

- 1119. Juyal, G.P., Katiyar, V.S., Dadhwal, K.S., Joshie, P. and Arya, A.K. 1995.** Mined area rehabilitation for torrent control in Himalayas. In: *Torrent Menace: Challenges and Opportunities* (Eds.) G.Sastry, V.N.Sharda, G.P.Juyal and J.S.Samra, CSWCRTI, Dehradun: 119-145.

Torrents are the downstream manifestation of the upstream disturbances in the watersheds. The unscientific mining carried out on the sensitive Himalayan slopes has led to environmental degradation and severe soil erosion, to the tune of 550 t/ha. A lime stone mined watershed of 64 ha area, situated in the Doon Valley of outer Himalayas was selected for rehabilitation with soil and water conservation measures and its hydrological monitoring. Engineering measures were first adopted to stabilize the degraded slopes and drainage

channels. Planning with suitable species of fuel, fodder and fibre value was done subsequently. The watershed was well vegetated and stabilized, bringing down the soil loss to 8 t/ha, within a period of 6 years. The conservation measures reduced the surface runoff (57 to 37%) and flood peaks and increased the dry weather flow and improved its quality. The soil properties also improved by incorporation of biomass. The SWC measures are eco-friendly and economically viable.