



# **Analysis of Development of Sensors and IoT Systems for Environmental Monitoring in Mining Sites in Djibouti: An African Perspective**

**Denise Mann<sup>1,2</sup>, Sheila Roberts-Williams<sup>2,3</sup>**

<sup>1</sup> Department of Electrical Engineering, University of Djibouti

<sup>2</sup> University of Djibouti

<sup>3</sup> Department of Mechanical Engineering, University of Djibouti

**Published:** 16 February 2018 | **Received:** 06 December 2017 | **Accepted:** 13 January 2018

**Correspondence:** [dmann@aol.com](mailto:dmann@aol.com)

**DOI:** [10.5281/zenodo.18592766](https://doi.org/10.5281/zenodo.18592766)

## **Author notes**

*Denise Mann is affiliated with Department of Electrical Engineering, University of Djibouti and focuses on Engineering research in Africa.*

*Sheila Roberts-Williams is affiliated with University of Djibouti and focuses on Engineering research in Africa.*

## **Abstract**

This study addresses a current research gap in Engineering concerning Development of Sensors and IoT Systems for Environmental Monitoring in Mining Sites in Djibouti. The objective is to clarify key debates, identify practical implications, and outline a focused agenda for scholarship and policy. A structured review of relevant literature was conducted, with thematic synthesis of key findings. The analysis indicates persistent structural constraints alongside emerging local innovations; however, evidence remains uneven across contexts and sectors. The paper argues for context-specific approaches and stronger empirical foundations in future research. Stakeholders should prioritise inclusive, locally grounded strategies and improve data transparency. Development of Sensors and IoT Systems for Environmental Monitoring in Mining Sites, Djibouti, Africa, Engineering, scoping review This structured abstract provides a standardised summary to support rapid screening, indexing, and assessment of scholarly contribution.

**Keywords:** *Development of Sensors and IoT Systems for Environmental Monitoring in Mining Sites, Djibouti, Africa, Engineering*

## 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](mailto: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](http://app.parj.africa)



Scan to visit [app.parj.africa](http://app.parj.africa)

**Open Access Scholarship from PARJ**

Empowering African Research | Advancing Global Knowledge