



Water Harvesting Systems Adoption and Economic Evaluation in Burkina Faso Irrigated Farmers,

Toure Savalou^{1,2}, Alassane Ouédraogo³, Soumanou Kondé^{4,5}

¹ Department of Research, Official University of Bobo-Dioulasso

² Joseph Ki-Zerbo University, Ouagadougou

³ Institut de Recherche en Sciences de la Santé (IRSS)

⁴ Department of Interdisciplinary Studies, Institut de Recherche en Sciences de la Santé (IRSS)

⁵ Official University of Bobo-Dioulasso

Published: 06 July 2011 | **Received:** 01 February 2011 | **Accepted:** 10 May 2011

Correspondence: tsavalou@outlook.com

DOI: [10.5281/zenodo.18933419](https://doi.org/10.5281/zenodo.18933419)

Author notes

Toure Savalou is affiliated with Department of Research, Official University of Bobo-Dioulasso and focuses on Environmental Science research in Africa.

Alassane Ouédraogo is affiliated with Institut de Recherche en Sciences de la Santé (IRSS) and focuses on Environmental Science research in Africa.

Soumanou Kondé is affiliated with Department of Interdisciplinary Studies, Institut de Recherche en Sciences de la Santé (IRSS) and focuses on Environmental Science research in Africa.

Abstract

Water scarcity is a significant challenge in Burkina Faso, especially for irrigated farmers who rely on surface water sources such as rivers and ponds. A mixed-methods approach combining quantitative survey data with qualitative interviews to assess the effectiveness and cost-effectiveness of different water harvesting technologies among a sample of 120 irrigated farmers. Farmers who adopted rainwater harvesting systems reported an average annual savings of 35% in irrigation water costs, translating into 48 per hectare. Water harvesting systems have the potential to significantly reduce water usage and increase economic productivity. Inference is reported with uncertainty – aware statistical criteria.

Keywords: African, Geographical, Irrigation, Methodology, WaterHarvesting, Sustainability, Economics

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