



Agricultural Productivity Growth, Resilience, and Economic Transformation in Sub-Saharan Africa

IMPLICATIONS FOR USAID

POLICY BRIEF

Rationale

This policy brief summarizes findings of a report commissioned by the Board for International Food and Agricultural Development (BIFAD) to review the evidence of evolving economic transformation and progress towards resilience in sub-Saharan Africa (SSA). The report provides a priority agenda for promoting transformation and resilience in SSA, recognizing the varying challenges being faced by fragile, low-income, lower-middle income, and resource-rich countries, and the programmatic implications for USAID, and its Bureau for Resilience and Food Security.

Main Findings

The report highlights six main findings:

- 1. Economic transformation and resilience are mutually reinforcing, and both accelerate economic development.** By raising incomes and promoting economic diversification, economic transformation promotes resilience. Greater resilience to shocks also promotes long-term economic growth and transformation. Agricultural productivity growth holds great potential to support both economic transformation and resilience in Africa, as well as reducing poverty and food insecurity. Agriculture remains a key element of a balanced strategy that addresses the full range of actions necessary to achieve economic transformation, acknowledging the synergies between growth in agriculture, downstream value chains, and non-farm sectors, as well as education, governance, water, sanitation and health, and hard and soft infrastructure.
- 2. Despite the continued major challenges that the region is facing, mounting evidence points to profound economic transformation in SSA since the early 2000s.** SSA's real per capita GDP rose 36% between 2000 and 2018. SSA has also achieved a marked decline in the share of people in poverty, from 58% in

1999 to 41% in 2015. Over 40% of SSA's labor force now cites off-farm activities as their main job.

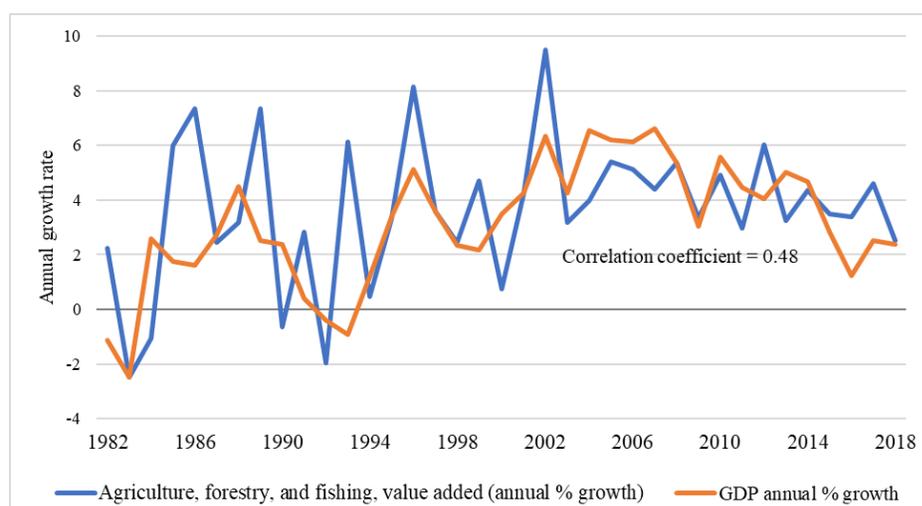
3. **Across a broad range of indicators—health, life expectancy, education, public service delivery, government effectiveness, and public investment in future economic transformation—most African countries have made remarkable progress.**

Today, a much greater proportion of the African population has access to safe water, electricity, transport networks, and mobile telephony. The proportion of men and women holding bank accounts has risen over a six-year period from 2011 (22.8% men and 17.5% women) to 2017 (47.0% men and 34.1% women). Indicators of business environment, government effectiveness, and voice and accountability have all improved. The percentage of Africans over 25 years of age who have completed lower secondary school has climbed from 23% in the 1980s to 43.7% in 2017 and is over 75% for both men and women in rapidly developing countries such as Ghana. Girls who complete secondary school are less likely to marry early or have many children. Nutrition and health indicators also show clear improvement. The proportion of undernourished people in the population of SSA fell from 28.4% in 2000 to 20.9% in 2015 before rising to 22.8% in 2018. The mortality rate of children under 5 declined from 165 to 80 per thousand. Of all the world's regions, SSA gained the most since 2000 in average life expectancy, which is now 64 years.

4. **Agricultural production growth has been a major driver of SSA's economic transformation and improvements in living standards.**

SSA has achieved the highest rate of agricultural growth of any region of the world since 2000. The region's economic growth rate remains highly correlated with annual changes in agricultural growth (Figure 1). When agriculture grows, its extensive linkages with off-farm stages of the agri-food system and other non-farm sectors expand employment and livelihoods in the rest of the economy and expand the tax base,

Figure 1. Strong correlation between agricultural growth and economic growth in sub-Saharan Africa



Source: World Development Indicators, last accessed October 2, 2020.

enabling governments to finance greater investments in public services. High farm production growth in SSA since 2000 has been a major driver of overall economic growth and improvements in the welfare of most Africans.

5. **SSA's high rate of agricultural production growth has been achieved mainly through the expansion of cropped area rather than through productivity growth** (increases over time in the ratio of farm output to inputs). This pattern will not lead to sustained growth in the future. Slow yield and productivity growth reflect chronic low investment in adaptive agricultural research and development and extension (R&D&E) systems.

Asian and African countries that achieved high rates of agricultural productivity growth (e.g., Ghana, Ethiopia, Bangladesh, and Thailand) all show the importance of effective local agricultural R&D&E (see Box 1).

6. **The pace of transformation and resilience has been uneven.**

Rapid improvements are especially evident in Africa's lower-middle-income countries and least so in the resource-rich and fragile countries. Uneven economic growth and development across the low-income, lower-middle-income, fragile, and resource-rich states have resulted in distinct challenges that require somewhat different programmatic responses (more on this below).

Box 1: Agricultural Research, Development, and Extension Investments Fuel Productivity-Led Growth in Ethiopia

Ethiopia is one of the few African countries that has substantially increased its spending on public agricultural research, which has more than tripled in real terms since 2000. Ethiopia also has half of SSA's agricultural extension workers. Not surprisingly, Ethiopia has enjoyed the highest rate of agricultural growth of any country in SSA since 2000. For each \$1 of agricultural value-added, the Ethiopian economy generated an additional \$0.29 in non-farm GDP and hence contributed profoundly to the country's rapid economic transformation and steadily improving livelihood indicators (Figure 2). Ethiopia's progress over the past several decades provides a powerful example for other African countries regarding how efforts to promote agricultural productivity can effectively stimulate both economic transformation and resilience.

Priorities for Future Progress

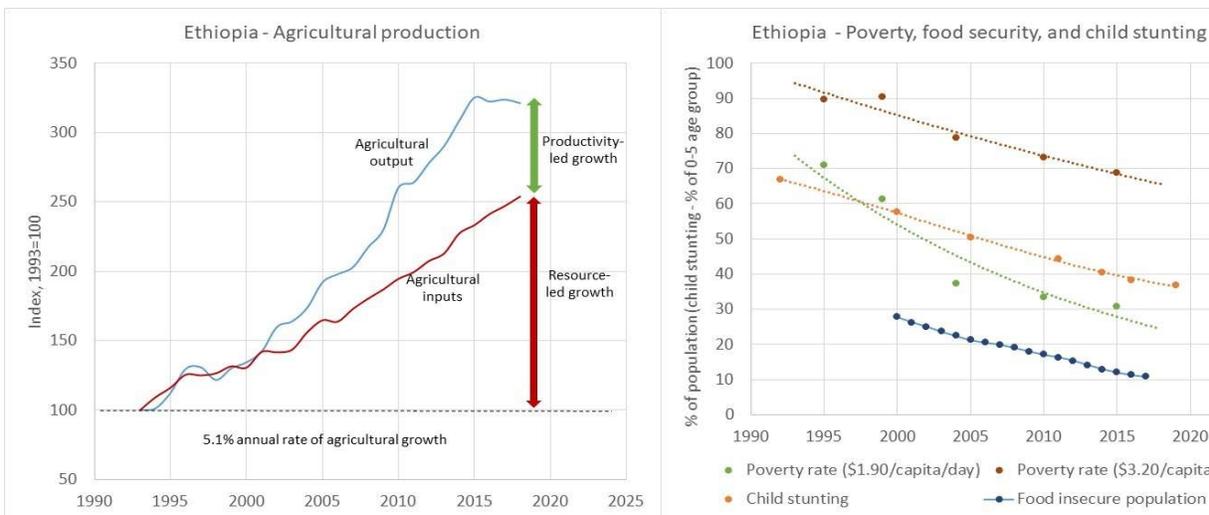
The most urgent need for all African countries is to recover from the economic and social setbacks of the COVID-19 pandemic. Afterward, African countries can more effectively prioritize the following actions to confront challenges to sustaining the progress that they have made over the past two decades.

1. **Accelerate Agricultural Productivity-Led Growth:** Support African-led agricultural R&D and scientific research; improve the policy environment to support agricultural productivity growth. Sustained progress toward economic transformation and resilience increasingly depends on raising the productivity of existing farmland. The goals of feeding Africa's growing population and conserving the planet's natural resources, diverse ecosystems, and the services they provide will be more effectively achieved through productivity improvements on existing farmland instead of area expansion (see Figure 2).



Photo from Feed the Future

Figure 2. Agricultural Growth and Falling Rates of Poverty, Food Insecurity, and Child Stunting in Ethiopia



Sources: USDA-ERS international agricultural productivity database; World Development Indicators; and FAO.

- 2. Expand Employment Opportunities:** While sometimes framed as a youth employment challenge, the challenge is fundamentally a broader ‘missing jobs’ crisis that reflects structural constraints on private investment and associated growth in new job opportunities. Addressing this challenge entails (1) policies that encourage economic growth and better jobs throughout the economy; (2) public investments that leverage new private investment and job opportunities; and (3) investing in human and organizational capacity development in Africa. Improving the productivity of the labor force is one of the most important avenues to making households, communities, and nations more resilient to pandemics, weather disturbances, and other shocks.
- 3. Achieve Economic Empowerment for Women:** Restrictive gender norms, legal barriers, and discriminatory policies limit African women’s opportunities to advance economically. Addressing this challenge involves: (1) improve reproductive health services to give women greater control over their lives; (2)

eliminate the gender education gap; (3) reform legal systems that deny women control of income, assets, and inheritance; (4) invest to decrease “women’s time poverty”, and (5) foster agency (ability to choose how to use one’s own time and economic resources) to reduce the negative impact of gender norms on women’s lives.

4. **Capture the Opportunities for Intra-African Agricultural Trade:** Increasing regional trade in agricultural products would raise farmer incomes and increase continental food security. Addressing this challenge requires: (1) support for the African Continental Free Trade Agreement (AfCFTA); (2) development of transport and communications infrastructure between African countries to reduce costs and risks of trade; and (3) promotion of competitiveness by reducing costs of production through agricultural R&D&E.
5. **Reduce the Infrastructure Deficit:** Africa’s large infrastructure deficit reduces competitiveness and hurts incomes from family farms and businesses. Addressing this involves (1) improving management to get more quantity and quality out of infrastructure expenditures; (2) improving planning and project selection to get higher rates of return on investment; (3) improving the enabling environment for private financing.

Priorities for Development Partners

1. **Support COVID-19 Recovery:** Support African countries in their efforts to recover from the economic and social setbacks of the COVID-19 pandemic. Post-stabilization, support African countries in addressing other crucial challenges to maintain progress.
2. **Support African Countries in Accelerating Productivity-Led Agricultural Growth:** Developing and making accessible to farmers a steady stream of technological innovations suitable to Africa’s diverse farming systems may be the single most important step to accelerating agricultural productivity growth and economic transformation in Africa.
3. **Support Policies and Institutions that Strengthen the Business Environment:** There are many examples of how policy and institutional change have been necessary to achieve productivity growth. By getting the institutions and policies right, the science and associated private investment can follow and enable technology diffusion to achieve transformation at scale.
4. **Recognize the Unique Challenges of Fragile States:** Most fragile states cannot devote sufficient attention or resources to an economic transformation agenda. Fragile states must first get back on a sustainable growth-oriented trajectory by addressing their humanitarian challenges, achieving peace and stability, and rebuilding their infrastructure and institutions.



Opportunities for USAID

USAID may not be positioned to invest in all these areas, but it can contribute to economic transformation and resilience by supporting African governments and other partners' activities in these foundational areas.

- 1. Leverage Strengths in Institutional Capacity Development:** USAID is particularly well suited to support institutional capacity development, especially for African agricultural R&D&E, policy analysis, and policy implementation. Several recent USAID-supported programs offer lessons on how to improve capacity in agricultural policy development.
- 2. Leverage USAID Convening Power and U.S. Global Leadership in Agricultural Innovation:** USAID can leverage the historical U.S. global leadership in agricultural sciences and innovation through U.S. Department of Agriculture (USDA), the land-grant university system, and its robust agribusiness sector for trade and development. Supporting agricultural productivity-led growth will contribute to U.S. Government-wide objectives for foreign assistance, including promoting country self-reliance and development; increasing private sector engagement to modernize and transform food systems; and supporting increased trade along agricultural value chains.
- 3. Support Intra-African Agricultural Trade,** especially the African Continental Free Trade Agreement (AfCFTA), along with investments that reduce trade costs.

The Board for International Food and Agricultural Development (BIFAD) is a seven-member, presidentially appointed advisory committee to USAID established under Title XII of the Foreign Assistance Act, and its role is to ensure that the assets of U.S. universities are brought to bear on development challenges in agriculture and food security.

This brief highlights a report commissioned by BIFAD and written by T. S. Jayne, Louise Fox, Keith Fuglie, and Adesoji Adelaja through the Association of Public and Land-grant Universities (APLU). The full report is available for download at <https://www.usaid.gov/bifad/documents/agricultural-productivity-growth-resilience-and-economic-transformation-sub-saharan-africa>

This study is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government. The contents also do not necessarily reflect the view of the Association of Public and Land-grant Universities (APLU).