



# Africa's Infrastructure-Led Growth Experiment Is Faltering. It Is Time to Focus on Agriculture.

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Over the past few decades, several low- and middle-income economies in Africa have sought to turbocharge growth by adopting an export-led economic model premised on heavy investments in infrastructure and building up domestic manufacturing capacity. But this strategy has often not produced the economic gains that have been promised for a variety of reasons.

The continued emphasis on infrastructure investments fails to account for the fact that even those African countries that have invested a great deal in infrastructure continue to lag other countries in Asia (like Bangladesh) in key manufacturing sectors like textiles regardless of infrastructure quality. In addition, this approach overlooks the fact that African countries do not have the same comparative advantages as the Asian countries that perfected and popularized the export-led growth model: while those Asian countries had an abundance of low-wage labor, wages in Africa are typically higher than those of other countries at comparable income levels.

Instead of fixating on infrastructure, African countries should look to the experience of Latin American countries with similar resource endowments—a greater relative abundance of land than low-cost labor. As this experience shows, countries can make far more durable, sustainable economic gains by focusing on improving agricultural productivity with relatively low-cost improvements targeted at smallholder farmers for whom a boost in productivity would have the largest impact.

## THE FLAWS OF THE INFRASTRUCTURE-FUELED GROWTH MODEL

Africa's recent experience challenges the infrastructure-led growth paradigm and calls for a different approach. Mega-infrastructure projects including railways, power stations, state-of-the-art airports and seaports, impressive highways, and spectacular bridges have been, and continue

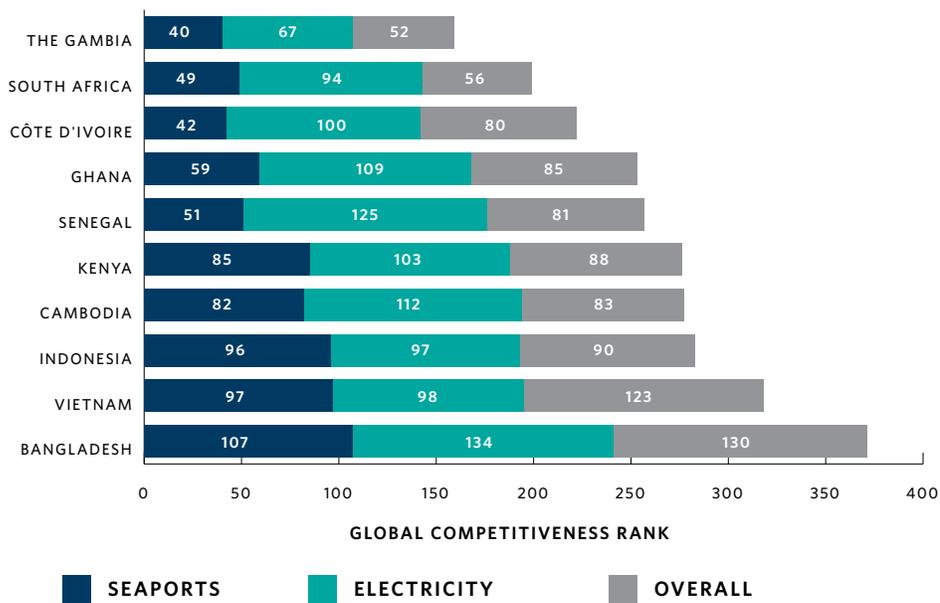
to be, built at an unprecedented pace. Yet these investments have not turbocharged growth. Understanding why this infrastructure binge has not spurred as much growth as expected and why such ventures are responsible for the incipient debt distress in several countries on the continent is imperative.

The claim of infrastructure-constrained economic growth lacks a theoretical foundation or empirical evidence. Over the last three decades, a third wave of Asian countries—including Bangladesh, Cambodia, and Vietnam—have leapfrogged African countries in terms of per capita income using export-led manufacturing with similarly deficient infrastructure.

In addition, it is not evident that the infrastructure has crowded in the productive private sector investments on which the governments' ability to repay the debts incurred in the process is predicated. Private investment has remained generally flat over the entire infrastructure investment drive even as the debt-to-GDP ratio has risen rapidly, which suggests that, far from crowding in, the infrastructure drive may have crowded out private investment.

Export-led growth premised on infrastructure investment seeks to fuel an economic surge by leveraging relatively low labor costs to capture global manufacturing market share. The Asian Tigers' export-led industrial takeoff is a reflection of the region's factor endowments, namely an abundance of labor relative to land; with a high share of population to hectare, Asia's labor productivity increased by 135 percent in only three decades (from the mid-1960s to the mid-1990s). Conversely, Africa's relatively high wages compared to those of other destinations competing in the area of labor-intensive export manufacturing reflect the continent's factor endowments, namely abundant land relative to labor.

### Infrastructure Rankings for Select African and Asian Countries



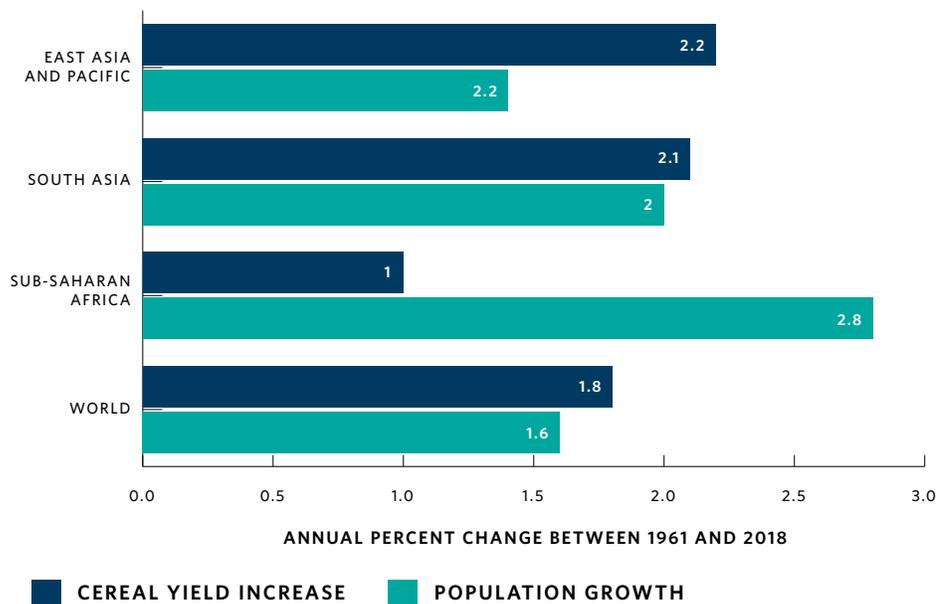
Source: World Economic Forum, "Global Competitiveness Report," 2011, [https://www3.weforum.org/docs/WEF\\_GlobalCompetitivenessReport\\_2010-11.pdf](https://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2010-11.pdf).

It is no surprise then that Africa's massive industry-focused infrastructure investment drive of the last two decades has precipitated debt distress rather than accelerated growth, given that the industry-focused investments, such as massive electric power projects, are not aligned with Africa's comparative advantage.

## THE CASE FOR AGRICULTURE-LED GROWTH

The infrastructure-led growth paradigm has channeled debt finance into investments that have contributed little, if anything, to agricultural development. Rather than a scarcity of infrastructure, the real binding constraint on growth in Africa is low agricultural productivity. Small-scale farming dominates African agriculture. Agriculture accounts for a large share of most African economies (all non-oil-producing or mineral-rich countries) and is the primary or a leading secondary source of income for, on average, more than half, and up to 80 percent, of the populations even in oil-producing and mineral-rich countries. Because of this, low productivity is a drag on these countries' entire economies. Africa is barely, if at all, converging with the rest of the world economically because of slow productivity growth in African economies, particularly in the agricultural sector (see figure below).

### Agricultural Productivity and Population Growth in Key Regions



Source: World Bank, World Development Indicators, <https://data.worldbank.org/indicator/AG.YLD.CREL.KG?locations=ZG-1W-8S-Z4> and <https://data.worldbank.org/indicator/SP.POP.GROW?locations=ZG-1W-8S-Z4>.

**There are at least four reasons why the case for agriculture-led growth is more compelling for African countries than their prevailing preoccupation with infrastructure and with the associated growth models centered on export-led manufacturing.**

**1. Africa's low agriculture productivity means that returns on investment will be highest in the sector.** This low productivity, for the most part, reflects a lack of working capital (for buying intermediate inputs including fertilizer, improved seeds, and pesticides) than fixed investment (in-farm equipment, tree crops, and land improvements).

**2. With the predominance of semi-subsistence, small-scale agriculture in Africa, the problems of low productivity, poverty, and food insecurity are intertwined.** If assistance were properly targeted, governments would get the biggest returns in terms of productivity growth by helping poor farmers. Raising agricultural productivity would hit three birds with one stone—spurring growth, reducing poverty, and addressing hunger.

**3. Virtually all of Africa’s agricultural growth presently is from cultivating more land, rather than boosting productivity.** The land under cereal production in Africa has increased by about 60 percent since 2000, compared to only around 10 percent worldwide. As a result, new farmland is increasingly moving into ecologically valuable forests and rangelands and is also a cause of resource conflicts between farmers and pastoralists.

**4. The case for agriculture-led growth does not imply that Africa does not need infrastructure investment.** In fact, increasing agriculture productivity entails considerable investment in specific types of infrastructure, such as irrigation. But beyond just infrastructure, agriculture-led growth requires public goods and services traditionally provided by governments, including research and extension services as well as policies and institutional development to address pervasive market failures.

## CONCLUSION

It is difficult to see how the African continent can become economically competitive without a broad-based increase in agricultural productivity. The continent’s factor endowments effect—an abundance of land relative to labor—is compounded by low agricultural productivity, which makes food expensive and renders globally competitive low-skill wages unattractive compared to wages earned in the process of subsistence farming since much of the low-wage income would be spent on buying expensive food.

Yet while African policymakers recognize this, they seem unable to resist the allure of industrial miracles. The widely held view that the East Asian model is the silver bullet for economic transformation is also called into question by the successful agriculture-led transformations in Latin American countries whose factor endowments are similar to those of Africa. African policymakers should embrace a more pragmatic stance on an economic agenda that recognizes and fully capitalize on Africa’s comparative edge.

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*These recommendations are drawn from David Ndii’s paper “Africa’s Infrastructure-Led Growth Experiment Is Faltering. It Is Time to Focus on Agriculture,” Carnegie Endowment for International Peace, December 20, 2022, <https://carnegieendowment.org/2022/12/20/africa-s-infrastructure-led-growth-experiment-is-faltering.-it-is-time-to-focus-on-agriculture-pub-88662>.*



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