



# ICT Infrastructure Development and Economic Growth in Ethiopia: A Systematic Review

Yared Tekle<sup>1,2</sup>, Solomon Asfaw<sup>1,3</sup>

<sup>1</sup> Hawassa University

<sup>2</sup> Jimma University

<sup>3</sup> Department of Data Science, Jimma University

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**Correspondence:** [ytekle@yahoo.com](mailto:ytekle@yahoo.com)

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### Author notes

*Yared Tekle is affiliated with Hawassa University and focuses on Computer Science research in Africa.  
Solomon Asfaw is affiliated with Hawassa University and focuses on Computer Science research in Africa.*

### Abstract

This study addresses a current research gap in Computer Science concerning ICT Infrastructure Development and its Impact on Economic Growth in Ethiopia in Ethiopia. The objective is to formulate a rigorous model, state verifiable assumptions, and derive results with direct analytical or practical implications. A structured review of relevant literature was conducted, with thematic synthesis of key findings. The results establish bounded error under perturbation, a convergent estimation process under stated assumptions, and a stable link between the proposed metric and observed outcomes. The findings provide a reproducible analytical basis for subsequent theoretical and applied extensions. Stakeholders should prioritise inclusive, locally grounded strategies and improve data transparency. ICT Infrastructure Development and its Impact on Economic Growth in Ethiopia, Ethiopia, Africa, Computer Science, systematic review This work contributes a formal specification, transparent assumptions, and mathematically interpretable claims. Model estimation used  $\hat{\theta} = \operatorname{argmin} \{ \theta \} \operatorname{sumiell} (y_i, f\theta(\xi)) + \lambda |V\theta rVert|^2$ , with performance evaluated using out-of-sample error.

**Keywords:** *Sub-Saharan, Access Networks, Telecommunications, e-Services, Frameworks, Models, Metrics*

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This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

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