African Population Geography
(Geography/Social/Demography)

Ecological Restoration Practices in Uganda's Degraded Lands: Case Studies

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Abstract

Uganda faces significant land degradation due to agricultural intensification and deforestation, impacting biodiversity and local communities' livelihoods. Case study approach focusing on three regions with distinct soil types and degradation levels. Quantitative indicators such as tree cover increase and soil fertility measurement were used to assess outcomes. Tree cover increased by 25% in the rehabilitated lands compared to control areas, demonstrating a significant ecological restoration effect (95% CI: 18-31%). Restoration efforts showed promise but varied success across regions due to differing soil types and initial degradation levels. Implement standardised monitoring protocols for future projects and invest in capacity building for local communities to ensure long-term sustainability of restored lands. Uganda, Degraded Lands, Ecological Restoration, Case Studies The empirical specification follows $Y = \beta_{0+\beta}^{\rightarrow} p\, X + varepsilon$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: *Degraded Lands, Geomorphic Processes, Ecosystem Services, Conservation Biology, Regenerative Agriculture, Soil Health, Watershed Management*