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Nota di contenuto	Chapter 1. Measurement, Data and Statistics: A Historical Voyage in Indian Forestry -- Chapter 2. National Forest Inventory in India: Developments Towards a New Design to Meet Emerging Challenges -- Chapter 3. Internet of Things in Forestry and Environmental Sciences -- Chapter 4. Inverse Adaptive Stratified Random Sampling -- Chapter 5. Improved Nonparametric Estimation Using Partially Ordered Sets -- Chapter 6. Bayesian Inference of a Finite Population Mean Under Length-Biased Sampling -- Chapter 7. Calibration Approach Based Estimators for Finite Population Mean in Multistage Stratified Random Sampling -- Chapter 8. A Joint Calibration Estimator of Population Total Under Entropy Distance Function Based on Dual Frame Surveys -- Chapter 9. Fusing Classical Theories and Biomechanics Into Forest Modelling -- Chapter 10. Statistical Multivariate Methods for Decision Making in Classification of Water Quality Data and Management of Water Resources -- Chapter 11. Investigating Selection Criteria of Constrained Cluster Analysis: Applications in Forestry -- Chapter 12. Ridge Regression Model for the Estimation of Total Carbon Sequestered by Forest Species -- Chapter 13. Some Investigations on Designs for

Mixture Experiments with Process Variable -- Chapter 14. Development in Copula Applications in Forestry and Environmental Sciences -- Chapter 15. Forest Cover Type Prediction Using Model Averaging -- Chapter 16. Small Area Estimation for Skewed Semicontinuous Spatially Structured Responses -- Chapter 17. Small Area Estimation for Total Basal Cover in the State of Maharashtra, India -- Chapter 18. Estimation of Abundance of Asiatic Elephants in Elephant Reserves of Kerala State, India -- Chapter 19. Exploration of Metagenomics Tools for Analysis of Forest Soil Microbial Diversity and its Annotation -- Chapter 20. Integrated Survey Scheme to Capture Forestry Related Data in Bangladesh: Beyond the Traditional Approach.

Sommario/riassunto

This book presents recent developments in statistical methodologies with particular relevance to applications in forestry and environmental sciences. It discusses important methodologies like ranked set sampling, adaptive cluster sampling, small area estimation, calibration approach-based estimators, design of experiments, multivariate techniques, Internet of Things, and ridge regression methods. It also covers the history of the implementation of statistical techniques in Indian forestry and the National Forest Inventory of India. The book is a valuable resource for applied statisticians, students, researchers, and practitioners in the forestry and environment sector. It includes real-world examples and case studies to help readers apply the techniques discussed. It also motivates academicians and researchers to use new technologies in the areas of forestry and environmental sciences with the help of software like R, MATLAB, Statistica, and Mathematica.
