

## New study finds ICT infrastructure investment to be key in alleviating inequality in Africa

According to a study conducted by Dr Mamello Nchake from the Department of Economics at Stellenbosch University and Dr Mohammed Shuaibu from the Department of Economics at the University of Abuja in Nigeria, investment in information, communication, and technology (ICT) infrastructure are key for sustained, inclusive economic growth and development in Africa.



Source: Pexels

The study, published recently in the peer-reviewed journal *Scientific African*, highlights a growing consensus that investment in ICT infrastructure can help to reduce poverty and inequality, create economic opportunities, address information asymmetries to enhance efficiency and enable isolated communities to engage in commerce and generate higher income.

"An efficient and improved ICT infrastructure reduces transaction costs, improves the productivity of firms, resulting in positive spillovers to growth at both macroeconomic and microeconomic levels," the researchers say.

"The 2020 Africa Economic Outlook Report shows that only a third of the countries achieved inclusive growth, reducing both poverty and inequality. The report underscores the need to create jobs and develop more opportunities to access the quality of education, for instance by expanding access to schools in remote areas and increasing the use of ICT infrastructure in schools."

Nchake and Shuaibu used various ICT-based infrastructure measures to investigate the impact investment in ICT infrastructure has on inclusive growth in Africa – growth that is pro-poor and allows people to contribute to and benefit from growth. They analysed data covering 46 countries in Africa between 2000 and 2019.

Their findings indicate that investment in ICT infrastructure has a positive impact on inclusive growth in Africa.

"An increase in ICT infrastructure investment stimulates inclusive growth by an average of 0.4% to 0.7%," they say. "Our results make a strong case for increased ICT infrastructure investment, especially in rural areas, to generate inclusive growth in the continent and to take full advantage of emerging opportunities from the Africa Continental Free Trade Area Agreement."

The researchers add that ICT infrastructure investment through digitisation could help address inclusive growth in the sense that market imperfections such as information asymmetry in different sectors could be addressed.

"For instance, digital identities could help banks track credible borrowers or reduce job search and matching time in the labour market. These can be combined to enhance market efficiency, reduce uncertainties in critical investment decisions and promote security in Africa where information flow is crucial for inclusive growth.

"With digital technologies, farmers can have better access to markets as well as opportunities to leverage information about improving the value of their products.

"Furthermore, digitisation and investment in ICT infrastructure can serve as a veritable tool to reduce poverty, inequality and unemployment in the continent and to drive inclusiveness given that African youths are tech-sawy, resilient and adaptable to the rapidly evolving global digital economy."

The researchers emphasise the potential for increased digital connectivity by pointing to a 2021 report by the Global System for Mobile Communications Association which estimates that 615 million people in sub-Saharan Africa will subscribe to mobile services by 2025 – roughly equivalent to 50% of the region's population. It was projected that \$155bn could be generated by mobile technologies and services by 2025.

Their study shows that addressing the inadequate regional connectivity between countries and sub-regions could help bridge existing ICT access gaps.



Bridging the racial and gender gap in SA

Nelisiwe Masango 5 Nov 2021

∹

Going forward, the paper underscores the need to speed up the implementation of regional ICT initiatives such as the Digital Transformation Strategy for Africa (2020–2030) by the African Union and Economic Commission for Africa's Centre for Excellence for Digital Identity, Trade and Economy, which has since 2018 provided support to African countries to intensify their ICT development efforts to achieve the Sustainable Development Goals.

"Strengthening regional policy and regulatory frameworks that push for more support and competitiveness of the ICT sector such as reduced licensing charges and application and registration procedures as well as promoting non-discriminatory access to critical ICT infrastructure could be considered."

Nchake and Shuaibu emphasise that better access to electricity in Africa is critical to achieve the goals of increased tele density, access to internet services and broadband penetration.

"It is critical for the benefits of digitisation to be spread across countries and subregions if we want to address spatial inequalities."

For more, visit: https://www.bizcommunity.com