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# **Call for Papers**

"Investing in Infrastructure for Productive Transformation in Africa".

7<sup>th</sup> Congress of African Economists (CAE)

Decembre 2025

### **CAE CONFERENCE RESEARCH PAPER**

What policy-relevant evidence exists to support the use of alternative financing models in bridging Sub-Saharan Africa's rural education infrastructure gap relative to inaction or stagnant investment?

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Abstract

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## **FOREWORD & ACKNOWLEDGEMENTS**

I would firstly like to congratulate the newly appointed Chairperson of the African Union Commission, H.E. Mahamoud Ali Youssouf of Djibouti, on his recent appointment to High Office in March 2025, subsequent to the proceedings of the 38<sup>th</sup> Ordinary Session of the Assembly of Heads of State and Government. Nigeria wishes the Chair every success in his professional endeavours in his capacity as Chair and send our best wishes and regards to the outgoing Chairperson of the AU Commission, H.E. Moussa Faki Mahamat of Chad. Secondly, Nigeria sends compliments to Mr. Nuur Mohamud Sheekh, the newly appointed Spokesperson for the Chairperson of the African Union Commission. We wish Mr. Sheekh every continued success in his new executive role promoting and supporting peace and security across the African continent as a spokesperson, on behalf of the Office of the Chair of the Commission.

#### INTRODUCTION

Many academics will agree that AfCFTA presents a strategic opportunity for many African states to mobilize regional investment for social infrastructure, specifically for a medium-term horizon targeted at the alleviation of conditions of resource scarcity and deficiency in rural education in Sub-Saharan Africa. Over four years in, as Member States continually align with one another, creating greater trade links, investment prospects, and frameworks of co-operation, AfCFTA can serve as a catalyst for scalable, cross-border financing models such as social infrastructure public-private partnerships (PPPs). This review highlights the potential for AfCFTA-aligned strategies to diminish infrastructure gaps in the design of mechanisms to finance rural education, enabling broader access to better quality education and supporting the development of a skilled, trans-continental workforce essential to Africa's single market ambitions. Closing this infrastructure gap is not only a social imperative but a foundational enabler of inclusive growth under AfCFTA.

This is not another rebuffed article intended to argue for greater public-private partnerships (PPP) frameworks, or for more suitable infrastructure-related funding for African governments. It is, however, a study of existing studies, so to speak. Using the PICOS framework (*Population, Intervention, Comparison, Outcomes, Study Design*) to define the specific and necessary research question, it is possible to survey what solutions have been proposed and what findings have emerged.

Indeed, out of the 144 measurable Sustainable Development Goal (SDG) targets, Africa is on track to achieve only 10 SDG targets by 2030 (Ramaite and Le Roux, 2024). Social infrastructure PPPs and the other capital investment needs of countries in Sub-Saharan Africa, relating specifically to core social infrastructure and government-provided educational facilities is in a circumstance of small-scale crisis, a crisis within a crisis. As attention is drawn away, and funding deflected away from social infrastructure in support of climate change, deforestation and biodiversity, the take up of the lion share of SDG gap financing is shifting, policy aspects such as the Pareto-effect created via free continental trade, fall by the waste-side, becoming nonchalant issues.

However, as we will come to see, when Member States operate inwardly like this, not only are disadvantages, but there are inefficiencies which have great cost. According to reports, just 12% of schools in rural Sub-Saharan Africa have reliable internet, and more than 50% of schools in Sub-Saharan Africa lack adequate access to electricity, clean water and sanitation facilities. Teaching quality and academic retention is also a matter of concern. While the perceived investment gap (i.e. the gap between the *actual* and the *required* level of social infrastructure investment) varies in range by country-specific requirements in educational resources across studies on the subject, what continues to characterise this crisis is an inadequacy, not merely of *access* to basic amenities, but of effective and credible financial *solutions*.

Upon responding to this call for submissions by the Congress of African Economists (CAE), it was imperative that the author(s) ask its various audiences: What hurdles continue to hinder Africa's development of social infrastructure for education according to previously published literature on this mission critical SDG?

#### RESEARCH DESIGN AND EMPIRICAL METHODOLOGY

This research takes the form of an evidence-based, empirically designed systematic literature review into the financial outcomes of investment into social infrastructure in Sub-Saharan Africa. It will aim to assess the contribution of a narrow theme of literature taken from specific academic journals. PICO is a valuable framework for assessing the relevant aspects which underpin a systematic review. We attribute a significant proportion of the paper to this concept.

- *Population*: The population is defined as participants and active users of the rural school system in Sub-Saharan African countries
- *Intervention*: Social infrastructure PPPs, private sector philanthropy, social bonds, and government tranche loans (repayable at interest)
- Comparison: A counterfactual scenario of stagnant investment from 2025 to 2030
- Outcomes: A level-playing field in school infrastructure on the world stage
- Study Design: Systematic review and Meta-Analysis

Across the nine-year research timeline, the first five consecutive years encompass the span of the systematic review<sup>2</sup>, and the remaining consecutive years make up the empirical element of the study with monthly data. Crucially, we shall navigate around the 1 January 2021 as a key date where a discursive turn of AfCFTA enforcement takes place. The dedicated timescale of the study will range from a) the date of inauguration of the SDG programme itself, beginning 1 January 2016 through to b) the date with which the AfCFTA agreement was legally enforceable - on 1 January 2021. Thereafter, we shall use data sourced from the likes of the United Nations, and the African Development Bank to project two counterfactual scenarios.

| Table 1.1 - Timeline for Primary Research |                     |                                     |
|---|---------------------|-------------------------------------|
| Date of Study <sup>3</sup>                | Start / End         | Significance to the Study           |
| 1 January 2016                            | Start of sys review | Inauguration date of SDG programme  |
| 1 January 2021                            | End of sys review   | Enforcement date of AfCFTA          |
| 1 January 2021                            | Start of analysis   | Enforcement date of AfCFTA          |
| 1 January 2025                            | End of analysis     | Cut-off date for empirical analysis |
| 1 January 2025                            | Start of forecast   | Start date for statistical forecast |
| 31 Decembre 2030                          | End of forecast     | Completion date of SDG programme    |

The selected methodology used in modelling the forecasted scenarios with economic data will simply be an extrapolation of two counterfactual events 1) a standard forecasted event premised on data from real world sources and 2) a *Pareto-optimal* forecasted event which assumes the required level of infrastructure investment is achieved. Each event, estimated by Maximum Likelihood Estimation will then be contrasted to the AU Commission's policy environment on economic development.

<sup>2</sup> There are a total of sixty-two articles presently being returned upon an initial search for the term "social infrastructure PPPs" and thirty-six results for the term "infrastructure for educational institutions" both including no specific reference to the situation in Africa.

<sup>3</sup> To be absolutely clear, the empirical research dates are representative of projections using real world data (as opposed to synthetic data), whereas the applied systematic review dates apply to dates with which selected pieces of academic literature were originally published.

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| PLANNING A SYSTEMATIC REVIEW OF THE AVAILABLE LITERATURE |           |  |  |  |
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