

*Unpacking land degradation and the thorny issue of woody plant encroachment in South Africa*

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Land degradation is a major issue plaguing the rangelands of South Africa. There are several causes of land degradation such as overgrazing and high population density. Historical land policies during the Apartheid era affected land availability and access to resources for farmers, leading to overcrowding and overgrazing. In addition to these, elevated levels of carbon dioxide in the atmosphere have resulted in the phenomenon of increasing number of trees into savannas, described as 'woody plant encroachment' which further contributes to rangeland degradation. Reduction in grazing land for livestock has significant impacts on farmer livelihoods in the region. Increasing tree cover also causes tradeoffs with the climate commitments and biodiversity of South Africa, thereby causing tensions in achieving the Sustainable Development Goals (SDGs).

In this work, we analyse the situation of land degradation in the Eastern Cape region of South Africa by adapting a natural resource governance framework and by conducting interviews with farmers. We show that addressing land degradation requires an approach that simultaneously considers the historical land tenure policies, social and ecological factors in rangelands, and how the outcomes of unequal resource budgeting are interlinked at the global, national, and local levels.

Policymaking aimed at reconciling South Africa's international treaties whilst undoing the past injustices of land distribution, requires the historical legacies of land management to be

addressed by developing policies that consider climate change adaptations to secure livelihoods, alleviate poverty, and protect biodiversity and ecosystem. While we use this framework to examine a specific case in South Africa, many countries with similar conditions face equivalent challenges in achieving the SDGs.

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