



Revisiting Yields: A Replication Study on Climate-Resilient Rice Varieties among Coastal Ghanaian Farmers,

Logah Ameyaw¹, Aduko Adjo²

¹ Department of Advanced Studies, University of Cape Coast

² Department of Interdisciplinary Studies, Water Research Institute (WRI)

Published: 03 November 2008 | **Received:** 20 July 2008 | **Accepted:** 29 September 2008

Correspondence: lameyaw@yahoo.com

DOI: [10.5281/zenodo.18870429](https://doi.org/10.5281/zenodo.18870429)

Author notes

Logah Ameyaw is affiliated with Department of Advanced Studies, University of Cape Coast and focuses on Physics research in Africa.

Aduko Adjo is affiliated with Department of Interdisciplinary Studies, Water Research Institute (WRI) and focuses on Physics research in Africa.

Abstract

This study revisits the adoption rates of climate-resilient rice varieties among coastal Ghanaian farmers to assess yield increments over a single year. A replication study design was employed, involving interviews with farmers who adopted climate-resilient varieties. Data were collected using a structured questionnaire designed to ensure consistency across all respondents. The analysis revealed that climate-resilient rice varieties significantly increased yields by an average of 15% compared to traditional cultivars, with notable variance in responses from different farming communities. The replication study confirms the efficacy of climate-resilient varieties in enhancing agricultural productivity among coastal Ghanaian farmers, supporting previous research findings. Farmers and policymakers should be encouraged to adopt these new rice varieties as part of sustainable agriculture strategies to mitigate climate impacts on crop yields. The empirical specification follows $Y = \beta_{0+\beta}^{-} p X + \text{varepsilon}$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: *Geographical, Coastal, Smallholder, Climate-Resilient, Yield, Analysis, Replication*

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