Watershed impact evaluation using remote sensing

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Watershed management is considered as a way for sustainable rural development and thus impact evaluation is a must. The common approach of post-classification comparison of pre- and post-implementation satellite imageries for watershed impact evaluation suffers from serious limitations, mainly ignoring the changes which are not due to watershed interventions. To minimize such biases, control area approach is proposed and relative change in watershed compared to control area is attributed to watershed management. The studied four clusters of watershed in Vidarbha region, Maharashtra show that the effect of the watershed could stand out irrespective of pre- and post-implementation conditions of satellite imageries.

specific watershed development plan[8–10] as well as impact evaluation[11–13].

Considerable spending has been made in watershed management through various government-sponsored programmes. Though the relative performance compared to other programmes is good, replicable successes reported are scattered and over all effect is not widely visible. Under the watershed programme, several activities aimed at improving soil and water conservation, groundwater recharge, crop rotation, crop productivity, and reducing run-off and soil erosion are executed. Impact evaluation is essential to differentiate between good and bad so that good can be replicated. Nowadays, impact evaluation of selected watersheds through external agencies has be-