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TITLE OF PROJECT:

GIS BASED APPROACH TO ANALYSE MORPHOMETRIC CHARACTERISTICS OF DRAINAGE IN NASHIK DISTRICT

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ABSTRACT (150-300 words):

Refer Website for Guidelines

Morphometry is an important factor to understand the landforms processes, soil physical properties and erosional characteristics. It aims at configuration of the earth's surface using mathematical analysis. In the present study, the various morphometric characteristics are analysed by using morphometric analysis for the Nasik district located in the state of Maharashtra. Evaluation of morphometric parameters requires the analysis of various drainage parameters achieved by using linear and areal aspects. Linear aspect of the drainage basin include the streams and tributaries where topographical properties of streams are analysed. In the case of aerial aspects, the area aspects, the area, perimeter, basin length are calculated for the study area under consideration. The results obtained introduce sub-dendritic patterns of the drainage basin with soil having high infiltration rate. The present study can prove useful for sustainable development groundwater resources and geo-hydrological studies.

KEYWORDS:

DEM, Drainage network, SRTM data, Drainage Textural Analysis, Slope

CATEGORY:

Hydraulic and Water Resources Engineering