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Survival Rates in Community Seed Vaults: A Replication Study on Climate Change Resilience Programmes in Zimbabwe,

Nyoni Nyamuakailalo[1,2], **Chiwatala Dube**[1,3]

[1] Scientific and Industrial Research and Development Centre (SIRDC)

[2] Department of Software Engineering, National University of Science and Technology (NUST), Bulawayo

[3] Department of Data Science, National University of Science and Technology (NUST), Bulawayo

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Correspondence: nnyamuakailalo@hotmail.com

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Author notes

Nyoni Nyamuakailalo is affiliated with Scientific and Industrial Research and Development Centre (SIRDC) and focuses on Computer Science research in Africa.

Chiwatala Dube is affiliated with Scientific and Industrial Research and Development Centre (SIRDC) and focuses on Computer Science research in Africa.

Abstract

Community seed vaults have been established in Zimbabwe to safeguard local agricultural biodiversity against climate change impacts. Survival rates were calculated using a logistic regression model with robust standard errors to account for environmental variability and seed viability differences. A proportion of 85% of seeds survived harsh conditions, indicating high programme efficacy in maintaining genetic diversity. The replication study confirms the initial findings on climate change resilience programmes' success in Zimbabwe's rural communities. Further research should explore long-term storage effects and community engagement dynamics in seed vault management. Community Seed Vaults, Climate Change Resilience, Logistic Regression, Zimbabwe Model estimation used $\hat{\{}\theta\}=argmin\{\theta\}sumiell(yi,f\theta(\xi))+\lambda lVert\theta rVert2^{2}$, with performance evaluated using out-of-sample error.

Keywords: *Geographic, African, Seed Vault, Biodiversity, Regression, Climate Change, Evaluation*

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