Afforestation Success Rates in Community-Based Forestry Management Initiatives: A Review of Sierra Leone Contextual Studies

Mendy Sesay[1,2], Farquhar Kargbo[3], Kallon Gbangbe[4]

[1] Department of Interdisciplinary Studies, Ernest Bai Koroma University of Science and Technology

[2] Department of Interdisciplinary Studies, Njala University

[3] Fourah Bay College, University of Sierra Leone

[4] Njala University

Correspondence: msesay@hotmail.com

Author notes

Mendy Sesay is affiliated with Department of Interdisciplinary Studies, Ernest Bai Koroma University of Science and Technology and focuses on Physics research in Africa.

Farquhar Kargbo is affiliated with Fourah Bay College, University of Sierra Leone and focuses on Physics research in Africa.

Kallon Gbangbe is affiliated with Njala University and focuses on Physics research in Africa.

Abstract

Afforestation projects in Sierra Leone have been implemented as part of community-based forestry management initiatives to address environmental degradation and promote sustainable land use. A comprehensive search strategy was employed using electronic databases such as PubMed and Web of Science. Studies published between and were included if they reported quantitative data on afforestation success rates in community-based forestry management projects. The analysis revealed that the average success rate for tree survival in Sierra Leone's community-afforestation programmes was 78% with a confidence interval of (74%, 82%). Community-based forestry management initiatives have shown varying degrees of success, but there is a clear need to improve monitoring and maintenance practices. Investment in training for community members on sustainable forest management techniques should be prioritised to enhance afforestation success rates. The empirical specification follows $Y = \beta_{0+\beta}^{\rightarrow} p\, X + varepsilon$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: *Geography, Africa, Sustainability, Ecology, Forestry, Methodeology, Reforestation*

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ REQUEST FULL PAPER

Email: info@parj.africa

Request your copy of the full paper today!

SUBMIT YOUR RESEARCH

Are you a researcher in Africa? We welcome your submissions!

Join our community of African scholars and share your groundbreaking work.

Submit at: app.parj.africa

Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge