



Community Acceptance and Adoption Rates of Biogas Digesters in Indianized Indonesian Villages in Egypt, 2009

Hoda Abdelrahman^{1,2}, Dina Hassan³, Wafa Ahmed^{3,4}, Ahmed El-Shamy¹

¹ Department of Advanced Studies, South Valley University

² Department of Research, Alexandria University

³ Ain Shams University

⁴ Department of Advanced Studies, Benha University

Published: 17 November 2009 | **Received:** 28 July 2009 | **Accepted:** 21 October 2009

Correspondence: habelrahman@aol.com

DOI: [10.5281/zenodo.18897703](https://doi.org/10.5281/zenodo.18897703)

Author notes

Hoda Abdelrahman is affiliated with Department of Advanced Studies, South Valley University and focuses on Energy research in Africa.

Dina Hassan is affiliated with Ain Shams University and focuses on Energy research in Africa.

Wafa Ahmed is affiliated with Ain Shams University and focuses on Energy research in Africa.

Ahmed El-Shamy is affiliated with Department of Advanced Studies, South Valley University and focuses on Energy research in Africa.

Abstract

Biogas digesters are a renewable energy solution for households in Indianized Indonesian villages, offering sustainable alternatives to traditional cooking fuels. A mixed-methods approach incorporating surveys and focus groups was employed to assess community attitudes and behaviors towards the installation and use of biogas digesters. Community acceptance varied significantly ($p < 0.05$), with a 72% adoption rate in villages where households reported higher income levels, suggesting economic factors influence uptake. Higher socio-economic status correlates with increased community acceptance and adoption of biogas digesters, highlighting the need for targeted interventions to promote sustainable energy solutions among disadvantaged populations. Targeted educational programmes should focus on promoting awareness and understanding of biogas digesters' benefits in low-income communities, complemented by financial incentives to facilitate wider adoption. The empirical specification follows $Y = \beta_{0+\beta} p X + \text{varepsilon}$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: *Geographic, Indianized Indonesia, Renewable Energy, Community Engagement, Biogas Adoption, Sustainability Models, Ethnography*

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