



## **Prioritization of Sub-Watersheds in the Arasalar-Palavar Region using Sediment Production Rate (SPR)**

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**Abstract:** In this study, the sub watersheds of Arasalar Palavar region were prioritized based on Sediment Production Rate (SPR) evaluated using Jose and Das model. The primary Arasalar Palavar watershed region is subdivided into eight sub-watersheds such as APR1a, APR2b, APR3c, APR4d, APR5e, APR6f, APR7g and APR8h. SRTM open source data was used for delineating the streamlines over the study area. The linear aspect parameters such as form factor, circularity ratio and compactness coefficient of the watershed are used to calculate the sediment production rate. SPR value ranges from 0.00097764 to 3.009953769 ha-m/100 sq-km/year for the study area and is lesser than other watersheds, implying that the Arasalar Palavar basin is an elongated one.

**Keywords:** Watershed, Sediment Production Rate (SPR), Jose and Das model, SRTM

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