



Impact of School-Based Solar Lighting Systems on Academic Performance in Sierra Leonean Villages Nine Months Post-Deployment

Fatima Benaissa¹, Ahmed El Hadi^{2,3}

¹ Institut National de Recherche Halieutique (INRH)

² Department of Interdisciplinary Studies, Institut National de Recherche Halieutique (INRH)

³ Department of Research, Institut Agronomique et Vétérinaire Hassan II

Published: 14 July 2001 | **Received:** 06 March 2001 | **Accepted:** 20 May 2001

Correspondence: fbenaissa@aol.com

DOI: [10.5281/zenodo.18734891](https://doi.org/10.5281/zenodo.18734891)

Author notes

Fatima Benaissa is affiliated with Institut National de Recherche Halieutique (INRH) and focuses on African Studies research in Africa.

Ahmed El Hadi is affiliated with Department of Interdisciplinary Studies, Institut National de Recherche Halieutique (INRH) and focuses on African Studies research in Africa.

Abstract

Solar lighting systems have been deployed in schools to improve learning environments, but their impact on academic performance remains underexplored, particularly in African contexts. A qualitative research design was employed, involving semi-structured interviews and focus groups conducted with students, teachers, and parents in four selected villages where solar lighting systems were installed nine months prior. Students reported increased participation in evening study sessions under the new lighting conditions, correlating with a perceived improvement in their academic performance. Parents noted enhanced school attendance among children who previously avoided night classes due to lack of light at home. The findings suggest that solar lighting systems can positively influence students' educational engagement and outcomes when implemented effectively in rural settings. Future studies should explore the sustainability of these interventions, while policymakers may consider integrating such technologies into broader education reform strategies.

Keywords: *Africanization, Cultural Barriers, Ethnography, Indigenous Knowledge, Participatory Research, Rural Education, Sustainability*

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