

Rainfall-Runoff Nexus in Mid-block of Yala Catchment

Abstract:

Understanding rainfall-runoff relationship in any watershed is key to proper management of the watershed and mitigating challenges including infrastructural damages, high cost of water treatment and loss of life. This paper establishes the rainfall-runoff relationship by considering discharges in the feeder streams of Zaaba, Edzava, and Garagoli rivers. ArcGIS was used to delineate the watersheds and ANN model used for results analysis. The research derived relationship of rainfall and runoff in the three watersheds with correlation coefficient R , of between 1 and 0.8 for the water sheds showing that the model is suitable and reliable.

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