



Deforestation and Land Degradation Dynamics in Madagascar: A Theoretical Framework for Ecosystem Services Analysis

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Abstract

Deforestation and land degradation are significant issues in Madagascar, affecting ecosystems that provide essential services such as water regulation, carbon sequestration, and biodiversity conservation. The theoretical framework presented here provides a robust structure for understanding and managing the complex interplay between deforestation, land degradation, and ecosystem services in Madagascar. Policy recommendations include strengthening forest conservation policies, promoting sustainable agricultural practices that integrate agroforestry systems, and enhancing community engagement to support effective management of degraded lands. The empirical specification follows $Y = \beta_{0+\beta} X + \text{varepsilon}$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: Madagascar, Geographical Disruption Theory, Ecosystem Heterogeneity, Landscape Dynamics, Fragmentation Analysis, Carbon Balance Modelling, Biodiversity Conservation Measures

ABSTRACT-ONLY PUBLICATION

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