

1. Record Nr.	UNINA9910366654703321
Titolo	Gully Erosion Studies from India and Surrounding Regions // edited by Pravat Kumar Shit, Hamid Reza Pourghasemi, Gouri Sankar Bhunia
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-23243-3
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XXII, 480 p. 293 illus., 267 illus. in color.)
Collana	Advances in Science, Technology & Innovation, IEREK Interdisciplinary Series for Sustainable Development, , 2522-8722
Disciplina	551.41
Soggetti	Geomorphology Environmental management Geographic information systems Soil science Geology Environmental Management Geographical Information System Soil Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Spatial Extent, Formation Process, Reclaimability Classification System and Restoration Strategies of Gully and Ravine Lands in India -- Soil Disintegration Characteristics on Ephemeral Gully Collapsing in Lateritic Belt of West Bengal, India -- Modeling of Gully Erosion Based on Random Forest Using GIS and R -- Geomorphic Threshold and SCS-CN-Based Runoff and Sediment Yield Modelling in the Gullies of Dwarka--Brahmani Interfluve, West Bengal, India -- Assessing Gully Asymmetry Based on Cross-Sectional Morphology: A Case of Gangani Badland of West Bengal, India -- The Potential Gully Erosion Risk Mapping of River Dulung Basin, West Bengal, India Using AHP Method -- Application of Field-Monitoring Techniques to Determine Soil Loss by Gully Erosion in a Watershed in Deccan, India -- Gully Erosion Susceptibility Mapping Based on Bayesian Weight of Evidence -- Understanding the Morphology and Development of a Rill-Gully: An Empirical Study of

Khoai Badland, West Bengal, India -- Estimation of Erosion Susceptibility and Sediment Yield in Ephemeral Channel Using RUSLE and SDR Model: Tropical Plateau Fringe Region, India -- Assessment of Potential Land Degradation in Akarsa Watershed, West Bengal, Using GIS and Multi-influencing Factor Technique -- Using Ground-Based Photogrammetry for Fine-Scale Gully Morphology Studies: Some Examples -- Effects of Grass on Runoff and Gully Bed Erosion: Concentrated Flow Experiment -- Water Flow-Induced Gully Erosion in Himalayan Watershed Cum Plateau and Alluvial Plains -- Influence of Road-Stream Crossing on the Initiation of Gully: Case Study from the Terai Region of Eastern India -- Land Degradation Processes of Silabati River Basin, West Bengal, India: A Physical Perspective -- Assessment of Gully Erosion and Estimation of Sediment Yield in Siddheswari River Basin, Eastern India, Using SWAT Model -- Role of Plant Roots to Control Rill-Gully Erosion: Hydraulic Flume Experiment -- Bamboo-Based Technology for Resource Conservation and Management of Gullied Lands in Central India -- Soil Erosion Protection on Hilly Regions Using Plant Roots: An Experimental Insight -- Planning, Designing and Construction of Series of Check Dams for Soil and Water Conservation in a Micro-watershed of Gujarat, India -- Impacts of Gully Erosion on River Water Quality and Fish Resources: A Case Study -- Gully Erosion in I. R. Iran: Characteristics, Processes, Causes, and Land Use -- Factors Affecting Gully-Head Activity in a Hilly Area Under a Semiarid Climate in Iran -- Topographic Threshold of Gully Erosion in Iran: A Case Study of Fars, Zanzan, Markazi and Golestan Provinces -- A Review on the Gully Erosion and Land Degradation in Iran -- Mapping and Preparing a Susceptibility Map of Gully Erosion Using the MARS Model -- Gully Erosion Susceptibility Assessment Through the SVM Machine Learning Algorithm (SVM-MLA) -- Data Mining Technique (Maximum Entropy Model) for Mapping Gully Erosion Susceptibility in the Gorganrood Watershed, Iran -- Land Degradation and Community Resilience in Rural Mountain Area of Java, Indonesia -- Spatial Analysis and Prediction of Soil Erosion in a Complex Watershed of Cameron Highlands, Malaysia.

## Sommario/riassunto

This book offers the scientific basis for the ample evaluation of badland management in India and some surrounding regions. It examines the processes operating in the headwaters and main channels of ephemeral rivers in lateritic environments of India. In particular, the book covers a range of vital topics in the areas of gully erosion and water to soil erosion at lateritic uplands regions of India and other regions in Asia. It explores the probable gully erosion modeling through Remote Sensing & GIS Techniques. It is divided into three units. Unit I deals with the introduction of badland, types of badland and the process of badland formation. Unit II is devoted to a description of quantitative measurements. Unit III deals with the control and management processes related to various issues from different regions. As such this book serves as a reference book for research activities in this area. It is an efficient guide for aspiring researchers in applied geography, explaining advanced techniques to help students recognize both simple and complex concepts.