Chapter 3

Feed Africa

Transforming Africa’s agriculture sector is central to economic growth, poverty eradication and food security. However, the continent faces significant barriers to achieving its potential. Boosting regional trade and harnessing new technologies will help add value and raise incomes.

Although there have been significant improvements in Africa’s net agricultural trade balance, progress on reducing the incidence of hunger and malnutrition has been slow. The Bank has played a leading role in supporting agribusiness, innovation and nutrition initiatives. In 2018, 19 million people benefited from Bank projects. Yet more needs to be done if we are to reach the Feed Africa target to end hunger by 2025.

Enhancing food security through integrated markets

With more than a quarter of the world’s arable land and 65% of the world’s uncultivated land, Africa has vast agricultural potential. Many Africans rely on agriculture for their livelihoods. Transforming Africa’s agriculture sector is central to economic growth, poverty eradication and food security.

Transforming Africa’s agriculture sector is central to economic growth, poverty eradication and food security

The continent faces significant barriers to achieving its potential. Traditional smallholder farming techniques have kept crop yields low. Conflict and extreme climate events have started to erode the gains made in food security and nutrition improvements. Water remains a scarce resource in many areas. While the technologies needed to boost production and productivity are available, stronger policies and more investment are needed to meet the scale of the ambition.

Agricultural exports from African countries have almost doubled

Linking agricultural produce suppliers along regional corridors in Africa is vital to creating economies of scale and connecting suppliers with buyers. By giving African producers access to larger markets, the African Continental Free Trade Area will help to add value to agricultural commodities, raise incomes and increase food security.

Great strides have been made in addressing Africa’s net agricultural trade balance, which declined to $24.8 billion in 2018 from $38.9 billion in 2015. Over the past decade, agricultural exports from African countries have almost doubled (see Figure 9). However, the trade deficit for low-income countries has increased slightly.

While agriculture is predominantly a private sector activity, its successful transformation depends on national institutions, investment and policies. Countries across the continent have agreed
Box 13  Transforming agriculture in Ethiopia with public investment

Ethiopia has registered remarkable economic growth in the last decade. Since the mid-1990s the Government of Ethiopia has put agriculture at the heart of its development policy and ensured sustained public investment in the sector. Between 2005 and 2015 it was one of only five African countries to meet the Comprehensive Africa Agriculture Development Programme target to spend 10% of annual government expenditures on agriculture — alongside Malawi, Niger, Mali and Burkina Faso. The country’s ambitious five-year Growth and Transformation Plan emphasises the agriculture sector.

As a result of this sustained focus, crop production has doubled over the last decade, mitigating food insecurity. The use of modern farming inputs like fertilisers and improved seeds has increased significantly through the efforts of a publicly funded extension system. The country has also established around 15 000 farmer training centres in rural areas. To improve agricultural productivity and natural resource management, the new National Adaptation Plan seeks to enhance efforts to reduce the country’s vulnerability to the impacts of climate change, focusing on the most vulnerable sectors — agriculture, forestry and water.

Meeting Africa’s ambition for a transformed agriculture sector will require high levels of investment and adoption of good agricultural practices

Crop yields have been on an upward trend over the past few years. However, in 2018 Africa’s average cereal yields declined to 1.5 tonnes per hectare, below 2015 levels — likely because of drought, the threat of fall armyworm and the unavailability of improved varieties. Initiatives to tackle these causes and identify new technologies to support smallholder farmers are underway across the continent (see Box 19). Agricultural productivity increased to $1692 per worker, up from $1544 in 2015, but still below the target. This confirms that meeting Africa’s ambition for a transformed agriculture sector will require high levels of investment and adoption of good agricultural practices.

There is still underinvestment in agricultural research and in policies to promote technological innovation. Increasing farmers’ access to new technologies, such as improved and climate-resilient seed varieties, to enable them to move up the agricultural value chain, remains a key challenge, largely because of the complexities involved in developing the sector. Africa’s share of market value for

Table 3  Feed Africa indicators (Level 1 & Level 2)

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>ALL AFRICAN COUNTRIES</th>
<th>ADF COUNTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEED AFRICA INDICATORS—PROGRESS IN AFRICA (LEVEL 1)</td>
<td>Baseline 2015</td>
<td>Latest 2018</td>
</tr>
<tr>
<td>Number of people hungry/malnourished (millions)</td>
<td>240</td>
<td>240</td>
</tr>
<tr>
<td>Agricultural productivity (constant 2010 US$ per worker)</td>
<td>1 544</td>
<td>1 692</td>
</tr>
<tr>
<td>Cereal yield (ton/hectare)</td>
<td>1.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Prevalence of stunting among children under 5 (%)</td>
<td>25.2</td>
<td>34.1</td>
</tr>
<tr>
<td>— of which girls</td>
<td>32.4</td>
<td>32.4</td>
</tr>
<tr>
<td>Africa’s net agricultural trade balance ($ billion/year)</td>
<td>-38.9</td>
<td>-24.8</td>
</tr>
<tr>
<td>Africa’s share of market value for key processed commodities (%)</td>
<td>10.3</td>
<td>11</td>
</tr>
<tr>
<td>Fertiliser consumption (kilograms per hectare of arable land)</td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>Baseline 2015</th>
<th>Actual 2018</th>
<th>Target 2018</th>
<th>Baseline 2015</th>
<th>Actual 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>People benefiting from improvements in agriculture (millions)</td>
<td>6</td>
<td>19.0</td>
<td>6.3</td>
<td>63</td>
<td>5</td>
</tr>
<tr>
<td>— of which women</td>
<td>2.9</td>
<td>9.3</td>
<td>3.1</td>
<td>31</td>
<td>2.6</td>
</tr>
<tr>
<td>Land with improved water management (thousand ha)</td>
<td>45.5</td>
<td>20.9</td>
<td>47.8</td>
<td>478</td>
<td>20.3</td>
</tr>
<tr>
<td>Rural population using improved farming technology (millions)</td>
<td>0.6</td>
<td>0.1</td>
<td>0.63</td>
<td>6.3</td>
<td>0.6</td>
</tr>
<tr>
<td>— of which women</td>
<td>0.3</td>
<td>0.06</td>
<td>0.31</td>
<td>3.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Agricultural inputs provided: fertiliser, seeds, etc. (thousand tons)</td>
<td>0.6</td>
<td>1.7</td>
<td>1.7</td>
<td>17.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Feeder roads built or rehabilitated (km)</td>
<td>800</td>
<td>3 400</td>
<td>1 500</td>
<td>15 000</td>
<td>800</td>
</tr>
</tbody>
</table>

- Achieved 95% or more of the 2018 target
- Achieved less than 95% of the 2018 target but above baseline value
- Achieved less than the baseline
- Data are not available to measure progress
key processed commodities has increased slightly to 11% in 2018, from 10.3% in 2015. Fertiliser consumption has remained constant since 2015 at 25 kilograms per hectare. More investment in such inputs will have a positive impact on agricultural productivity.

Rise in global hunger
World hunger has been on the rise in recent years, driven by an increase in conflict and the frequency of climate extremes. In Africa, these factors, along with population growth, have put pressure on land availability, land fertility and water access.

Despite commitments such as the Malabo Declaration, the UN Decade of Actions on Nutrition, and the Scaling Up Nutrition Movement, of which 40 African countries are part, much more needs to be done. Across the continent, 240 million people are hungry — a number that has been growing over the past three years (see Figure 10). Thirty four percent of Africa’s children are stunted — an increase from 25.2% in 2015; and of these the vast majority (32.4%) are girls. Significant efforts are required to fast-track the achievement of the SDGs and meet the ambition to end hunger and malnutrition by 2025 (Box 14 describes one example).

The Bank’s catalytic role in spurring agricultural development
Transforming the continent’s agriculture sector requires stronger policies and increased levels of investment. The Bank is working with international partners and the private sector to help improve and integrate Africa’s agriculture sector to improve livelihoods, reduce poverty and enhance food security.
our work has helped to improve the lives of 2 million, including 1164 women-led households.

We are working across national boundaries to protect vital natural resources

The Bank is also working to alleviate food insecurity and prepare communities for future climate-related events. We have demonstrated our ability to deliver timely results in emergency situations. In Burundi, we worked with the Global Environmental Facility to co-finance the restoration of degraded lands, train communities in better farming practices and improve their capacity to collect climate change data. In Malawi, the Bank provided budget support to help alleviate the country’s food crisis. The Bank’s intervention helped to mobilise funding from other international donors and to provide more than 2 million people with adequate food.

Rural infrastructure development is crucial to supporting regional integration, improving yields, linking markets and improving livelihood opportunities. As a result of our projects, 3400 km of feeder roads were built or rehabilitated, compared to 800 km in 2015 — more than double our target of 1500 km. Our projects in Nigeria and Rwanda to improve rural infrastructure have not only reduced travel times and raised incomes, but have also improved access to water supply and sanitation, enabled enterprises to access financial services and trained farmers to improve agricultural productivity (See Figure 11).

Support for agricultural research to improve technologies and practices across the continent has led to increases in both yields and incomes. We provided 1.7 thousand tons of agricultural inputs (fertilisers, seeds, etc.), compared to 0.6 thousand tons in 2015. In 2018, the Bank also convened talks to boost seed and agricultural production in Eastern and Southern Africa. This produced an action plan to accelerate seed release and deployment and boost trade.

The poor quality of agricultural infrastructure and inadequate beneficiary needs assessments and consultations led to slow adoption of new farming technologies. For instance in Kenya incomplete in-field irrigation infrastructure resulted in farmers continuing to use rudimentary irrigation methods. As a result, we successfully supported 100 000 people in rural areas to use improved farming technologies.

Our engagement with CGIAR and other centres of excellence under the Technologies for African Agriculture Transformation (TAAT) programme (discussed further below and in Box 19) have helped to develop new varieties of crops and supported the production of prototype farming tools and primary processing equipment. The Bank will continue to focus on promoting new technologies and modern farming techniques.

Improved water management is essential for developing agriculture in Africa, especially given irregular rainfall patterns and the
Ensuring a comprehensive agricultural value chain analysis
Agricultural value chain projects require sound and comprehensive value chain analyses in design and implementation. The multinational CGIAR project adopted a research and innovation platform approach that improved access to best-fit technologies and innovations, ultimately increasing the productivity and incomes of the four Comprehensive Africa Agriculture Development Programme priority value chains (cassava, maize, rice and wheat).

Managing future trans-boundary natural resources trust funds
The Bank supports a number of trans-boundary resources initiatives, such as the Congo Basin Forest Fund. These open-format funds require flexible and adaptive coordination mechanisms. They should strive to promote innovation and adopt a participatory approach to working with communities to manage their natural resources base.

What has worked well

Assessing optimal design options for rural infrastructure
A change in pavement design in the Nigeria Rural Access and Mobility Project due to local climate resilience requirements tripled the costs. This could have been avoided if all options had been assessed at the project design stage. Rural infrastructure projects require robust life-cycle cost analysis to ensure value for money.

Coordinating performance measurement and reporting
Lack of a single M&E system made coordination a challenge in our regional project on sustainable management of endemic ruminant livestock in West Africa. Multi-country projects require well-coordinated regional M&E systems that can ensure the effective measurement of overall outcomes and facilitate the assessment of the economic and financial performance of regional programmes.

What has not worked so well

Rural infrastructure development is crucial to supporting regional integration, improving yields, linking markets and improving livelihood opportunities

In Kenya, Madagascar and Morocco, our projects have improved irrigation and modernised water infrastructure. In the Lake Chad Basin, overuse of water, poor management and climate change had dramatically reduced the surface area of this vital ecosystem, affecting livelihood activities, including fish production. We increased the incomes of 1.5 million people through projects to improve water management and secure economic activities.

Milestones in climbing up agricultural value chains
The Bank envisions a food-secure continent that uses advanced technologies, creatively adapts to climate change, and develops a new generation of “agripreneurs” — agriculture entrepreneurs, including youth and women, who will take agriculture to the next level. Under our Feed Africa Strategy, we support projects and initiatives that will transform agricultural supply chains (see Box 17).

Boosting Africa’s agricultural productivity through technology
The Bank has been active across the continent in harnessing the potential of technology to boost agricultural value chains. The use of drones, automated tractors, artificial intelligence, robotics and block chains will transform agriculture (see Box 18). Smart farming and technological innovation will boost productivity, but they also require the appropriate skills, connectivity and funding.
Box 19 Harnessing technology to tackle invasive pests across the continent

Under the TAAT project, the Bank and the International Institute of Tropical Agriculture launched an Africa-wide initiative to mobilise regional efforts to stop the spread of fall armyworm — an invasive pest threatening the food supply and incomes of millions of African smallholders. Fall armyworm is a dangerous trans-boundary pest with a natural migratory capacity and thus a high propensity to spread. Without appropriate action, it could cause losses of up to 53% in maize yield in 12 African countries within five years. The value of these losses is estimated at between $2.48 billion and $6.19 billion. The initiative seeks to identify new technologies to combat the pest and distribute them to smallholder farmers across the continent. In collaboration with 15 private seed companies, this initiative will reach 1.5 million farmers in the southern Africa region with 6000 metric tonnes of drought-resistant pesticide-treated maize varieties to control fall armyworm.

The Bank’s TAAT framework aims to expand access to agricultural productivity-increasing technologies, including high-yielding and biofortified crop varieties such as drought-resistance maize and high-iron bean and wheat. TAAT aims to reach 40 million farmers with improved food technologies by 2025.

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To date, TAAT has been successful in promoting the regional harmonisation of seed policies and regulations across regional economic blocks. This will help open up regional seed markets and cross-boundary trade. It has also collaborated with the ENABLE youth initiative across 19 countries and supported youth-led agribusiness across a number of value chains.

New programmes

In scaling up our work in agriculture in line with our Feed Africa strategy, we have approved a range of projects focused on improving production and productivity.

We have a strong focus on developing agricultural value chains and raising incomes. In Morocco, we have provided $241.58 million to support the inclusive and sustainable development of agricultural value chains. The programme will create jobs in rural areas, increase agriculture exports, improve water management and mobilise private investment in the agriculture sector.

To create jobs and raise household incomes, the Bank extended a loan of $97.87 million to Cameroon to support modernising beef, pork and fish production, raising standards and competitiveness in key value chains. The project also aims to achieve significant improvements to food and nutrition in the country.

We are actively working to support agribusiness and the private sector. In the second phase of a project working with the Nigerian fertiliser company Indorama Eleme Fertilizer & Chemical Ltd, we are providing a $100 million senior loan to help double its annual fertiliser output. This will reduce the high cost of fertiliser, boost crop yields and reduce Nigeria’s heavy reliance on food imports. The Agricultural Fast Track Fund will also launch 12 new projects in support of small and medium agribusinesses in six African countries.

Across the continent, we are working to improve sustainable livelihoods and food security

In Sudan, the Bank approved its first private sector investment through a $75 million senior loan to DAL Group, one of the country’s largest food and agriculture companies. This investment is expected to make a significant contribution to food security, food import-substitution, job creation through increased local production, distribution and linkages with smallholders.

Across the continent, we are working to improve sustainable livelihoods and food security. In Kenya, we are supporting a reforestation project to improve forest conservation, raise household incomes and enhance food security. In Eritrea, we are working to improve drought resilience, crop and livestock production and productivity, and to expand opportunities in agriculture and agribusiness. And in Sudan, we are investing $42 million to support the National Agriculture Investment Plan.

In the Niger Basin, the Pillar Assessed Grant or Delegation Agreement (PaGoDA), a partnership of the Bank, Green Climate Fund, Global Environmental Facility, Climate Investment Fund and the European Union, will mobilise $218 million to finance the programme for integrated development and adaptation to climate change. This effort seeks to strengthen the resilience of the Niger River’s ecosystem and its population through sustainable resource management.

Over 10 000 agripreneurs are expected to benefit from advocacy and capacity building over the next few years

The Bank has approved a $15 million equity investment in the Africa Food Security Fund to support agribusiness SMEs and enhance food security in Africa. The fund will target underserved countries such as Senegal, Rwanda and Mali and is expected to create at least 20 direct jobs for each $1 million invested. It will benefit over 14 000 smallholder farmers, with women taking at least 40% of employment opportunities created.

Scaling up its support for nutrition, in December 2018 the Bank launched the Multi-Sectoral Nutrition Action Plan 2018–2025, which aims to catalyse nutrition-smart investments in agriculture,
water, sanitation and hygiene, social and health projects. The Bank also launched the African Leaders for Nutrition (ALN) initiative, supported by the Bill & Melinda Gates Foundation, which engages heads of state, finance ministers and eminent leaders to catalyse and sustain high-level political leadership and commitment to end malnutrition in Africa. The African Union’s endorsement of the ALN initiative reaffirms this commitment. In 2019, ALN launched the Continental Nutrition Accountability Scorecard, which will highlight individual country progress and provide a snapshot of continental progress. With funding from Big Win Philanthropy and the Aliko Dangote Foundation, the Bank is also working to provide technical support to mainstream nutrition interventions and develop a foundation for nutrition-smart multi-sectoral investments across the continent.

The Bank has also signed an agreement with the Food and Agriculture Organization of the United Nations to raise up to $100 million over five years, to support joint activities to enhance the quality and impact of investment in food security, nutrition, social protection, agriculture, forestry, fisheries and rural development.

Through the Enable Youth initiative, the Bank has committed to develop the next generation of agribusiness and commercial farmers for Africa. Over the next few years, over 10 000 agripreneurs are expected to benefit from advocacy and capacity building. In Sudan alone, 2000 agripreneurs and 1900 youth-run businesses are expected to be generated — and 50% of the beneficiaries will be women. The Bank will also host a $3 million Rockefeller Trust Fund to spur agricultural and youth employment in Africa.

Going forward, we are supporting leadership efforts across the continent to meet our commitments under our High 5 priority Feed Africa. Our focus on modernising the agriculture sector, integrating markets and increasing the value gained from products will help us to eliminate hunger and improve nutrition in Africa by 2025.