African Applied Remote Sensing
(Technology/Methodology)

# Strategic Approaches to Enhancing Digital Access in Rural South Africa

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## Abstract

Digital access disparities persist in rural South Africa, exacerbating socioeconomic inequalities. A mixed-methods approach combining surveys with participatory workshops to assess community needs and preferences. Findings suggest a significant proportion (35%) of surveyed households lack reliable internet access, primarily due to infrastructure limitations. Strategic approaches are needed to enhance digital access in rural South Africa, informed by community feedback. Policy recommendations include prioritising infrastructure development and subsidizing connectivity costs for underserved regions. digital inclusion, rural South Africa, participatory research, internet access Model estimation used $\hat{\{\theta\}} = argmin\{\theta\} sumiell(yi, f\theta(\xi)) + \lambda lVert\theta rVert 2^2,$ with performance evaluated using out-of-sample error.

**Keywords:** *Sub-Saharan, African, Spatial-Analysis, GIS, Multivariate-Methods, Community-Literacy, Participatory-Research*

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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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