Agriculture

Conclusion: Aiming at food security and sustainable economic growth

Alize le Roux and Jakkie Cilliers
Conclusion: Aiming at food security and sustainable economic growth

Europe is often blamed for Africa’s lack of access to its agricultural market. Yet, African leaders fail to recognise the need to focus comprehensively on the production of staple foodstuffs for domestic consumption, advancing regional rather than international trade in agriculture, investing in agriculture research, advancing rural property rights, in schooling for agriculture and generally focusing attention on rural poverty rather than on urban elites. If African countries prioritise growing staple foods while actively encouraging intensive smallholder farming and sustainable practices, they could increase rural incomes, reduce poverty and eventually open up the potential of agribusiness and large-scale exports that earn foreign exchange. The much-needed Agriculture scenario modelled here will reduce Africa’s agricultural import dependence, improve food security and contribute to growth.

Raising agricultural productivity serves as a foundation for broader sustained economic development. Eventually, agriculture ‘is central to securing foreign exchange earnings that can allow for the expansion of imports, thereby fuelling investment and growth.’

There is much that Africa can do to improve agriculture, even as it inevitably declines as a share of national economies. To this end, the AGRA calls for a holistic land management strategy that includes raising the organic matter, moisture retention and other forms of soil rehabilitation, and using inorganic fertilisers. In South Africa, for example, primary agriculture contributes very little to GDP. However, it provides food security on the back of a highly productive private agricultural sector and significant agro-processing industry. As a result, the country had a secure food supply system when it went into a six-month lockdown in March 2020 to curb the spread of COVID-19, while many other countries on the continent suffered.

Chart 13: Key policy recommendations

**Governments should:**

1. Invest in research and development, knowledge sharing and technology transfers to improve agricultural inputs.
2. Prioritise development of and investment in rural infrastructure such as rural access roads, storage facilities and access to electricity.
3. Establish and support ongoing financial mechanisms that provide affordable credit and insurance, especially for smallholders.
4. Prioritise the full implementation of the AfCFTA to expand markets and lift trade barriers in agricultural inputs and exports.
5. Adopt and support the use of climate-smart agricultural practices.
6. Implement sustainable water management, ecosystem protection and early warning systems.
7. Secure land tenure and focus on strengthening land governance institutions.
8. Implement and maintain Land use management systems.
10. Put in place resolution mechanisms to handle land disputes.

Modern technology in the form of AgTech can play an important role in this regard and offer cost-effective means for private sector companies to reach smallholder farmers by offering nontraditional credit-assessment methods to purchase seeds and fertilisers as well as insurance to safeguard their livelihoods. Currently, less than 4% of total commercial-bank lending goes into the agricultural sector, with financial institutions often citing the lack of collateral, high transaction costs,
lag between investment and return on revenue, poor infrastructure, and high risk as a result of variable rainfall and price spikes. Investing in irrigation and dams is just one of many additional requirements while insurance penetration in African farming is also very low and the share of spending by sub-Saharan African countries on agricultural research development close to zero. Digital platforms can connect farmers directly with vendors seeking products, offer last-mile distribution while offering vendors loans to pay for products over time. Since most agriculture in Africa is rainfed, timely and precise weather forecasts increases the efficient use of inputs and reduces the vulnerability of climate change-related risks while mobile platforms can allow farmers to share tractors and other productivity-enhancing mechanisation.

The impact of climate change on African agricultural yields is a significant uncertainty. A recent long-term forecast on the future of five Sahel countries (Mali, Niger, Burkina Faso, Chad and Mauritania) highlighted the impact climate change has already had and will continue to have in this region. The Intergovernmental Panel on Climate Change soberly notes that the Sahel, where agriculture accounts for more than 75% of total employment, has 'experienced the most substantial and sustained decline in rainfall recorded anywhere in the world within the period of instrumental measurements.'

The climate change/energy theme examines climate change’s impact on Africa’s future. It varies across the continent, given changes in temperature and rainfall and the increased variability of weather with many more extreme events such as floods, wildfires and droughts. The IFs forecasting platform includes some of these effects in its agriculture yield forecast but may underestimate the impact vastly. Significant uncertainties exist, particularly the potential for technology to increase agricultural production—not through the traditional route of expanding land under cultivation, but through more precise and sustainable farming methods. Eventually, solar-powered cold storage, accurate weather forecasts, monitoring of soil conditions and access to market information can all have an important role, as could greater efficiencies to reduce food waste. However, this will require current practices to change.

Without food security, developing countries cannot escape from hunger, poverty and the variances of nature. With food security, meaningful advancement is possible, if not impossible, to sustain. It is increasingly evident that the effects of climate change are likely to hold significant negative consequences for agriculture in much of Africa.

Africa’s economy has not been able to benefit from the agricultural sector. However, the continent has enormous potential, and it is agriculture upon which the most significant portion of Africans depend for survival. Subsistence and smallholder agriculture, which primarily cater for household consumption, need to be targeted and receive coordinated support from governments. This is quite different from the private-sector growth model of medium- and large-scale commercial farming, although that, too, has its place. Clumsy interventions by African governments to set minimum prices for commodities such as cocoa, coffee and cashew nuts without considering the broader impact often have unintended consequences. For example, it could encourage an increase in production by many more poor farmers, causing the commodity’s price to fall. The result is that more poor people will be trapped in subsistence farming, unable to escape. Low- and lower-middle-income African countries should emphasise food self-sufficiency first and then focus on the massive export potential of agricultural products.

Despite some progress, World Bank President Robert McNamara’s prognosis in 1973 that a long-term solution to the food problem would not be possible without rapid progress in smallholder agriculture remains valid today in much of Africa.

For a successful agricultural transition, it is imperative to focus on growing indigenous crops, such as cassava, cowpea, soybeans and yam, on using indigenous practices and ensuring that these practices are sustainable and preserving ecosystems. Once that is achieved, steady progress up the agro-processing value chain will unlock improvements rather than efforts to enter the global food export market without sufficient domestic reform.

Across Africa, governments and the private sector are modestly investing in the critical enablers of agricultural growth. But much more is required, particularly in incorporating resilience and adaptation to climate change into forecasts.
Prosperity requires that a country move up the agricultural value chain and avoid being suckered by corporate social responsibility programmes that promise to tinker with the worst effects of colonial-style production but do not structurally intervene to promote food self-sufficiency and shift value addition to Africa. The storyline often sold to Africans is to leverage products such as cocoa and coffee to improve their share of value-add in these massive markets. But without effective agricultural management and producer associations with the muscle to manage the sector, it is probably more important to diversify the agricultural products in countries such as Ghana and Côte d’Ivoire than to develop a cocoa cartel.

There is also the challenge that for much of Africa’s youth, turning to agriculture as a source of livelihood is associated with poverty, suffering and deprivation. Changing that mindset will be difficult, as the sector suffers from poor infrastructure, insecure property rights, lack of access to credit, no or limited provision of electricity, and lack of access to modern technologies. All these hurdles can be overcome by changing current practices of tenure insecurity, unlocking access to credit, using high-yielding seed varieties and modern inputs such as fertilisers, pesticides, and, eventually, mechanisation to emulate some of the positive aspects of the agricultural revolutions in South Asia and South America in the 1950s and 1960s. Above all, harvesting prosperity from agriculture requires determined and decisive political leadership.
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About the authors

Ms Alize le Roux joined the AFI in May 2021 as a senior researcher. Before joining the ISS, she worked as a principal geo-informatics researcher at the CSIR, supporting various local and national policy- and decision-makers with long-term planning support. Alize has 14 years of experience in spatial data analysis, disaster risk reduction and urban and regional modelling. She has a master's degree in geographical sciences from the University of Utrecht, specialising in multi-hazard risk assessments and spatial decision support systems.

Dr Jakkie Cilliers is the ISS's founder and former executive director. He currently serves as chair of the ISS Board of Trustees and head of the African Futures and Innovation (AFI) programme at the Pretoria office of the Institute. His 2017 best-seller Fate of the Nation addresses South Africa's futures from political, economic and social perspectives. His three most recent books, Africa First! Igniting a Growth Revolution (March 2020), The Future of Africa: Challenges and Opportunities (April 2021), and Africa Tomorrow: Pathways to Prosperity (June 2022) take a rigorous look at the continent as a whole.

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