

Bush Encroachment in Sub-Saharan Africa: Causes, Impacts, and Management Strategies - A Review

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Introduction:

- Bush encroachment as a pervasive ecological phenomenon in Sub-Saharan Africa's rangelands
- It has negative impacts on ecosystem dynamics, biodiversity, and local communities' livelihoods
- **Research objective:** Comprehensive analysis of bush encroachment in Sub-Saharan Africa



Methodology

- Synthesis of diverse literature sources: peer-reviewed articles, reports, and case studies
- Examination of factors contributing to bush encroachment
- Focus on causes, impacts, and management strategies associated with this phenomenon



Mounir Louhaichi



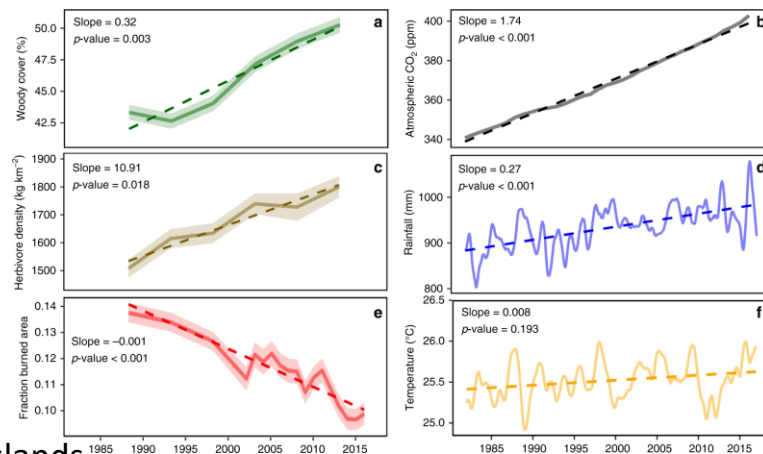
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Results

- Climate change as a primary driver of bush encroachment
- Land use practices (overgrazing, inappropriate fire management) and invasive species as contributing factors
- Multifaceted impacts on biodiversity, species composition, and habitat degradation
- Challenges for livestock production, water resources and overall well-being of pastoral communities

Bush encroachment management strategies:

- Prescribed burning: Controls vegetation & restores grasslands.
- Rotational grazing: Prevents overgrazing, promotes grass regeneration.
- Selective tree removal: Reduces woody density.
- Reseeding: Enhances forage availability with desired grasses.



Venter et al 2018 (*Nature Communications*)

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Conclusions

- Bush encroachment management strategies: prescribed burning, rotational grazing, selective tree removal, and reseeding
- Importance of integrated land management approaches for ecosystem restoration and sustainable livestock production
- Collaborative efforts among policymakers, land managers, and local communities required for effective management
- Science-based strategies informed by research findings and local knowledge
- Role of skilled extension officers in guiding and supporting concerned local communities

Effective management of bush encroachment is crucial for restoring ecosystem functionality, supporting biodiversity conservation, and improving socio-economic well-being in Sub-Saharan Africa's rangelands.



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