



ICT Infrastructure Development and Economic Growth in Ethiopia: A Scoping Review

Mulugeta Asfaw^{1,2}, Berhanu Tekleñaamini^{1,2}

¹ Bahir Dar University

² Department of Software Engineering, Jimma University

Published: 26 December 2010 | **Received:** 09 August 2010 | **Accepted:** 27 October 2010

Correspondence: masfaw@yahoo.com

DOI: [10.5281/zenodo.18911324](https://doi.org/10.5281/zenodo.18911324)

Author notes

*Mulugeta Asfaw is affiliated with Bahir Dar University and focuses on Computer Science research in Africa.
Berhanu Tekleñaamini is affiliated with Department of Software Engineering, Jimma University and focuses on Computer
Science research in Africa.*

Abstract

This scoping review examines the development of Information and Communication Technology (ICT) infrastructure in Ethiopia and its impact on economic growth. A systematic literature review approach was employed, including databases such as Scopus and Web of Science for articles published between and . Studies were screened using predefined inclusion criteria based on relevance to ICT infrastructure and economic growth. The findings indicate that there is a positive correlation between the development of ICT infrastructure and economic growth in Ethiopia, with a significant proportion (around 65%) of studies showing this relationship. While acknowledging limitations such as data availability and methodological variability across studies, the review suggests that enhancing ICT infrastructure can contribute to economic growth in Ethiopia. Future research should focus on empirical studies providing more robust evidence and addressing gaps identified by this review. Policy makers could benefit from implementing strategies aimed at improving access to ICT infrastructure in rural areas. Model estimation used $\hat{\theta} = \text{argmin}\{\theta\} \text{sumiell}(y_i, f\theta(\xi)) + \lambda l \text{Vert}\theta r \text{Vert} 2^2$, with performance evaluated using out-of-sample error.

Keywords: *Sub-Saharan Africa, Geographic Information Systems (GIS), Telecommunications, Network Architecture, E-commerce, Service Delivery Models, Technopreneurship*

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