

**A HYSOMETRIC PERSPECTIVE IN COMPREHENSING THE GEOMORPHIC
DEVELOPMENT OF TAMBRAPARNI RIVER BASIN, WESTERN FLANK, SOUTH
WESTERN GHATS**

KARTHIKA KRISHNAN

Research Scholar, Department of Geography, School of Earth and Atmospheric Sciences,
Madurai Kamaraj University, Madurai, India

ABSTRACT

This paper deals with a part of the author's research work dealing with the geomorphometry and geomorphology of the Tambraparni River Basin (TRB) of Kanyakumari District of southern Tamil Nadu, located on the western flank of South Western Ghats. The Western Ghats Mountain chain is today internationally recognized as a region of immense global importance for the conservation of its biological diversity, besides its association of areas of great geological, cultural and aesthetic importance. Hypsometric analysis quantifies the geologic stages of development and erosional proneness of a river basin. In this study, efforts were made to estimate the hypsometric values of the Tambraparni River Basin and so as to understand the geologic as well as geomorphic evolution and stages of the basin. In the present study as the value of hypsometric integral is 0.0484, which is associated with a highly concave hypsometric curve, it indicates that the major portion of the basin of Tambraparni River lies at a comparatively low relief. Typically, the basin is associated with highly dissected and eroded landscape as a result of fluvial action.

KEYWORDS: Analysis, Geomorphometry, Geomorphic Stages, Hypsometry, TRB, Western Ghats