



Ecological Sustainability of Riverine Ecosystems in Central Western Ghats

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ABSTRACT The conservation and sustainable management of ecosystems are the vital requisites in the pursuit of environment friendly development goals. This requires an understanding of the complex functioning of ecosystems, diversity of resources, ecosystem goods and services and their quintessential role in supporting people's livelihood. Ecological units with the exceptional biotic and abiotic elements are designated as Ecologically Sensitive Regions (ESRs). Identification of ESRs has been done by considering spatially, both ecological and social dimensions of environmental variables. The current research maps ESR at village levels in the Kali River Basin of Central Western Ghats through aggregated weightage metric score as ESR (1-4) based on attributes (biological, Geo climatic, Social, etc.). There are 203 villages in ESR-1, 73 in ESR-2, 77 in ESR-3, and 181 villages in ESR-4. Ecologically fragile regions to be conserved on priority with no disturbances are ESR 1 and ESR 2, while ESR 4 is for development.