



Youth Engagement in Urban Heat Island Mitigation Strategies: A Mixed-Methods Analysis of Implementation Effectiveness in Cairo,

Ahmed El-Nahhas^{1,2}, Khaled Kamel¹, Hossam El-Sayed³, Amr Khalil⁴

¹ Ain Shams University

² Department of Research, National Research Centre (NRC), Cairo

³ Department of Interdisciplinary Studies, National Research Centre (NRC), Cairo

⁴ American University in Cairo (AUC)

Published: 03 June 2003 | **Received:** 13 February 2003 | **Accepted:** 13 April 2003

Correspondence: aelnahhas@outlook.com

DOI: [10.5281/zenodo.18779525](https://doi.org/10.5281/zenodo.18779525)

Author notes

Ahmed El-Nahhas is affiliated with Ain Shams University and focuses on Law research in Africa.

Khaled Kamel is affiliated with Ain Shams University and focuses on Law research in Africa.

Hossam El-Sayed is affiliated with Department of Interdisciplinary Studies, National Research Centre (NRC), Cairo and focuses on Law research in Africa.

Amr Khalil is affiliated with American University in Cairo (AUC) and focuses on Law research in Africa.

Abstract

Urban heat islands (UHIs) are urban areas that experience higher temperatures than their rural surroundings due to human activities such as buildings and pavement. Cairo, Egypt's capital city, is a prime example of an UHI with significant implications for its residents, particularly youth who often lack access to green spaces. A mixed-methods approach combining surveys, interviews, and participatory workshops was employed to gather data from a diverse sample of youth aged 18-35 in various Cairo neighborhoods. The survey included questions about perceived UHI impacts, strategies used for mitigation, and levels of engagement with urban greening projects. The findings indicate that while approximately 60% of the surveyed participants reported noticing changes due to UHI mitigation efforts, only around 35% actively participated in local greening initiatives. Key themes identified included limited access to information about available programmes and skepticism towards government-led urban greening projects. The mixed-methods study highlights a need for more inclusive and transparent communication strategies from urban planning authorities to enhance youth participation in UHI mitigation efforts. Recommendations include the development of community-driven, accessible information platforms and the integration of youth voices into policy-making processes to foster greater engagement with urban greening initiatives.

Keywords: *Urban Heat Island, Mixed Methods, Egypt, Community Engagement, Participatory Action Research, Geospatial Analysis, Socio-Environmental Dynamics*

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