kalon "who had not had any mountain training at all, was quick to learn and made the summit."

The text offers little in the way of information on the climbing but a plethora of logistical facts is included in the numerous tables and appendices. 3600 man-days of food, 23,000 cigarettes, 5060 vitamin C tablets, 15 kilograms of garlic, 1536 meters of manila fixed rope were among the items used in the expedition. Six hundred rock and ice pitons were carried, but only twelve rock hammers, which leads to the fascinating ratio of fifty pitons per hammer. These and hundreds of other facts contribute nothing in the way of useful information for would-be travelers to the region. Nonetheless the book offers glimpses

into the workings of the ITBP—whose record of achievement in the Indian Himalaya is documented here. The photographs are poorly reproduced and provide no record of the actual climbing encountered.

In spite of these shortcomings, the book will undoubtedly prove useful to anyone contemplating a trip to this part of the Himalaya. More than one reader will be stimulated by the views of Saser II, III and IV to consider organizing a trip to the area, if permission can be obtained and logistics organized. With the opening of new areas of the Indian Himalaya to foreign mountaineers, this is only a matter of time, one hopes. Great ingenuity will be required if the next ascents of the Saser Kangris are to be done "on a shoestring budget." Here lies a challenge that the mere climbing of an 8000-meter giant in these modern times no longer adequately provides.

ROY KLIGFIELD

Mountains and Man, A Study of Process and Environment. Larry W. Price. University of California, Berkeley, 1981. 506 pages, black-and-white photographs, maps, illustrations, tables. $29.95.

The main task of *Mountains & Man* is to explore the complex processes and features of the mountain environment. In this synthesis of processes and relationships, the text treats the erosive effects of nivation, soil creep, and frost-wedging, all forms of mass wasting. This wasting is more important as a denuding agent in mountain lands than running water. Price reminds us that frost-wedging is the primary force of rock breakdown: a major cause of rockfall is due to a 9% expansion of water freezing. The directional growth of ice crystals is another factor. We are reminded what climbers have long known—the instability of talus slopes. The average rate of surface movement of talus was measured in the Rocky Mountains as about eight inches per year above timberline.

The book provides an important discussion of climatic regimes and how wind affects landscapes and snow deposit. The role of wind in the distribution of snow is most important to mountaineers and skiers, who are concerned over the accumulation of snow and slabs on lee slopes. The book shows how mountains serve as pathways for plant migration and how endemics—species found only in a particular range—have developed. There is a detailed discussion of alpine tundra in its latitudinal positions, and the effects of the latter on vegetative species.

Man, animals, and plants have displayed a preference for altitudinal belts in which to arrange themselves. Price points out "Mountains exist as microcosms, like islands amid surrounding lowland seas. . . . They offer sanctuary for endangered species." Altitude and latitude, of course, are important factors in the location of the world's glaciers. The book describes the formation of ice from snowfall, and there is an adequate