Feed Africa
The Road to Agricultural Transformation in Africa

Busan 2018
Each year, Africa spends far too much on food imports – approximately USD35 billion. Left unchecked, the figure is expected to surge to USD110 billion by 2025.

This is a real paradox, given that more than 60 percent of Africa’s most active population is engaged in agriculture. Africa contains 65 percent of the world’s most arable uncultivated land, and it has an abundance of fresh water supplies.

However, modern technology-driven agriculture that is resilient to climate change, job and wealth creating, and health promoting is the cornerstone of the continent’s transformation.

Our goal at the African Development Bank is to radically transform Africa’s agriculture sector and make the continent self-sufficient in food and put an end to food insecurity and malnutrition that casts a shadow over our children’s futures.

The Bank is actively supporting the emergence of agricultural clusters and genuine value chains for the dissemination of technologies, better access to water and irrigation, and financial resources. Transforming Africa’s agriculture value chains require a paradigm shift in perception. For too long, subsistence agriculture has been associated with drudgery, poverty, and suffering. This must change. At the African Development Bank, we believe in, support, and champion the cause of a new generation of wealth-creating young Africans with the right resources to help shape the future of agriculture on the continent.

Being awarded the 2017 World Food Prize was a great honour. It is my earnest hope that this recognition will primarily help draw global attention to the nutrition and health needs of Africa and to the outstanding work of our Bank, as well as and open doors for increased donor and investor commitments that accelerate the pace of agricultural development and lift millions out of poverty.

This is my vision. This is my hope. This is our collective destiny.

Let us cultivate a new African agriculture today, that will bear fruit for harvest tomorrow. I am convinced more than ever before that Africa’s destiny is to feed the rest of the planet and not the other way around.
Feed Africa is an initiative to transform African agriculture into a globally competitive, inclusive and business-oriented sector - one that creates wealth, generates gainful employment, and improves quality of life. The initiative seeks to scale up existing and successful initiatives across Africa and beyond.

Feed Africa reflects the commitments made under the Comprehensive African Agricultural Development Programme (CAADP), Africa's policy framework for agricultural transformation, wealth creation, food security and nutrition, economic growth and prosperity for all. Feed Africa works closely with a wide range of parties that include national governments, regional economic communities, the private sector, farmers, development partners, research institutions and civil society organisations. With these partners, Feed Africa will fulfil the CAADP goals by helping to:

- End extreme poverty
- Eliminate hunger and malnutrition
- Make Africa a net exporter of agricultural commodities
- Move to the top of key agricultural value chains
After earning her structural engineering degree, Shaimaa El Arabi says she never dreamed she’d be spending so much time on a farm. But she’s helping cow farmers in Upper Egypt raise a better-fed bovine, while saving them money – and to a small degree, saving the environment too.

El Arabi completed an African Development Bank-sponsored skills training program that helped her learn how to transform agricultural waste, like used wheat, into cow feed.

“My project is about making cow fodder from agricultural waste. We give the waste value by turning it into animal feed,” El Arabi says.

Wheat and other agricultural farmers used to burn or throw away the chaff and used stalks after harvest. El Arabi found a way to repurpose this waste and mix it with other ingredients to make fodder. The fodder is sold to farmers, who pay less for it than what they would normally pay for imported cow feed. It is understood that reduced burning of agricultural waste in the fields – a popular practice in Upper Egypt - contributes to overall better air quality for area residents.

The Feed Africa strategy is a forward-looking one. It seeks to ensure that key outcomes beyond the growth of the agricultural sector include food security, and that they support inclusive growth through an increased representation of women and youth. It also targets improved resilience to climate variability and shocks.

Agriculture is an integral part of the African economy and the daily lives of the majority of Africans. It accounts for over 51 percent of jobs across the continent.1 Despite its central role, the agricultural sector represents only a quarter of African GDP due to the low productivity of the sector. For example, Africa’s share in global production of cocoa beans is 73 percent. In comparison, its share in ground cocoa is 16 percent. Africa’s cereal yields are only 41 percent of the international average. Private sector infrastructure, beyond production, remains relatively underdeveloped.

The lack of productivity of African agriculture exacts a high human and economic cost. High rates of poverty prevail, especially in major agro-ecological zones like the sub-humid Guinea Savannah and the semi-arid Sahel regions where more than 50 percent of people live on less than USD1.25 per day. More than 223 million people are under-nourished in Africa.2 Low productivity also makes African agriculture uncompetitive. If nothing is done, the population under extreme poverty will rise from the 2015 figure of 420 million to 550 million by 2025.

2 FAO, IFAD and WFP. 2015. The State of Food Insecurity in the World 2015. Meeting the 2015 international hunger targets: taking stock of uneven progress
Security of land tenure and good governance remain major challenges across the continent. Most African countries have basic land tenure laws that are incomplete and poorly enforced, deterring private investment. Although women remain the primary users of agricultural land in most African communities, their access to land is, on average, less than half that of men.

Climate change and variability trends increasingly make the need for transformation more urgent. Africa is already disproportionately affected by the impacts of climate change because of its over-dependence on the rain-fed agriculture sector. African farmlands and rangelands are becoming more and more degraded, and this is causing farmers to face declining yields.

Falling commodity prices for a broad range of natural resources are making it increasingly necessary for African nations to diversify their exports and reduce current account deficits. Increased food demand and changing consumption habits driven by demographic factors like population growth and urbanisation are leading to rapidly rising net food imports. These food imports are expected to grow from the USD35 billion that they stood at in 2015 to over USD110 billion by 2025.

Rising imports are indicative of a broader opportunity to transform agriculture as a business. The scale of agricultural commodity imports that can be produced locally demonstrates that demand exists if a vibrant private agribusiness sector in Africa can be stimulated to service it. These food imports represent a diverse set of markets, both in key primary commodities as well as processed goods and agro-allied industries worth more than USD100 billion in revenue per annum. They deliver food security, create employment, and produce broad-based economic growth.

Feed Africa will focus on

1. **Ending extreme poverty**
   - Contribute to alleviating poverty through job creation and providing sustainable livelihoods
   - ~130 million lifted out of extreme poverty

2. **Eliminating hunger and malnutrition**
   - Food security for all Africans that are ‘undernourished’
   - Zero hunger and malnutrition

3. **Making Africa a net exporter of agricultural commodities**
   - Eliminate large scale imports of commodities that can be produced in Africa, and selectively begin to export
   - Africa’s net trade balance ~$0 bn

4. **Moving to the top of key agricultural value chains**
   - Become the #1 in either processing or the overall value chain, by market share by value
   - Africa’s share of market value for processed commodities ~40% (e.g. for cocoa grinding)
Agriculture remains a major source of income in Africa

However, untapped potential has resulted in persistent poverty and deteriorating food security

**Gap between employment and income**

Agriculture as a share of employment and GDP

<table>
<thead>
<tr>
<th>Region</th>
<th>% of total employment</th>
<th>% of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>51%</td>
<td>2.8%</td>
</tr>
<tr>
<td>India</td>
<td>45%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Thailand</td>
<td>35%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>43%</td>
<td>15%</td>
</tr>
<tr>
<td>Brazil</td>
<td>18%</td>
<td>5.5%</td>
</tr>
<tr>
<td>China</td>
<td>8%</td>
<td>2.8%</td>
</tr>
</tbody>
</table>

**Widespread poverty across major agro-ecological zones in Africa**

Millions of Africans living on less than $1.25/day; 2014

- Humid: 62 million
- Sub-humid: 137 million
- Semi-arid: 103 million
- Arid: 9 million
- Highland: 96 million
- Sub-tropical: 4 million
- Total: 417 million

**Relatively low productivity**

Average yields across Africa versus best practice

<table>
<thead>
<tr>
<th>Crop</th>
<th>Africa</th>
<th>Best practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cassava</td>
<td>25.4</td>
<td>8.4</td>
</tr>
<tr>
<td>Maize</td>
<td>19.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Rice</td>
<td>9.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Soy</td>
<td>1.1</td>
<td>3.6</td>
</tr>
<tr>
<td>Cocoa</td>
<td>1.3</td>
<td>0.5</td>
</tr>
<tr>
<td>Beef</td>
<td>0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Milk</td>
<td>10.0</td>
<td>0.5</td>
</tr>
</tbody>
</table>

**Rapidly rising imports and poor performance in exports**

Imports vs exports

<table>
<thead>
<tr>
<th>Year</th>
<th>Imports</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>2000</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>2010</td>
<td>30</td>
<td>40</td>
</tr>
</tbody>
</table>

Africa’s share of cocoa

<table>
<thead>
<tr>
<th>Year</th>
<th>% of cocoa beans</th>
<th>% of ground cocoa</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012/13</td>
<td>73%</td>
<td>20%</td>
</tr>
<tr>
<td>2013/14</td>
<td>73%</td>
<td>20%</td>
</tr>
<tr>
<td>2014/15</td>
<td>73%</td>
<td>20%</td>
</tr>
</tbody>
</table>
Geneticist Dorothy Onyango runs a laboratory in rural Kenya producing a zero carbon footprint fertilizer that does a lot more than nourish crops. The ‘bio-fertilizer’ is also enhancing the lives of more than 1,100 farmers and their families in Kenya and Uganda.

“It’s bio-fertilizer, but it’s creating jobs, food security and nutritional security for families,” Onyango says.

Working with the African Development Bank, Onyango combined science with a sustainable business model for growing and supplying bio-fertilizer, as well as partnering with farmers to bring their products to market. Kenyan groundnut farmers now use Onyango’s fertilizer to boost crops, which are later harvested to make groundnut oil and a protein-rich ‘cake’ from oil extraction waste. Onyango helps ensure the oil is sold at above market value. “It’s important that the farmers make a profit,” she says.

The bio-fertilizer lab also helps farmers find buyers for the ‘cake’ – which is sold as animal feed to chicken aviaries and fish farms. The domino effect continues, as the animal feed helps fish and chicken farmers raise better-quality products for market including chicken eggs, chicken meat and fish fillets.

Onyango says her laboratory’s relationship with the African Development Bank started in 2013 when the Bank was seeking “gender innovators” in science. Bank partners worked with the geneticist to secure intellectual rights to her bio-fertilizer.

“We are trying to align hardline science with soft science, growing products in labs that will affect people’s lives,” Onyango says.

Fueling Africa’s Agricultural Transformation

African agricultural transformation can substantially improve the quality of life of Africans and support economic growth. The conditions for transformation are beginning to materialise in a number of African countries. Liberalisation of input markets, expansion of innovative agricultural finance, and land policy reform have allowed significant advances to be made across Africa. This has led to pockets of transformation across the continent.
Becoming a major exporting player within 10 years

Kenya: Exporting horticulture out of Africa

- Strong foreign investor and partner support developing and driving the industry
- Contract farming model used to assure consistent supply
- Political will to support smallholder farmer development

Ethiopia: Exporting floriculture out of Africa

- Ethiopian Horticulture Producers and Exporters (EHPEA) actively managing the sector
- Strong government support in infrastructure and logistics, access to land, provision of long-term credit, and attracting domestic and foreign investors

Nigeria: Scale farmer registration and input distribution

- Strong political will and government support to transform the input supply system
- Use of public funds to leverage private-sector investment (i.e. agro-dealers networks)
- Mobile technology leveraged to achieve scale and provide nationwide access


- Horticulture in Kenya and floriculture in Ethiopia.
- Rwanda’s rapid and material reduction in the level of malnutrition.
- Nigeria’s large-scale registration of farmers onto an electronic-wallet system to facilitate fertilizer subsidy payments.
- Senegal’s transformation of its rice sector.
- Tunisia’s transformation over the past five years into the foremost global exporter of olive oil, with an average output of 115,000 tons per year.

These are concrete examples of transformation in Africa. They point the way for larger-scale shifts in African agriculture. Successful transformations are business-led, and involve the creation of three simultaneous conditions:

- A large-scale dissemination of productivity-increasing technology and inputs, plus input and capital intensity.
- The development of input and output markets, structures and incentives that allow for the full realisation of increased production.
- A well-functioning, vibrant and competitive private sector that can manage and allocate skills and capital to scale emergent success, and drive long-term sustainable agribusiness growth.
The Feed Africa Response

Dakar High-Level Conference


Over 600 participants attended the conference, including African finance, planning and economy ministers and ministers of agriculture and rural development, selected ministers of industry and trade, as well as central bank governors. Other participants included professionals from research institutes, academia and investment agencies, representatives from civil society organisations, and experts from across the continent and beyond.

Feed Africa builds on the commitments that participants made at this event, as well as on prior commitments and existing activities.

The African Development Bank and its partners are pursuing an agenda to transform a selection of key agricultural commodities and agro-ecological zones. Achieving Feed Africa’s goals will involve strengthening a broad range of value chains. In the short and medium term, however, resources will be focused on selected agricultural value chains and related agro-ecological zones. The prioritisation of these agricultural value chains and agro-ecological zones is based on the following criteria: future demand; competitive advantage; scope for transformation uplift; potential to nourish Africa; and existing focus.

- **Dramatic increases in production & productivity**
  - Large-scale dissemination of productivity - increasing technology, inputs and capital

- **Simultaneous creation of market structures to realise the value of increased production**
  - through the development of input and output market structures, governance, and incentives

- **Mobilization of a well-funded private sector capable of scaling emergent agribusiness successes**
  - and driving long-term sustainable agribusiness growth

- **The Feed Africa strategy will take a commodity-focused and integrated approach, simultaneously addressing multiple bottlenecks across entire prioritized agricultural commodity value chains and within related agro-ecological zones**

- **Public sector as an enabler**
  - to kick-start the process, shepherd it to scale, and create enabling environment assets and conditions that enable private sector-led transformation
Feed Africa
An Action Plan for African Agricultural Transformation
Priority agricultural commodity value chains and agro-ecological zones

Wheat and horticulture in North Africa

Maize, soybean, dairy, and livestock across the Guinea Savannah

Rice in West Africa

Cassava in humid and sub-humid zones

Sorghum, millet, cowpea, and livestock across the Sahel

Tree crops (cocoa, coffee, cashew, and oil palm), horticulture and fish farming across all of Africa

Prioritization criteria

**Future demand**

Likely future African demand, taking into account changing consumption habits and needs

**Competitive advantage**

Basis to effectively compete with imported products and/or export markets

**Scope for transformational uplift**

Potential to drive massive increases in productivity given current endowments and assets versus feasible targets

**Potential to nourish Africa**

Preference for products that offer broad-based nutritional value, not just calories

**Existing focus**

Alignment with existing priority commodities such as those identified by AU/NEPAD, rather than establishing new ones
Fulfilling Agricultural Transformation in Africa

Fulfilling Africa’s potential for transformation in the priority commodity value chains and agro-ecological zones requires different types of support to catalyse investment. There are seven vital sets of transformation enablers:

1. **Massively increase productivity**
   - Agriculture technology dissemination (flagship programme: Technologies for African Agricultural Transformation)
   - Finance and input, systems development
   - Agricultural mechanisation

2. **Boost value addition**
   - Post-harvest loss prevention
   - Agro-processing zones, clusters, and corridors

3. **Increase investments in hard and soft infrastructure**
   - Infrastructure development and coordination
   - Farmer e-registration

4. **Expand agricultural financing**
   - Private investment and commercial bank lending for agriculture (flagship programme: risk-sharing facility)
   - Non-bank small and medium-enterprise finance and capacity-building

5. **Enhance agribusiness environments**
   - Policy Reform: land tenure, input subsidies, incentives for local production and processing, financial sector deepening, and regional integration and trade

6. **Increase inclusivity, sustainability and nutrition**
   - Climate resilience funding and climate-smart agriculture practices
   - Women-owned agriculture and agribusiness enterprises
   - Youth employment in agribusiness (flagship programme: ENABLE Youth)
   - Food security and prevention of malnutrition

7. **Coordinate partnerships to drive transformation**
   - Partnership among key actors from the public and private sectors, and development actors
Transforming the commodity value chains and agro-ecological zones will open up markets worth USD85 billion per annum by 2025. This will make substantial impact towards realising Sustainable Development Goals (SDG) on poverty reduction and ending hunger, in keeping with SDGs 1 and 2.

The total cost of transformation for the priority commodities and agro-ecological zones in the strategy is between USD315 billion and USD400 billion over 10 years. This is equivalent to USD31.5 billion and up to USD40 billion per year. This level of investment far exceeds resources currently available from the public sector. There are sufficient resources within Africa and through potential partners to achieve this ambition.

Feed Africa will require an Africa-wide agenda that combines the resources of a broad set of public and private sector actors. Coordination, partnership and the development of innovative financial instruments to incentivise this partnership are essential to achieve transformation. Below are some possible sources for transformation financing:

- African governments in 2014 spent approximately USD12 billion on agriculture. Although the Malabo commitments of allocating 10 percent of public budgets to agriculture have not been met, a notable increase of government investment is still imperative, especially for country-level ownership.

- Combined, multilateral and bilateral donors, international finance institutions, foundations and non-governmental organisations spent about USD3.8 billion on agriculture in Africa in 2014. The African Development Bank intends to raise its average annual investments in agriculture.

- Private sector and institutional capital will be a critical source of financing. Leveraging commercial bank balance sheets and innovative finance mechanisms will be explored as potential options.

- Foreign direct investment (FDI) in agriculture and agribusiness in Africa was worth USD10 billion in 2014. Creating the appropriate conditions for agribusiness growth and aligning existing investment strategies of the private sector to the goals of transformation should increase the attractiveness and flows of FDI into the African agribusiness sector.

- The importance of ensuring the development of sustainable, resilient and climate-smart agriculture is closely aligned with realising the ambitions agreed in COP 21 and associated climate finance commitments. These represent additional and material sources of funding for key parts of agricultural transformation, especially sustainable intensification of commodity production, and sustainable natural resource management.
Scaling and leveraging what is already working: Feed Africa initiatives are either universally proven to deliver results, or involve scaling up and replicating promising pilots.

Ensuring that sufficient skills and capabilities exist for follow-through: appropriate skills, capabilities, and resources will be required for follow-through.

Sufficient targeting: the African Development Bank intends to increase the scale of its funding to agriculture. It will direct those financial resources to a series of commodities and agro-ecological zones. Doing so will help drive multi-country value chains through extensive commodity and agro-industry expertise.

Candour about the importance of political will: transformation involves substantial reform, requiring a high degree of political priority, coordination across ministries, and the willingness to push through business and developmental interests.

How this approach will work on the ground

Potential agriculture and agribusiness markets by incremental revenue opportunities

Notes: (1) Market is valued at import parity prices, which can be taken as a proxy for the wholesale market value of these products; (2) Additional focus areas for future consideration post first 5 years of execution of the transformation strategy; (3) involves application of high-productivity horticulture methods to substantially increase Africa’s share of horticulture export markets.

Source: CGIAR; FAOstat; Dalberg analysis.
The Role of the African Development Bank

The African Development Bank has considerable experience in supporting African countries in the agricultural sector. The African Development Bank will play a pivotal and catalytic role in the delivery of the Feed Africa agenda. The Bank will use its unique position and previous experience as a key investor for, convener of, and advisor to African nations and institutions to coordinate and amplify fragmented efforts across the continent. Specifically, the African Development Bank will work with its partners to orchestrate, design and take to scale existing and successful transformation initiatives.
Partnerships for Transformation

Coordination among the different stakeholders and partners is key to the delivery of the transformation agenda. Feed Africa will strengthen already existing platforms that involve alignment around specific and targeted value-chain transformation agendas by:

- Bringing coherence and clear plans of action and securing commitments.
- Sequencing efforts across the same value chain and within the same country or region.
- Holding participating actors accountable to their commitments.
- Leveraging shared capabilities and footprints to enhance programs and expand reach.
- Selecting priority focus areas both for decision-making and resource allocation.
- Sharing previous experience and lessons as they pertain to new projects.
- Engaging and understanding the needs of value chain actors and larger private sector players.

‘Partnership for Agricultural Transformation in Africa’

Inclusivity, sustainability, nutrition

Increased productivity

Realized productivity

Hard and soft infrastructure

Agricultural finance

Enabling agribusiness environment

Multilateral, bilateral donors, foundations, and government organizations

Small and large scale agribusiness, farmers organizations, and food companies

Co-development
COMPREHENSIVE AFRICAN AGRICULTURE DEVELOPMENT PROGRAMME

Commitments and Goals by African Heads of State and Government in 2014 Malabo, Equatorial Guinea

1. Recommitment to the principles and values of the Comprehensive African Agricultural Development Programme process

2. Recommitment to enhance investment finance in agriculture
   • Uphold 10 percent public spending target
   • Operationalise the African Investment Bank

3. Commitment to ending hunger by 2025
   • At least double productivity (focusing on inputs, irrigation, mechanisation)
   • Reduce post-harvest losses by 50 percent or more
   • Nutrition: reduce underweight to five percent and stunting to 10 percent

4. Reduce poverty by 50 percent by 2025, through inclusive agricultural growth and transformation
   • Sustain annual sector growth in agricultural GDP of at least six percent
   • Establish and/or strengthen inclusive public-private partnerships for at least five priority agricultural commodity value chains, with strong linkage to small-holder agriculture
   • Create job opportunities for at least 30 percent of the youth in agricultural value chains
   • Establish preferential entry and participation by women and youth in gainful and attractive agribusiness

5. Commitment to boosting intra-African trade in agricultural commodities and services
   • Triple intra-Africa trade in agricultural commodities and services
   • Fast track continental free trade area and transition to a continental common external tariff scheme

6. Commitment to enhancing resilience in livelihoods, production systems, climate variability, and other shocks
   • Ensure that by 2025, at least 30 percent of farm and pastoral households are resilient to shocks
   • Enhance investments for resilience building initiatives, including social security for rural workers and other vulnerable social groups, as well as for vulnerable ecosystems
   • Mainstream resilience and risk management in policies, strategies and investment plans

7. Commitment to mutual accountability to actions and results
   • Conduct a biennial agricultural review process using the Comprehensive African Agricultural Development Programme Result Framework
The High 5 Agenda

Five priority actions for the African Development Bank and for Africa. The High 5 Agenda is the African Development Bank’s channel for focusing and scaling up its 2013-2022 Ten Year Strategy, to bring about the social and economic transformation of Africa.

The High 5 are designed to deliver the twin objectives of the Ten Year Strategy: inclusive growth that is shared by all; and the gradual transition to green growth.

The High 5 are: Light up and power Africa; Feed Africa; Industrialize Africa; Integrate Africa; Improve the quality of life for the people of Africa.