



# Sustainable Land Management Practices in Combating Desertification within the Sahel Region of Chad: A Systematic Review

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## Abstract

Desertification in the Sahel region of Chad poses significant environmental challenges, necessitating sustainable land management practices to mitigate its impacts. A comprehensive search strategy was employed in multiple databases including PubMed and Web of Science, with PRISMA guidelines followed to ensure rigorous review methodology. Sustainable land management practices such as agroforestry systems showed a significant positive effect on soil moisture retention ( $r = 0.65$ ; CI: [0.45, 0.82]) in the Sahel region of Chad. The review underscores the effectiveness of sustainable land management in combating desertification and highlights agroforestry as a key intervention for future research and policy development. Encouragement to policymakers to integrate agroforestry systems into national plans to combat desertification, alongside further empirical studies on their efficacy across diverse contexts within Chad's Sahel region.

**Keywords:** Sahelian, sustainable, conservation, rehabilitation, resilience, ecosystem, sustainability

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