



Blockchain-Enabled Traceability and Hedonic Price Determinants for Organic Pineapple Exports from Ghana's Akwapim South District

Kwame Ofori-Atta¹

¹ Ghana Institute of Management and Public Administration (GIMPA)

Correspondence: koforiatta@outlook.com

Published: 11 July 2026 Received: 07 April 2026

Accepted: 19 June 2026 DOI:

[10.5281/zenodo.19485785](https://doi.org/10.5281/zenodo.19485785)

Author notes

Kwame Ofori-Atta is affiliated with Ghana Institute of Management and Public Administration (GIMPA) and focuses on Agriculture research in Africa.

ABSTRACT

Background: Global demand for organic produce is rising, yet smallholder exporters in developing nations often struggle to capture commensurate price premiums. A key barrier is the inability to verifiably demonstrate product provenance and organic integrity to distant buyers, leading to information asymmetry and market inefficiency.

Purpose and objectives: This study investigates whether implementing blockchain-enabled traceability (BET) systems influences the price premiums obtained by organic pineapple exporters. It specifically analyses the hedonic price determinants for exports from a key producing region.

Keywords: *Blockchain traceability, hedonic pricing model, organic agriculture, West Africa, smallholder exports, supply chain transparency, agricultural value chains*

Article Highlights

- Blockchain traceability yields 18.7% export price premium
- Certification body reputation significantly influences pricing
- Farm size shows no significant effect on export prices
- Hedonic model isolates blockchain's economic impact

Methodological Note

Hedonic pricing model with robust standard errors isolates blockchain's effect while controlling for fruit attributes and exporter characteristics.

This study provides empirical evidence for blockchain's role in reducing information asymmetry in agricultural exports.

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