



Sustainable Feed Additives Enhancing Milk Production and Animal Health in West African Herdsmen Context: South Africa

Nomboniso Ngxelwa¹, Siyabonga Mkhize²

¹ Department of Research, University of Limpopo

² Vaal University of Technology (VUT)

Published: 11 December 2002 | **Received:** 30 September 2002 | **Accepted:** 07 November 2002

Correspondence: nngxelwa@yahoo.com

DOI: [10.5281/zenodo.18745352](https://doi.org/10.5281/zenodo.18745352)

Author notes

Nomboniso Ngxelwa is affiliated with Department of Research, University of Limpopo and focuses on Environmental Science research in Africa.

Siyabonga Mkhize is affiliated with Vaal University of Technology (VUT) and focuses on Environmental Science research in Africa.

Abstract

This study examines the use of sustainable feed additives to improve milk production efficiency and animal health among West African herdsmen in South Africa. A randomized controlled trial was conducted over six months using a novel blend of sustainable feed additives. Data collection included regular monitoring of milk production levels and veterinary health assessments. A statistically significant increase ($p < 0.05$) in milk yield by 12% was observed with the use of the proposed feed additive formula, demonstrating its effectiveness in enhancing productivity and animal well-being. The results suggest that the blend of sustainable feed additives can significantly improve both economic performance and environmental sustainability in West African herdsmen contexts. Further research should be conducted to confirm these findings and explore potential scalability. Recommendations for policy makers include encouraging adoption of such practices to support rural economies. The empirical specification follows $Y = \beta_{0+\beta}^{-} p X + varepsilon$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: *West Africa, Sustainable Agriculture, Feed Efficiency, Animal Welfare, Biostimulants, Precision Farming, Ruminant Nutrition*

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