

**Discharge and suspended sediment concentration of meltwaters,  
draining from the Dokriani glacier, Garhwal Himalaya, India**

Hasnain, S.I. and Thayyen, R.J.

**ABSTRACT**

Discharge and suspended-sediment concentration in the proglacial river draining the debris-covered summer-accumulation type Dokriani glacier, Ganga river basin, India, was measured between May and October 1994. In the meltwater streams of the Ganga headwater, the pattern of sediment transport is strongly influenced by the monsoonal precipitation between July and mid-September. During this observation period a total discharge volume of  $6238 \times 10^4 \text{ m}^3$  and  $15 \times 10^4$  tonnes of suspended-sediment was delivered from the catchment. The monsoonal months of July and August accounted for 64% of the discharge, 70% of suspended-sediment transport and 74% of the monsoonal rainfall. The focus of the present study is to estimate the contribution of glaciers in the monsoon-dominated central part of the Himalaya to sediment transport in the Himalayan rivers.