

## Morphometric Study of PG-1 Watershed of Chandrapur District, Maharashtra

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### Abstract

Morphometric analyses for 13 mini-watersheds of PG-1 watershed have been carried out during present work. The linear parameters reveals that the mini-watersheds 1,2,3,4,5,7 and 8 has well developed stream network up to III and IV order with dendritic drainage pattern. The hard and compact nature of basaltic rock exposed over these mini-watersheds is related to dendritic drainage pattern and responsible for less infiltration and well developed stream network. The rock types of the study area are homogeneous with undulations in southern part of watershed, while northern part covering many mini-watersheds is a flat region. The areal parameters suggest moderate surface runoff and mostly elongated shape for all mini-watersheds (Ff: 0.09-0.84) with late maturity stage of topography. The basin relief is higher on southern side and it decreases towards northern part of watershed. The relief aspects as well as the visual interpretation of DEM of study area reflects high to moderate relief, higher runoff and low infiltration from southern central portion, which is related to lithology of either Deccan basalts or the shale-limestones of Penganga Group.

**Keywords:** Morphometric analysis, PG-1 watershed, Chandrapur District, Maharashtra.