

Classification Of Small Scale Land Forms, Its Significance: A Case Study Of The Middle Ichamati River, India

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Abstract: Landforms are the core concept of geomorphology. The definition of landforms, their characterization and classification are the core subject of geomorphology. But all these become complex when it seems to difficult to identify the landforms, especially when the area is plain land and highly modified by human activities. This paper has examined the characters of the landforms of the middle basin of the Ichamati river, the important distributary in the district of North 24 Parganas, India. It has been primarily taken an attempt to classify the landforms with the help of the satellite image, IRS P6 LISS II and LISS III. The DEM is not enough to identify the micro scale landform. To overcome this difficulty a series of field works have been conducted (2002, 2004, 2012 and 2015). The landforms have been classified according to second order derivative (Wood, 1996) method. Then ANOVA test has been applied to justify the classification. The F-statistics have indicated the effort is satisfying. The changing character of different landforms denote the river is going to be deteriorating from downstream upward.

Keywords: Landforms, geomorphology, classification, DEM, fieldwork, second order derivative, ANOVA.

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