FEED AFRICA:

STRATEGY FOR AGRICULTURAL TRANSFORMATION IN AFRICA 2016-2025

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ADF	African Development Fund
AEZ	Agro-Ecological Zone
AfDB	African Development Bank
AFFM	Africa Fertilizer Financing Mechanism
AgSS	Agriculture Sector Strategy
ARC	Africa Risk Capacity
ATA	Agricultural Transformation Agenda
AUC	African Union Commission
AVC	Agricultural Value Chain
AWARD	African Women in Agricultural Research and Development
CAADP	Comprehensive Africa Agriculture Development Programme
CCAFS	Climate Change, Agriculture, and Food Security
CGIAR	Consultative Group for International Agricultural Research
COP-21	Conference of Parties 21
CSA	Climate-Smart Agriculture
FAO	Food and Agriculture Organization of the United Nations
FARA	Forum of for Agricultural Research in Africa
HLC	High-Level Conference
ICT	Information and Communications Technology
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IITA	International Institute of Tropical Agriculture
INDC	Intended Nationally Determined Contributions
GDP	Gross Domestic Product
GPAFS	Global Partnership for Agriculture and Food Security
GREAT	Gender-Responsive Researchers Equipped for Agricultural Transformation
L4Ag	Leadership 4 Agriculture
MSMEs	Micro-, Small-, and Medium-Sized Enterprises
NEPAD	New Partnership for Africa's Development
OFSD	Financial Sector Department
OPSD	Private Sector Department
OSAN	Agriculture and Agro-Industries Department
PATA	Partnership for Agricultural Transformation in Africa
PIDA	Programme for Infrastructure Development
REC	Regional Economic Community
R&D	Research and Development
RMC	Regional Member Country
SDGs	Sustainable Development Goals
SHF	Smallholder Farmer
TAAT	Technologies for African Agricultural Transformation
UNECA	United Nations Economic Commission for Africa
USD	United States Dollars
WFP	World Food Programme

EXECUTIVE SUMMARY

Agriculture is a major source of income in Africa; however, untapped agricultural potential has contributed to persistent poverty and deteriorating food security, resulting in a projected increase in the number of undernourished people from ~240m in 2015 to ~320m by 2025. Falling commodity prices for a broad range of natural resources are creating an increasing imperative for African nations to diversify their exports and reduce current account deficits. At the same time, increased food demand and changing consumption habits driven by demographic factors such as population growth and urbanization are leading to rapidly rising net food imports, which are expected to grow from US$35bn in 2015 to over US$110bn by 2025.

These rising imports are indicative of a broader opportunity to transform agriculture construed as a business. The scale of imports demonstrate 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 commodities as well as processed goods and associated or 'agro-allied' industries worth more than US$100bn in revenue per annum[1], while delivering food security and broad-based income growth.

Capturing these opportunities on the scale required in Africa has occurred elsewhere in the world before, such as in Brazil, Malaysia and Vietnam, and often over a shorter time period. The conditions for transformation are beginning to materialize in a number of African countries. Smaller-scale transformations are happening, such as in the horticulture and floriculture sectors in Kenya and Ethiopia respectively, Rwanda's rapid and material reductions in the level of malnutrition, Nigeria's large scale registration of farmers onto an electronic-wallet system to facilitate fertilizer subsidy payments, and transformation of the rice sector in Senegal. These instances show that localized transformation in Africa is possible, and point the way for larger-scale shifts in African agriculture. The lessons learned from these experiences help frame this Strategy. Successful transformations are business-led, and involve the creation of three simultaneous conditions:

(i) a large-scale dissemination of productivity-increasing technology and inputs, plus input intensity and capital intensity;
(ii) the development of input and output markets structures and incentives that allow the full realization of the value of increased production; and,
(iii) a well-functioning and vibrant private sector that can manage and allocate skill and capital to scale emergent success and drive long-term sustainable agribusiness growth.

The public sector has a critical role to play in enabling these conditions and letting businesses flourish. In successful cases of agricultural transformation, liberalization of input markets,

[1] *Net food imports are estimated at $111bn by 2025. There are multiple ways to close the net import gap. This strategy has identified incremental agribusiness and agro-allied industries that could be worth $100bn - $150bn per annum by 2025, at 'competitive' wholesale prices (i.e. the prices that would need to be achieved by African suppliers in wholesale markets to be at least as cheap as imports, excluding any tariff supports). The market opportunity is substantially larger than this; this strategy focuses on developing agribusiness markets that are critical to also delivering food security, ending hunger and reduce poverty. Other markets such as alcoholic beverages, juices, a broad set of edible oils, and industrial food manufacturing ingredients represent material additional markets that this strategy does not focus on, as they have a much lower contribution to the broader goals of the agricultural transformation agenda.*

innovative financing, infrastructure development (irrigation, storage, and rural roads), and land tenure reforms were important - as were technologies and outreach plans. Today, new technologies, especially in the application of information and communication technologies to agriculture, financial services and information services, open up new ways to replicate these successes, as well as drive new ways of modernizing value chains, and in a particularly inclusive manner.

Underlying all of these is a critical need for the political will to undertake large scale reform. This is particularly true in light of the critical role of policy reform and the creation of an enabling environment for investment and participation by the private sector. However, strong political should not be equated with strong government intervention. When and where the most effective course of action, as expressed by small and large private sector actors, is for the government to reduce its involvement and allow a system to thrive and balance itself, leaders must be equally willing to do so.

The scale of resources required for transformation is significant: the transformation of a selection of 18 value chains will cost an estimated $315-400bn over 2015-2025. This exceeds – by far – the funds available from the public sector; private sector capital is needed, and there are sufficient funds in African capital markets if they can be appropriately mobilized by the public sector. Net banking assets are ~$800bn in Sub-Saharan Africa alone[2]and sovereign, pension and private equity funds constitute combined net assets of $550-600bn. Transformation of the CAADP goals and Malabo commitments will require a combination of resources from a broad set of public and private sector actors, and therefore coordination and partnership as well as the development of innovative financial instruments to incentivize this partnership is essential to achieve transformation.

In October 2015, the Bank – in association with the AUC, UNECA, and the Government of Senegal – organized a high-level Ministerial Conference (HLC) on "Feed Africa: An Action Plan for African Agricultural Transformation" in Dakar to map out, within the CAADP goals and Malabo commitments, how to unlock Africa's agricultural potential and boost job creation with a view to diversifying African economies. The HLC was attended by over 600 participants, including African Ministers Finance, Planning and Economy, the Ministers of Agriculture and Rural Development, select Ministers of Industry and Trade as well as Central Bank Governors; the research institutes, the academia, investment agencies, civil society organizations and experts across the continent and beyond. This Strategy builds on the commitments made at this event as well as the existing activities and prior commitments.

The specific sets of enablers, and the proposed approach of the Strategy reflects commitments made in the 2003 Maputo Declaration and 2014 Malabo Commitments through the Comprehensive African Agricultural Development Program (CAADP). It intends to contribute to and build on these efforts. More specifically, the Strategy will execute the CAADP goals of contributing to elimination of extreme hunger, malnutrition, poverty, and increased prosperity – , in partnership with alliances including farmers, agribusiness, and civil society, and exploiting regional comparative advantages and opportunities for trade and collaboration. It will be forward-looking, ensuring that key outcomes beyond growth of the agricultural sector include enhanced capacity of governments, multilateral institutions, and others to support this growth, increased representation for women and youth, and improved resilience to climate variability and shocks.

[2] *KPMG, 2014*

As part of the Bank's High 5 Agenda and the objectives of "Feed Africa", the Bank is elaborating a strategy for its support to the four specific goals of CAADP viz.:

- contribute to eliminating extreme poverty in Africa by 2025;
- end hunger and malnutrition in Africa by 2025;
- make Africa a net food exporter; and,
- move Africa to the top of export-orientated global value chains where it has comparative advantage.

Given the scale of resources and coordination required to transform the entire value chains, it is important to apply a targeted investment strategy to realize these ambitions. An initial set of agricultural commodities and agro ecological zones identified as being initial lead areas for investment include:

- Achieve self-sufficiency in key commodities **(rice, wheat, fish, palm oil, horticulture, cassava[3]);**
- Move up the value chain in key export orientated commodities **(cocoa, coffee, cotton, cashew,);**
- Creating a food secure Sahel (sorghum, millet, cowpea, livestock); and,
- Realizing the potential of the Guinea Savannah (maize, soybean, livestock)

Transforming this initial set of commodity value chains and agro-ecological zones could open markets worth US$85bn per annum by 2025, will have a substantial impact on realizing Sustainable Development Goals on poverty reduction and ending hunger, and will **require mobilizing US$315bn - US$400bn** in investments.

More specifically, fulfilling Africa's potential in each of these areas requires different emphases in the types of support needed to catalyze investment, but overall each commodity and agro-ecological zone transformation requires seven sets of enablers:

a) **Increase productivity** by catalyzing the development of effective input distribution systems and reduction in post-harvest waste and loss;
b) **Realize the value of increased production** by facilitating increased investment into output markets and supporting market incentives for value addition;
c) **Increase investment into enabling infrastructure**, both hard infrastructure (such as roads, energy and water) as well as soft infrastructure (especially ICT, which can have positive effects);
d) Create an **enabling agribusiness environment** with appropriate policies and regulation;
e) **Catalyze flows of capital** (especially commercial lending and private investment) to scale agribusinesses;
f) Ensure that transformation delivers on broad-based needs of Africans, by ensuring **inclusivity, sustainability and effective nutrition** beyond what the market may deliver otherwise
g) **Coordinate** activities to kick start transformation, align activities and investments of different actors, and guide initial activities to the point where private sector actors can be crowded in;

[3] *Specifically, this refers to substituting start imports (through high quality cassava flour) and oil (through ethanol), as well as developing additional products (e.g. glucose, dextrin)*

The strategy is closely aligned to commitments towards global food security that came out of the 2009 G8 Summit in L'Aquila. These highlighted the importance of increased investment, development of local agricultural production, formation of a global partnership on agriculture and food (the Global Partnership for Agriculture and Food Security – GAFSP), and the promotion of open and efficient agricultural and food markets. Measurement of progress towards the goals of the Strategy will consider contributions to achieving the 2015 Sustainable Development Goals (SDGs), particularly those related to ending poverty, hunger, and combating climate change. Finally, the Strategy echoes the vision set out in the 2063 Strategy for Africa – developed jointly by the Bank, the AUC, and UNECA – to 'consolidate the modernization of African agriculture and agro-businesses'.

The escalating challenge of climate change means that climate smart agriculture (CSA) is now no longer an option but a core necessity of any strategy to deliver results, even in the near term: El Nino has, at the time of preparation of this report in 2016, increased food insecurity in several countries in East and Southern Africa. Given its depended on the environment, the agricultural sector is one of the most affected by climate change, and, given its dependence on agriculture, the African continent is already experiencing a disproportionate amount of the impact thus fair, particularly in the Sahel. In light of this, it will be important to promote and finance the use of CSA practices and better prepare farmers and other vulnerable populations for climate risks. To this effect, the Strategy will also aim to align with decisions of the 2015 Paris UN Climate Change Conference (COP-21) and partner with the many multi- and unilateral actors that have made commitments. As most of the agriculture-related targets were defined at the country-level in Intended Nationally Determined Contributions (INDCs) submitted prior to Paris, it will be important to support individual countries in ensuring that they have set material targets and developing, financing, and evaluating the programs required for fulfilling these.

The strategy is also closely aligned to the dual key principles laid out in the AfDB 10-Year Strategy 2013-2022: inclusive growth and gradual transition to green growth. On the one hand, the AfDB Strategy for Agricultural Transformation in Africa will promote inclusive and green growth through direct programming For example, it will prioritize projects designed to target historically underserved rural, female, and youth populations to encourage equitable participation in all areas of the sector and increase number of farmers using climate-smart agriculture practices. However, it will also elevate the importance of inclusive and green growth by mainstreaming these issues across all of its activities and the initiatives it funds. This will include ensuring that M&E is gender responsive, putting in place safeguards to protect against disenfranchisement of smallholder farmers as certain sub-sectors are commercialized, and supporting governments in developing the country-level data systems required to track the use and impact of climate-smart agriculture practices. Fundamentally, the overarching aim of the strategy is to drive inclusive gains in agriculture to sustainably transform the lives of all – including the poorest and most vulnerable – Africans.

This Strategy is intended to add to, and not duplicate, earlier efforts. It will do so by **bringing to scale** existing and successful interventions across Africa, while further developing the required capacity of actors – public and private – throughout the system to sustain the positive impacts of these interventions. The AfDB is poised to play a particularly important role in the transformation through its strategy, acting as a catalyst for these efforts using, among other strengths, its **financial leverage** to raise the investments required and its **convening power** to bring different partners to the table and enhance accountability.

Addressing the unfulfilled potential of agriculture is an imperative for Africa. Transforming the agriculture sector can and should be harnessed towards a vital impact on

inclusive growth on the continent. In 2014, over 60% of people in Africa lived in rural areas and relied on agriculture for their livelihoods,[4] and women in Africa made up at least half of the agricultural labor force.[5] The further development of agriculture as a business can used to create opportunities for those in rural areas, as well as for women and youth across the continent. It can drive inclusive growth, helping to reduce poverty and build wealth. As Africa's development bank, the AfDB will elevate its efforts in the space and work with partners to make this vision a reality.

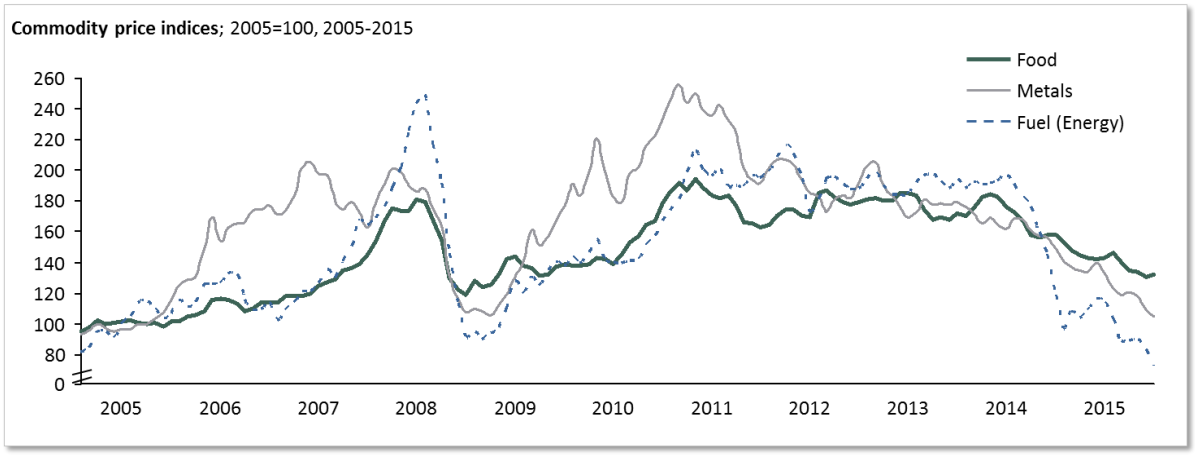
[4] *Word Bank Databank, Agriculture and Rural Development, 2015,* <*http://data.worldbank.org/topic/agriculture-and-rural-development*>.
[5] *FAO, State of Food and Agriculture, 2011.*

1. THE IMPERATIVE FOR A TRANSFORMATION OF AFRICAN AGRICULTURE - THE CHALLENGES FACING AGRICULTURAL TRANSFORMATION

1.1 **Agriculture remains an integral part of the African economy and the daily lives of the majority of Africans, accounting for just over 60% of jobs across the continent.**[6] Despite its central role, the agriculture sector represents only a quarter of African GDP[7], ranging from 3% of GDP in Botswana to almost 50% in Chad, the Central African Republic, and Sierra Leone[8], due to the low productivity of the sector. Since 1990, cereal yields have increased by 164% in Brazil, 81% in Uruguay, 69% in Chile, and by 43% in Malaysia, while average African cereal yields grew by less than 40%. As a result, Africa's yields are only 56% of the international average,[9] and the private sector infrastructure beyond production – especially in upstream activities such as seed and fertilizer distribution, as well as downstream activities such as dry and cold storage and agro-processing – remains relatively underdeveloped.

1.2 **Recent natural resource price volatility has created an acute need for African economies to diversify their sources of foreign exchange earnings, making the potential for driving agriculture sector growth increasingly important to realize.** In recent years, while commodity prices were relatively high – particularly minerals of which Africa is home to a third of the world's reserves – Africa was a particularly fast growing region with average annual growth around 5%.[10] However, the recent decline of natural resource prices contributed to at least ten African currencies losing more than 10% of their value in 2014. There is now an acute need for African economies to diversify their sources of foreign exchange earnings, especially into less volatile markets such as agricultural commodities and food. Africa's economic growth has not been sustainable and, in some cases, previous gains have been lost because of the historic dependence on raw commodity trade. Agriculture is a good option for the required diversification, as it exhibits lower price volatility and the continent has substantial undeveloped amount of the necessary endowments.

Figure 1: Agricultural prices have been less volatile than natural resources over the past decade



Source: IMF Primary Commodity Price System

[6] *AGRA, 'Africa Agriculture Status Report,' 2013.*

[7] *AfDB, 2015-2019 Draft Agriculture & Agribusiness Strategy*

[8] *Word Bank Databank, Agriculture and Rural Development, 2015*

[9] *AfDB, 'Africa's agricultural productivity is the lowest in the world.'*

[10] *The Economist, 'The twilight of the resource curse?' January 2015.*

1.3 **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 such as the Sub-Humid "Guinea Savannah" and Semi-Arid "Sahel" regions where more than 50% of people live on less than US$1.25 a day; more than 232m people are under-nourished in Africa[11]. Low productivity also makes African agriculture an uncompetitive sector; around a third of all calories consumed in Africa are imported,[12] resulting in a negative net agricultural trade balance of US$35bn per year in 2015. Agribusiness activities outside of farming account for 78% of total value added in all agricultural value chains globally,[13] yet this figure falls to approximately 38% in Africa.[14] In the case of cocoa, Africa exports 69% of the world's raw cocoa beans, but only 16% of ground cocoa, which is typically worth 2-3 times more per ton than raw cocoa.

1.4 Notwithstanding the expected rise in rural populations as well, **urbanization is driving an increased demand for high-value food products that are not currently being supplied in sufficient quantity and quality by African farmers.** The urban population in Africa has increased by a factor of 12 since 1960[15]with the percentage of the population living in urban areas approaching 40%. When Africans move to cities, their consumption patterns change as they are exposed to higher quality, often imported, food – specifically premium cereals, dairy, poultry, beef and vegetables. For example, Africans living in cities consume 70% premium rice, whereas rural Africans eat mostly standard rice. The share of Africans living in urban areas is projected to increase to almost half by 2025; and 70% by 2050. Unless African production adapts to changing consumption patterns, further urbanization will put pressure on the import of products that are either not produced in Africa or produced in insufficient volume to meet demand.

[11] *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*

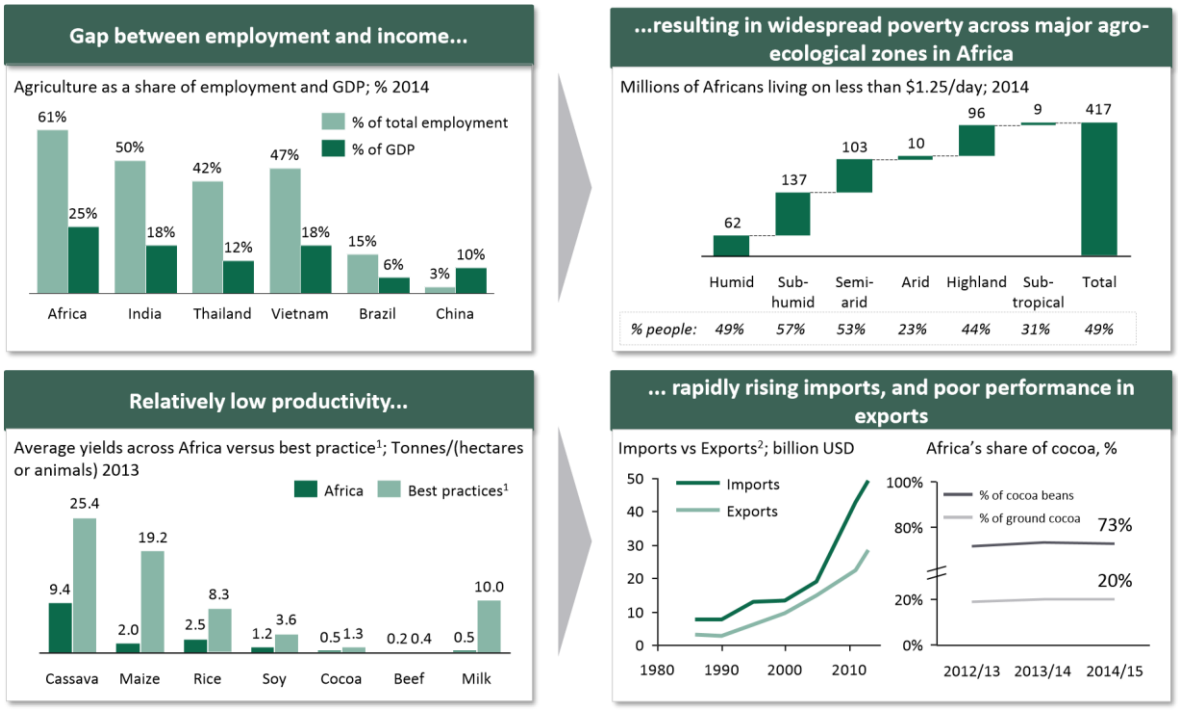
[12] *AfDB, 'Feeding Africa: An Action Plan for African Agricultural Transformation Report of Work Stream Sessions,' 2015.*

[13] *World Bank, 'Growing Africa: Unlocking the Potential of Agribusiness', January 2013.*

[14] *The ratio of agribusiness value add to farming output is only 0.6x in Africa compared to 13x in the United States.*

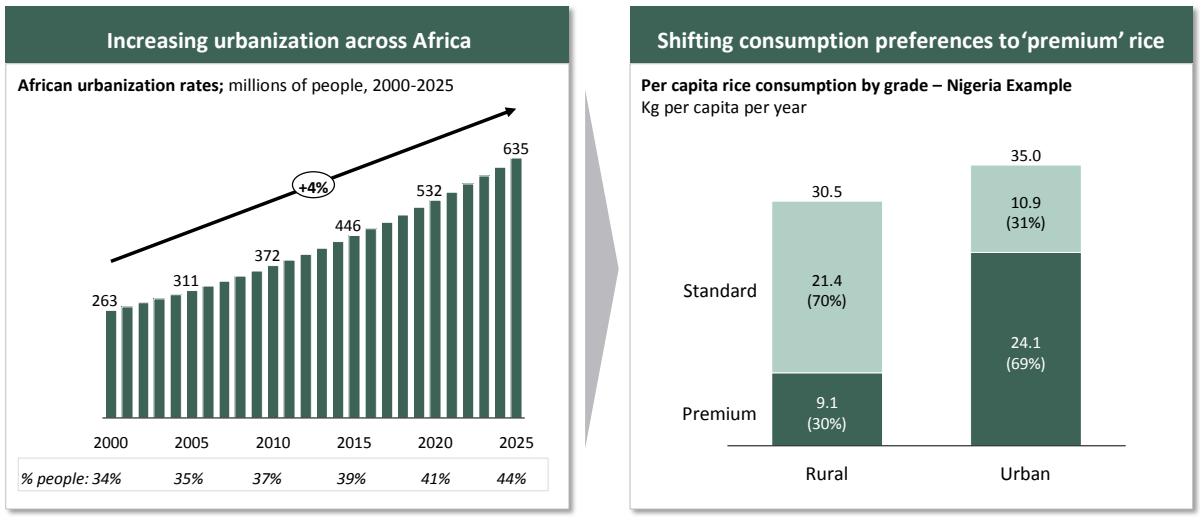
[15] *The World Bank 'Structural transformation and rural change revisited,' Losch et. al., 2012.*

Figure 2: Untapped agricultural potential is limiting economic development across Africa



Notes: (1) Best practices = average of top 10 countries in the world by yield in the commodity; (2) Out of Africa;
Source: FAOstat; World Bank; IFPRI; IITA, ICCO, AfDB "Agriculture and Agribusiness Strategy 2015-2019", Dalberg analysis

Figure 3: Urbanization is driving up demand for 'premium' food products (e.g., rice) that are not supplied by African producers

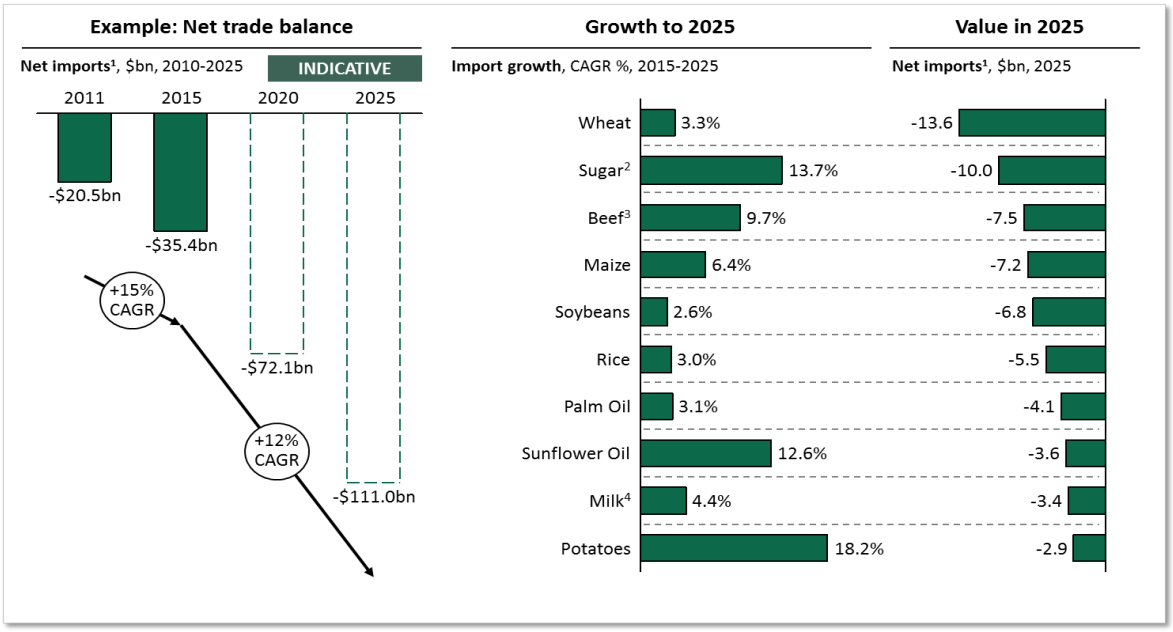


Source: IFPRI, Policy options for accelerated growth and competitiveness of the domestic rice economy in Nigeria; World Bank;; Africa Rice Center, The New Rice for Africa – a Compendium; World Bank Data; Dalberg analysis; CGIAR, Technologies for African Agricultural Transformation

1.5 **Without intervention, net import levels will likely increase to over US$100bn by 2025.** Today, 120m Africans are out of work and more than 400m live on less than US$1.25 per day. Relatively low productivity, underutilized agricultural land, and lost opportunities for value addition has perpetuated poverty and food insecurity. Wide-reaching food shortages, such as occurred in 2008, have led to food crises and riots in many African capitals. Price

volatility and reliance on imports inhibit growth. In the absence of a transformation, the situation will get worse. Given that population growth is projected to outpace production increases, without a large-scale, integrated investment strategy Africa will be forced to further increase imports to satisfy demand.

Figure 4: Africa's negative net trade will increase significantly in the absence of transformation



Notes: Figures in Billions USD and exclude intra-African trade; (1) Imports represented as negative values; (2) Sugar includes: sugar beet and sugar raw centrifugal; (3) beef includes: cattle and the meat; (4) Milk (includes: cow whole milk fresh, Dry whole cow milk and dry skim whole milk; Source: IFPRI; IITA, Dalberg analysis

1.6 **Climate change trends are another increasingly important driver for the need for transformation.** Agriculture accounts for approximately 14% of greenhouse gas emissions; this figure increases to 25% when forestry and other land use is included[16]. Major drivers of this problem are deforestation, soil and nutrient management, and livestock emissions. In general, agriculture is the sector most susceptible to changes in climate patterns because of its dependence on the environment. Thus, it is important to note that, although many nations made pledges to support developing countries in climate adaptation coming out of the Paris COP in 2015, most of the implications for agriculture will be indirect, through country-level strategies illustrated in Intended Nationally Determined Contributions (INDCs)[17]. One important challenge this presents is that there is no agreed upon way for measuring success and individual country commitments vary.

1.7 **Africa is, in turn, already disproportionately affected by the impacts of climate change because of its earlier-discussed dependence on the agricultural sector.** African farmlands and rangelands are increasingly degraded, causing farmers to face declining yields. In many cases, the impact has been so great that land can no longer support large herds of livestock. Simultaneously, African farmers are increasingly susceptible to climate change-induced fluctuations in rainfall and temperature, with major African staple crops expected to have 8%-22% lower yields by 2050. There is a need to increase the use of climate-smart agriculture (CSA) – agriculture centered on efficient input use, climate change resilience, and greenhouse gas emission reduction. Many CSA approaches are designed to rehabilitate

[16] McArthur, John W, 'Agriculture in the COP21 Agenda', Brooking Institution, 2016.
[17] Ibid.

degraded land and build resilience to climate, pest, price, and other shocks. At its core, CSA emphasizes sustainably increasing agricultural productivity and incomes and, given the urgency of combating climate change, should play an important role in African's agricultural transformation story.

1.8 **Finally, security of land tenure and good governance remain major challenges across the continent.** Only 10% of Africa's rural land is registered, while inefficient land administration means that transferring land title deeds costs twice the price and takes twice as long as it does in developed countries. Most African countries have basic land tenure laws that are incomplete and poorly enforced, deterring private investment (*Smalley 2013*)[18]. Applicable legislation remains voluntary and non-binding (Ideas for Development 2012). Weak policy and institutional frameworks are the leading cause of corruption in the agriculture sector, including land administration. Meanwhile, women's access to land is on average less than half that of men. Generally, title and inheritance rights across Africa are bestowed to male family members. Yet women remain the primary users of agricultural land in most African communities.

THE IMPERATIVE FOR AGRICULTURAL TRANSFORMATION

1.9 **The 'challenges' facing African agriculture can, if the sector is transformed, be construed as a substantial opportunity to improve the quality of life of Africans and support economic growth.** Agriculture is already central to the lives of Africans. The continent's relatively low yields, limited value-added processing capacity, and vast acreage of undeveloped arable land (representing ~60% percent of the planet's undeveloped arable land) provides a tremendous opportunity. Large and growing net food imports demonstrate that there are substantial markets for prospective agribusiness investors to address, worth over US$100bn per year by 2025.

1.10 **Transformation at the scale needed in Africa has occurred elsewhere at the value chain level**. There are several successful examples of transformation that can be drawn from other regions of the world. East Asia was able to lift 400m people out of poverty in ten years by investing heavily in agriculture,[19] and Brazil was able to go from a negligible agricultural producer to the world's second-largest producer of soy and beef, and largest producer of coffee beans, sugarcane, and oranges in the span of two decades, by investing in research and development to boost food production.[20]

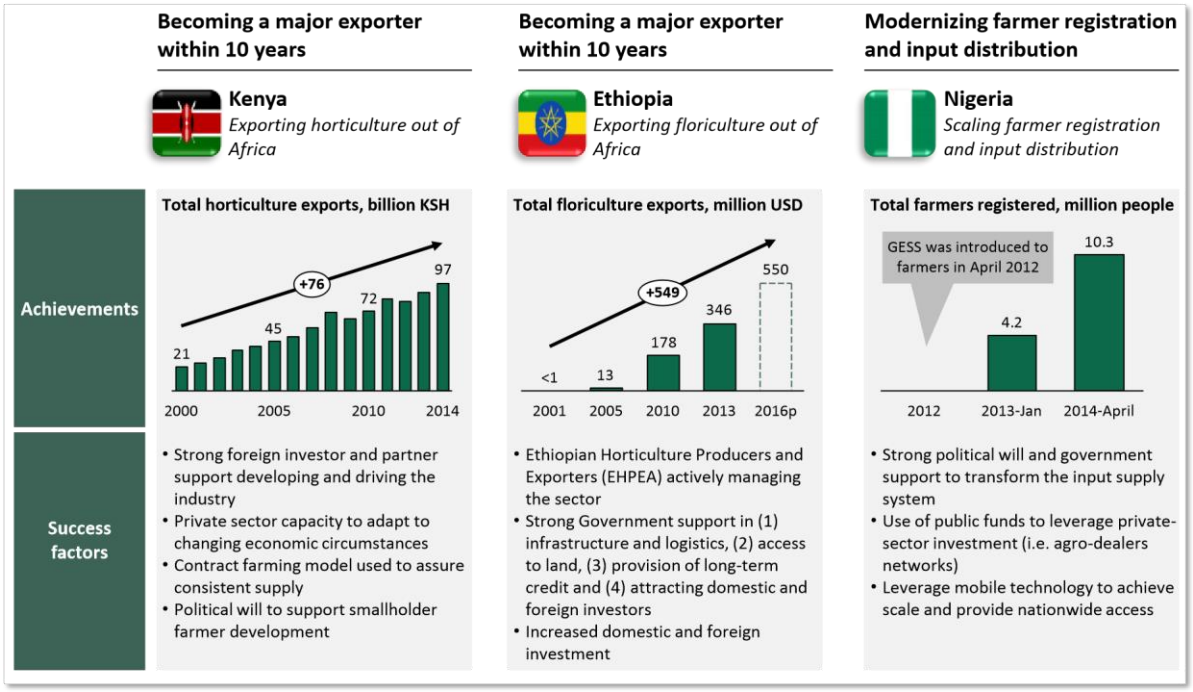
1.11 **Transformation is also beginning to occur in some parts of Africa.** Liberalization of input markets, expansion of innovative agricultural finance, and land policy reform have allowed significant advances across Africa to be made. Examples of country-specific experiences of transformation include Nigerian farmer registration and input distribution, floriculture growth in Ethiopia, horticulture development in Kenya, improved rice yields in Senegal and Mali, rapid and material malnutrition reduction in Rwanda, vertical integration and agro-processing in Morocco, and cotton production in Burkina Faso. These examples from Africa and beyond, are expected to be replicated while taking into account the best practices that would enhance sustainability of the proposed interventions.

1.12 **New ways of driving modernization of agricultural commodity value chains, especially with the application of information and communication technology (ICT), are**

[18] *Smalley, 2013*
[19] *AfDB, 'Feeding Africa: An Action Plan for African Agricultural Transformation Report of Work Stream Sessions,' 2015.*
[20] *FAOstat, 2013 data.*

emerging. The use of ICT can radically change the costs and delivery models used for a broad range of products and services to farmers and other actors along agricultural value chains. The Nigerian example of using an e-Wallet system for the distribution of input subsidies created both a far more efficient platform for driving input use versus the pre-existing public distribution system (where only 11% of subsidies by value were reaching farmers), as well as creating a platform to engage with and understand farmers. New forms of farmer extension using text or voice over mobile, and video, are reducing the cost and increasing the quality of training of farmers. A significant share of mobile and ICT-based service innovation – especially for the agriculture sector – is being driven within Africa, a potentially important source of comparative advantage versus other regions.

Figure 5: Agricultural transformation is already underway in several African countries



Source: Kenya National Bureau of Statistics; World Bank "Exporting Out of Africa—Kenya's Horticulture Success Story" 2004; GRIPS "Global Value Chains and Market Formation Process in Emerging Export Activity: Evidence from Ethiopian Flower Industry" 2011; Observatory of Economic Complexity; Market Insider "Ethiopia cut flower industry's success story" 2015; Development (FMARD) Nigeria; The economist "If only Nigeria could revamp its Grow-Africa "Fertilizer Subsidy Reform Revives Nigeria Agriculture"; Federal Ministry of Agriculture and Rural farms" 2013; Dalberg analysis

1.13 **The lessons learned from these experiences help frame the necessary conditions for achieving successful agricultural 'transformation.' Successful transformations are business led**, and involve the creation of three simultaneous conditions:

i a large-scale dissemination of productivity-increasing technology and inputs, plus input intensity and capital intensity;

ii the development of input and output markets structures and incentives that allow the full realization of the value of increased production; and,

iii a well-funded and competitive private sector that can manage and allocate skill and capital to scale emergent success and drive long-term sustainable agribusiness growth.

1.14 **There is a critical role for the public-sector to play to enable transformation,** by kick-starting the process with selected investments and directed activities (especially in circumventing 'bootstrapping' problems where markets fail to exist), shepherding the overall

transformation process to scale, and creating the enabling environment assets and policy conditions to allow businesses to thrive.

1.15 **The specific needs for transformation vary depending on country and commodity specific realities, but overall there are a recurring set of bottlenecks and constraints that must be addressed.**

Figure 6: African agricultural commodity value chains face common constraints[21]

Under-performing value chains	Limited coordination of **research and development**	Insufficient utilization of **inputs and mechanization**	Limited reach of extension to boost **on-farm production**	Poorly organized post-harvest **aggregation and transport**	Inconsistent capacity for effective **value addition**	Poorly developed **market linkages** and trade corridors
Insufficient infrastructure	Insufficient transport, energy, water, waste and other **hard infrastructure**, leading to uncompetitive cost structures			Undeveloped **soft infrastructure** including aging smallholder farmers and a lack of skills for commercial agriculture and agro-allied industries		
Limited access to agricultural finance	Real and perceived **risk** limiting private sector investment		High **service cost** due to small deal sizes, lack of credit data, and low capacity in agricultural lending		Limited **market attractiveness** relative to perceived higher returns outside of the agricultural sector	
Adverse agri-business environment	Unfavorable **market access and incentives** limiting trade and capacity to produce high-quality products		Ineffective **sector regulation** creating long lead times for new technologies and inconsistent trade policies		Unsupportive **business enabling environment** restricting land tenure and general ease of doing business	
Limited inclusivity, sustainability and nutrition	Insufficient **inclusivity** of women and youth in agricultural development		Limited incentives to ensure **sustainability** and climate-resilient practices		Limited access and affordability of commodities with high **nutrition** levels	

Source: Dalberg analysis, expert consultations

These constraints are discussed in detailed in Chapter 1 of the Implementation Plan that accompanies this strategy document. Some of areas highlighted include:

- The development of context-appropriate agricultural technologies and strengthening of mechanisms to distribute them widely
- The provision of enabling hard infrastructure (roads, energy, water) in rural areas – which have historically been underserved by both public and private investments – to improve production and connect farmers to downstream activities
- The use of innovative financial instruments to both de-risk investments and crowd in private sector financing. Underserved recipients, such as women, youth, and rural populations, will be priority targets for this additional funding
- The strengthening of national and regional institutional capacity required to effectively enable necessary conditions for and regulate agriculture and agribusiness sectors
- The disproportionate effect of all these constraints on historically marginalized populations (e.g. women, youth, and rural populations)
- The role of the production of nutrient-rich commodities in combatting malnutrition, especially among pregnant women and children under 5 years of age, and the historically underexplored intersection of agriculture and nutrition

[21] *See appendix for commodity-specific assessments of bottlenecks along value chains*

1.16 **Overall, Africa lags behind other regions in terms of the value it captures relative to the importance of agriculture to its economies.** Across agricultural value chains, very little processing takes place on African soil. For example, Africa produces approximately 70% of the world's cocoa beans by weight, but only ~20% of intermediate cocoa products.[22] Similarly, African countries process on average 56% of the soybean they produce, and meet further demand for processed soy through expensive imports.[23] More generally, Africa is the only region for which GDP contribution from agriculture is higher than that from agribusiness; there is greater value to be captured downstream from raw commodity production and Africa is capturing less than its 'fair share' of profits down the value chain.[24]

1.17 **While the general lack of processing capacity is a significant reason behind Africa's low agribusiness output, there are other barriers to value addition.** These can be characterized as either barriers to value addition itself, or barriers to selling demanded, competitively-priced value-added products. Common barriers to investment in value addition across most priority crops include insufficient or inconsistent quantities of feedstock (raw crops), lack of access to electricity for value addition processes, lack of skilled labor, and lack of affordable and appropriately structured working capital and other financing for storage, aggregation, and processing. There are several 'downstream' challenges that make supplying competitively-priced products to centers of African demand challenging, including: high logistics costs arising from poor transport and other infrastructure; high taxes for processed products; lack of feedback from buyers to processors and from processors to farmers on the necessary quality of product; insufficient or unenforced health and other food standards; and insufficient investment in marketing and branding to increase local demand for processed products.

1.18 **Access to markets by African farmers, especially women farmers, also remains limited at the local, national, regional, and international levels.** In an increasingly globalized environment, Africa's participation in the global agricultural commodity and value-added market remains limited, at only 2%[25]. Regional trade has so far played only a marginal role and remains largely informal. For example, the value of informal cross-border trade in southern Africa, 70% of which is conducted by women, is estimated to be above US$7 billion. Informality not only limits government revenue, but also restricts business growth by limiting access to formal credit, making businesses more vulnerable to harassment, and the inconsistent application of trade policies. Additionally, the policies of rich countries on subsidies have limited market access, while a host of supply constraints (poor infrastructure, credit, lack of insurance, etc.) restrict the participation of African agriculture in international markets. Trade finance is also widely acknowledged to be a limiting constraint to expanding both intra- and external agricultural export initiatives.

1.19 **Transforming a selection of 18 value chains will cost an estimated $315-400bn over 2015-2025** The scale of capital required to transform agriculture in Africa is larger than the public sector alone can manage, while for the private sector the risk-adjusted returns are not yet established enough to support investments at this level. There are also a defined set of areas where the public sector is best positioned to be an efficient actor in driving the growth of

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[22] Based on forecasts for the 2015/16 season from ICCO although this has been broadly consistent for the last 5 years; percentage is by volume.

[23] ACET. 2014. "The Soybean Agri-Processing Opportunity in Africa." <http://acetforafrica.org/wp-content/uploads/2014/08/Soybean-Dalberg.pdf>.

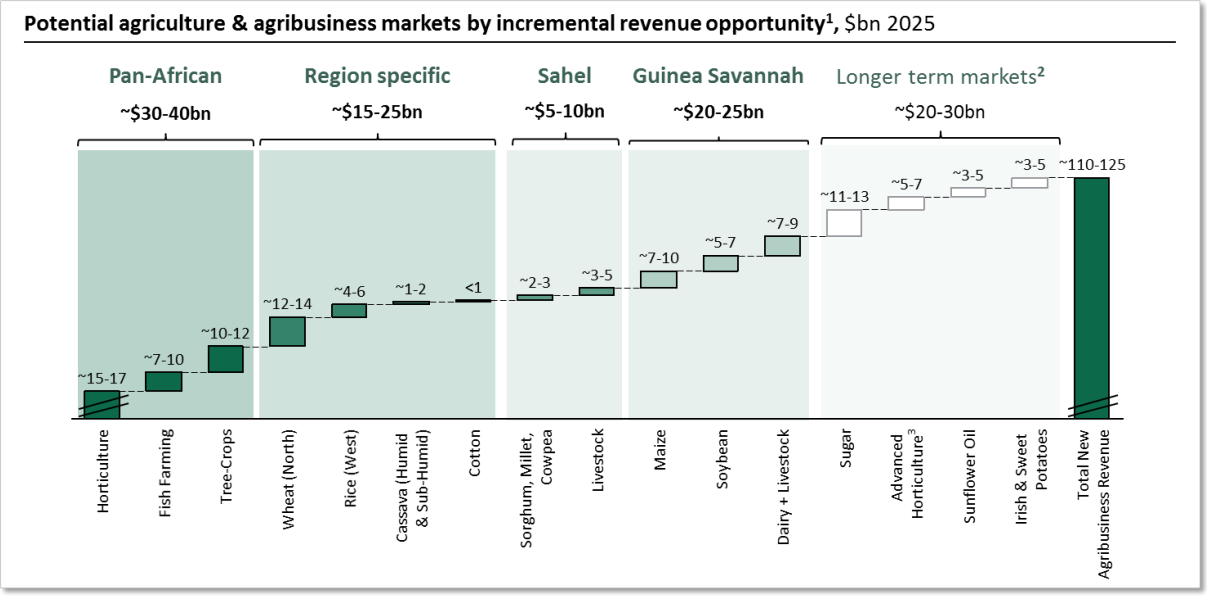
[24] FeedAfrica, 2015.

[25] AfDB et al., 2014.

agribusiness, such as creating the right policy and regulatory environment, creating strong institutions, and building sufficient infrastructure.

1.20 **Fulfilling the potential of African agribusiness to meet goals of the strategy could open up markets worth more than US$100bn per year by 2025; an initial set of value chains identified as being early candidates to transform could present market opportunities worth ~US$70-90bn a year by 2025[26].** These markets are diverse, both in terms of their regional mix, and the critical success factors for transformation. Commodities map to 4 regions: Pan-African or applicable across diverse agro-ecological zones (such as horticulture), applicable across particular agro-ecological zones (such as wheat, rice and cassava), or tied to agro-ecological transformation agendas (capturing the potential of the Guinea Savannah and creating a food secure Sahel). A longer term set of transformation opportunities include adding several other agricultural commodities targeting self-sufficiency (such as sugar, Irish potatoes, sweet potatoes, sunflower oil) and FMCG (fast-moving consumer goods) and food industry ingredients (increased domestic production of alcoholic beverages, non-alcoholic beverages such as soft drinks and juices, industrial fats and butter / margarine). These markets could constitute an additional broadening of the transformation, from 2021 to 2025, in addition to the initial set of value chains that have been identified as early candidates for transformation.

Figure 7: Agricultural transformation has the potential to generate new revenue



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

[26] *For import substitution and self-sufficiency market opportunities markets are valued on an import parity basis; for export markets (such as cocoa grindings, roast & ground / freeze-dried coffee, horticulture products etc) these are valued on a current average export FOB price from Africa. All prices are based on the most recent weighted averages for Africa on FAOstat.*

2. STRATEGIC APPROACH TO AGRICULTURAL TRANSFORMATION IN AFRICA

GUIDING PRINCIPLES AND OBJECTIVES

2.1 The African Agriculture Transformation Strategy will be guided by the following principles:

- **Country ownership**: The interventions in RMCs will be aligned with national and regional plans and strategies. National CAADP 'compacts' and 'investment plans', where they exist, will be the starting point for national transformation efforts;
- **Leveraging the private sector**: Leveraging investment by the private sector at the global, regional and national levels by catalyzing project co-financing and 'crowding in' private sector operators. This will require a conducive policy, along with the necessary institutional and legal environments for private sector development to take place;
- **Development results and value added**: Particular attention will be paid to concrete results while at the same time ensuring that its participation generates sufficient value added. To foster this approach, existing collaborative arrangements between all parties will be crucial;
- **Inclusivity and sustainability**: assuring gender equality and sustainable outcomes will underpin all investments and sector dialogue actions;
- **Partnerships**: Collaboration among the different stakeholders operating in the agriculture space including development partners, private sector entities, community institutions, and civil society entities is important. In particular, partnership will be forged to address areas where partner engagement will be emphasized;
- **Taking to scale:** This will entail replicating, advancing and taking to scale, pockets of successful programs and projects that abound across Africa in order to fully realize the their transformational impacts;
- **Business oriented approach:** Critically, there needs to be a reorientation away from treating agriculture as a 'way of life' or social welfare system to a business, and look to frame a transformation agenda that is public-sector enabled and private-sector led; and,
- **Securing improved small holder agricultural** livelihoods based on enhancing the value of their assets (land, labor, time) while assuring higher returns and household food security.

2.2 **The vision of the Strategy is to transform African agriculture into a competitive and inclusive agribusiness sector that creates wealth, improves lives and secures the environment.** The Strategy builds on momentum generated at the Feeding Africa High-Level Conference (HLC) organized by the AfDB to solicit success stories of agricultural transformation across Africa and reach consensus on the greatest priorities for scaling successful interventions. The HLC was organized in association with the Senegalese government, the African Union Commission (AUC), and the United Nations Economic Commission for Africa (UNECA) and held in Dakar, Senegal in October 2015. The Strategy's overarching goals, enablers, and proposed approach reflect commitments made in the 2003 Maputo and 2014 Malabo Declarations through the Comprehensive African Agricultural Development Program (CAADP).

Box 1. Commitments and Goals by African Heads of States and Government in 2014 Malabo-Equatorial Guinea:

1. Recommitment to the principles and values of the CAADP process

2. Recommitment to enhance investment finance in agriculture

(a) Uphold 10% public spending target

(b) Operationalize the African Investment Bank

3. Commitment to ending hunger by 2025

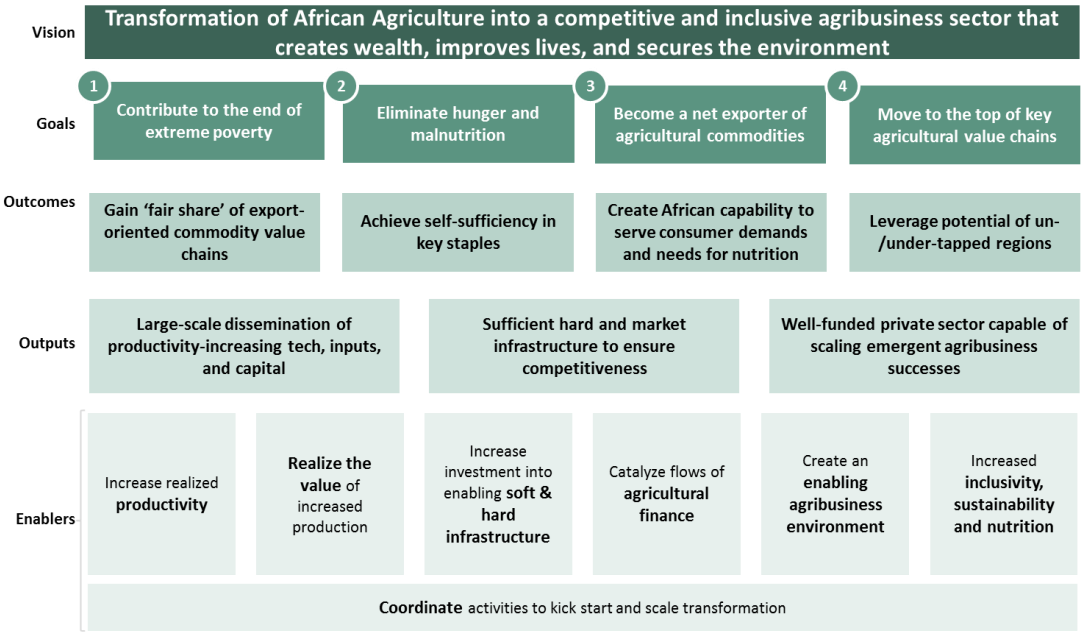
(a) At least double productivity (focusing on Inputs, irrigation, mechanization)

(b) Reduce PHL at least by half

(c) Nutrition: reduce and underweight to 5 % and stunting to 10%
4. Commitment to halving poverty, by 2025, through inclusive agricultural growth and transformation
(a) Sustain annual sector growth in Agricultural GDP at least 6%
(b) Establish and/or strengthen inclusive public-private partnerships for at least Five (5) priority agricultural commodity value chains with strong linkage to smallholder agriculture
(c) Create job opportunities for at least 30% of the youth in agricultural value chains
(d) 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
(a) Triple intra-Africa trade in agricultural commodities and services
(b) Fast track continental free trade area and transition to a continental Common External tariff scheme
6. Commitment to enhancing resilience in livelihoods and production systems to climate variability and other shocks
(a) Ensure that by 2025, at least 30% of farm/pastoral households are resilient to shocks
(b) Enhance investments for resilience building initiatives, including social security for rural workers and other vulnerable social groups, as well as for vulnerable ecosystems
(c) Mainstream resilience and risk management in policies, strategies and investment plans
7. Commitment to mutual accountability to actions and results
(a) Through the CAADP Result Framework – conduct a biennial Agricultural Review Process

The Strategy intends to contribute to and build on these efforts. More specifically, the Strategy works towards similar goals – in terms of contributing to elimination of extreme hunger, nutrition, poverty, and increased prosperity – in partnership with alliances including farmers, agribusiness, and civil society, exploiting regional comparative advantages and opportunities for trade and collaboration. Figure 8 presents the framework for the Africa-wide transformation agenda that seeks to chart an implementation pathway for translating the CAADP goals on the ground. This view captures – at a high level – what is necessary at a continental level and it is expected that multiple parties across the public and private sector would be involved in these activities. The Bank will focus on a subset of activities that will be discussed separately.

Figure 8: Framework for Agricultural Transformation in Africa



Source: African Development Bank 'Feeding Africa' Conference; Dalberg analysis

2.3 **Contributing to reduce extreme poverty and end hunger and malnutrition connect directly to and will be measured by their contribution to Sustainable Development Goals #1 to 'End poverty in all its forms everywhere' and #2 to 'End hunger, achieve food security and improved nutrition and promote sustainable agriculture'.** The materiality of agriculture as a source of livelihoods in Africa and the potential to substantially drive inclusive

growth makes it an important lever for the African Development Bank and other actors to pursue most of the SDGs**.** In particular, the SDG #2 stresses the importance of ending hunger and malnutrition by increasing year-round access to nutritious and sufficient food, doubling the agricultural productivity and incomes of small-scale food producers, and increase investment in rural infrastructure, agricultural research and extension services, and technology development.

2.4 **Achieving the second set of goals regarding being a net exporter of agricultural commodities and moving up the value chain requires a fundamental shift in the way agriculture is viewed: not as a 'way of life' and a means for poverty alleviation through social investments, but as a business.** Doing so will require an integrated value chain approach - including improvements in production as well processing, distribution, and retail - to capture the full economic potential of the sector through value addition. This transformation will be underpinned by securing the livelihoods of small holder famers and their food security. It will also require interventions to better facilitate regional trade. Self-sufficiency implies that not only is enough food being produced within Africa, but also that steps are taken to ensure that surpluses can move freely across borders. To create transformation at the continental scale, unlocking a range of new sources of financing, especially from the private sector, will be crucial, as well as building cross-boundary infrastructure and coordinating regional and multi-sectoral partnerships. The AfDB will be able to play these roles while remaining cognizant of the African context, including all major stakeholders, and ensuring that growth is inclusive of women and other marginalized groups.

2.5 **The activities of the Strategy will be focused toward four ambitious targets.** By 2025, Africa should be a net exporter of agricultural commodities, representing the substitution of ~US$110bn worth of imports. This shift will represent achieving self-sufficiency in key staples so that Africa can feed itself. While, in the long-run, the goal is for Africa to export certain commodities where it is competitive, the primary desired outcome related to this target is minimize the level of imports required to fill the current gap in food production. 'Undernourishment' will have been eliminated; ~240m were undernourished in 2015 and is expected to grow to ~320m by 2025, all of them will enjoy access to adequate calories and nutrients. Up to ~130mn people will be lifted out of poverty, representing 25% of the ~550m that would be living below the poverty line[27] by 2025. Finally, in pursuit of increased value capture, Africa will double its share of market value for select processed commodities.

[27] *Established as those living under $1.25/day on a purchasing power parity basis*

Figure 9: High-Level Targets for Agricultural Transformation in Africa

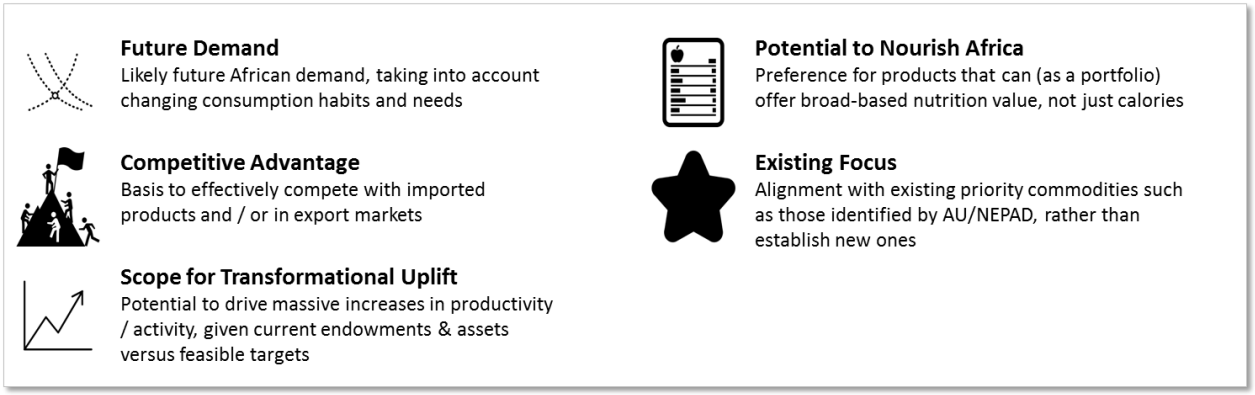
Goals	Aspiration	Lead Indicator	Baseline 2015	ATA Target 2025
1 Contribute to the end of extreme poverty	• Contribute to alleviating poverty though job creation and providing sustainable livelihoods	Incremental number or people lifted out of poverty[1] – million	**N.A.**	**~130m**
2 Eliminate hunger and malnutrition	• Food security for all Africans that are 'undernourished'	Number of people undernourished – million	**~240m**	**nil**
3 Become 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 – $, Value of Exports less Imports[2]	**-$35bn**	**>$0bn**
4 Move 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 share of market value for processed commodities	**~20%** *(Example for cocoa grinding)*	**>30%**

Notes: (1) Millions of Africans across major agro-ecological zones in Africa living on less than $1.25/day; in 2014 ~420 million people were under poverty line; (2) the net trade balance in a "do nothing" scenario is expected to be ~-110bn USD in 2025; negative values represent net imports; excludes intra-African trade; Source: FAO "The State of Food Insecurity in the World 2015"; World bank data; ICCO; IFPRI; IITA; FAOstat; Dalberg analysis

TARGET COMMODITY VALUE CHAINS FOR ACHIEVING SUCCESS

2.6 **In the long-run, this Strategy will involve strengthening a broad range of value chains. However, in the near term, resources will be focused** on selected priority agricultural value chains (AVCs) and related agro-ecological zones (AEZs)**.** The prioritization of these AVCs and AEZs will be based on the following set of criteria:

Figure 10: Criteria for agricultural value chain prioritization



2.7 **When these criteria are applied, certain AVCs emerge as 'must transform' areas for achieving the long-term outcomes laid out in the strategic framework.** The Strategy will focus on this initial series of critical value chains to allow Africa to deliver on four overarching outcomes that translate into a set of priority AVCs and related AEZs:

- **Achieve self-sufficiency in key staples**. A focus on better-developed value chains will require activities such as cluster development, downstream market development, increased productivity, and scaled-up climate adaptation practices.

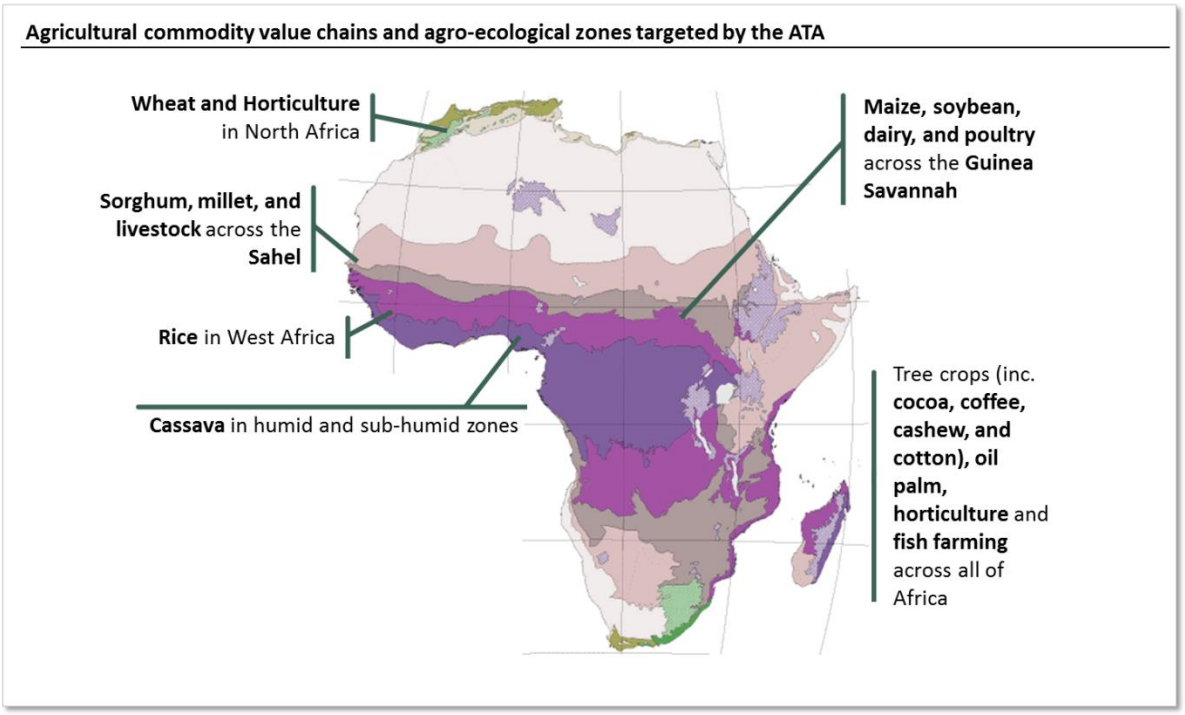
New financing streams can increase sector-wide investment in hard infrastructure—e.g., irrigation, energy, transportation, logistics—and soft infrastructure, e.g., human capital and the development of agricultural finance systems. The public sector can facilitate investments in the agricultural sector at scale through taking on some of the associated risk and helping to reduce the costs of serving micro, small, and medium enterprises and smallholder farmers. *Rice will be a key priority. Examples of future target value chains include: sorghum, millet, wheat, sugar, and potatoes.*

- **Gain a 'fair share' of export-orientated commodity value chains.** As an initial step toward reaching the top of target export-orientated value chains, the strategy will aim to support Africa in gaining its 'fair share' in key export-orientated value chains where a comparative advantage might exist. *Promising value chains include those for which agro-ecological endowments uniquely position Africa to fill demand during periods of low supply in other exporting regions—e.g., horticulture products destined for North American and European markets—and those for which African producers dominate supply, such as in cocoa. Cashew will also be a key priority. Examples of future target value chains include: coffee and cotton.* The overall agribusiness environment should also be improved in order to expand access to regional and international markets.

- **Create African capability to serve consumer demands and nutrition needs.** African demand for protein will lead to fast growing consumption of animal products, as well as associated feed inputs. Cassava is a key potential feedstock for a broad set of starch and sugars-based ingredients into foods that can be used in a diverse range of food manufacturing processes, and starts to offset imports of flours and starches from abroad. *Cassava, soy, maize, beef, and dairy will be key priorities. Examples of future target value chains include poultry and fisheries.*

- **Leverage the potential of un- / under-tapped regions.** In order to close the gap between what African agriculture produces today and what it can sustainably produce, the Bank should look to catalyze land tenure reform and scale up climate-adaptive agricultural practices. *Focusing on many of the aforementioned priority value chains (i.e. sorghum, millet, cowpea, livestock, maize, soybean, dairy, and poultry) will mean increasing production in the Sahel region and unlocking the potential of the Guinea Savannah.*

Figure 11: Priority agricultural value chains and agro-ecological zones



Source: CGIAR "Technologies for African Agricultural Transformation (TAAT) proposal; Dalberg analysis.

ENABLERS FOR AGRICULTURAL TRANSFORMATION IN AFRICA

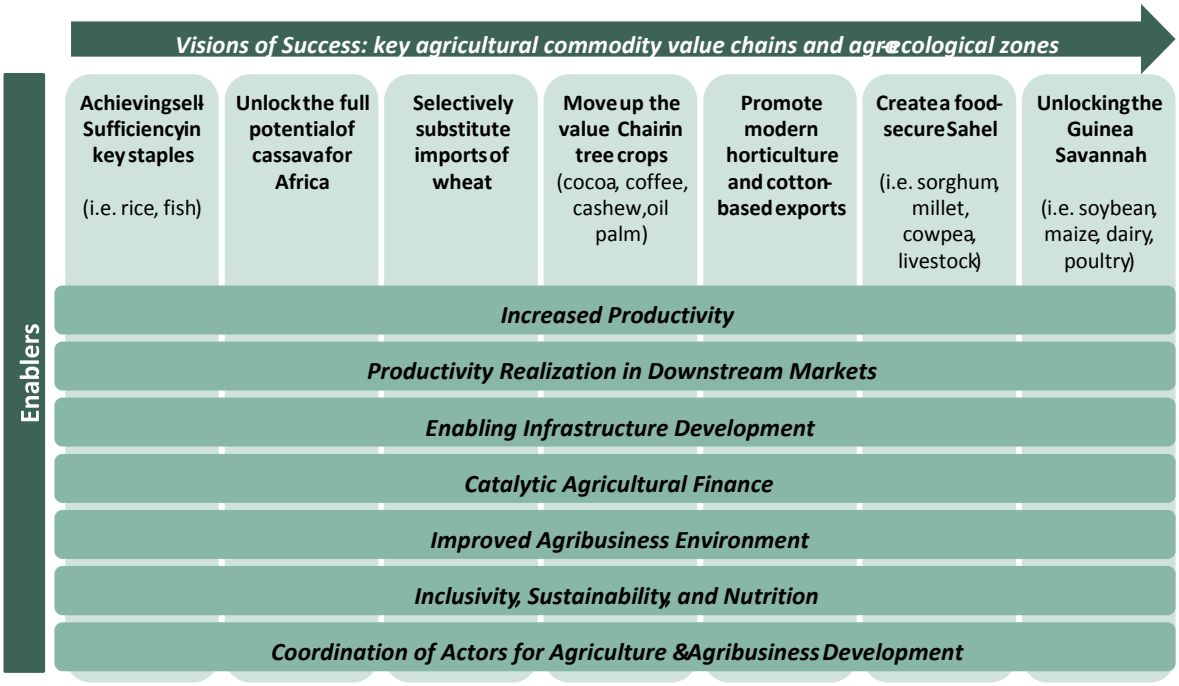
2.8 **To transform the priority value chains, the Strategy needs to address 7 sets of enablers.** The key activities listed in Table 1 represent what is necessary at an Africa-wide level. The Bank will not be responsible for all of these; rather, it will focus on a shorter list of activities and expect that other partners will take the lead where they have the comparative advantage.

Table 1: Enablers and key activities for agricultural transformation

Enabler	Key activities
#1: Increase Productivity	▪ Drive large scale dissemination of productivity raising technology ▪ Support further development of R&D tailored to African context and enhanced public agricultural research capacity ▪ Catalyze increases in input intensity and capital intensity of agriculture to drive productivity, through market incentives and catalyzing creation of private sector input supply ▪ Reduce post-harvest waste and loss to raise level and cost effectiveness of production ▪ Coordinate investments into market structures: inputs / agro-dealer businesses, production, agro-processing and storage markets to drive overall competitiveness of value chains
#2: Realize the value of increased production	▪ Catalyze investment into activities to add and fully realize production value ▪ Coordinate investments into market structures: inputs / agro-dealer businesses, production, agro-processing and storage markets to drive overall competitiveness of value chains

	▪ Support / create market governance mechanisms (marketing boards, market corporations, business groups) to facilitate overall value chain governance
#3: Increase Investment into enabling Hard & Soft Infrastructure	▪ Increase the availability of finance for investments into hard infrastructure (roads, energy, water, logistics) that support the feasibility and cost competitiveness of scaling agricultural production and agribusiness ▪ Focus on develop rural infrastructure to both improve potential output and connect farmers to other value chain actors and markets ▪ Develop ICT platforms to support financial transactions, disseminate market information, and support value chain modernization ▪ Develop the level of human capital in agribusiness by attracting talent and developing skills.
#4: Catalyze flows of increased Agricultural Finance	▪ Catalyze and crowd-in funding from partners requiring risk mitigation or proof that returns are realizable ▪ Set up facilities to reduce the risk and cost to serve under-financed areas of the agribusiness sector and increase financial inclusion ▪ Develop structured finance facilities to leverage private (including institutional) capital into the agribusiness sector to provide adequate financial resources to scale agribusiness ▪ Promote regional trade by increased access to trade finance
#5: Create an improved Agribusiness Environment	▪ Advise and provide support to RMCs to put in place efficient regulation and legislation to enable private-sector-led development of agribusiness ▪ Build national institutional capacity to develop and implement policy, as well as to monitor and evaluate gains in agriculture (through relevant ministries, para-statals, and others) ▪ Provide forums for coordination across private, public and donor actors to foster market linkages and learning and replication of best practice ▪ Promote regional trade through policy reform, removal of existing barriers, and training and capacity building around quality standards for export
#6: Increased Inclusivity, Sustainability, and Nutrition	▪ Launch funding programs that will increase the availability of financing and participation of under-represented actors in agribusiness, with particular focus on women and rural populations ▪ Support development of a young class of future 'agripreneurs', through training and financing ▪ Strengthen farmer institutions, including cooperatives and unions ▪ Promotion of climate-smart agriculture among farmers and enterprises through funding and demonstration of the value of CSA approaches; incentivize adoption through long-term investments ▪ Investment into country-level infrastructure and training and coordination of major institutions to meet CSA targets ▪ Scale up and replicate successful programs to raise access to quality nutrition and end hunger, including community-based nutrition programs to promote breast-feeding and nutrient supplements for infants and children in their first 1000 days; vouchers or subsidies for biofortified maize, cassava, and other staple food; school meal programs; and advocacy for greater RMC government allocation to nutrition interventions ▪ Support increased production of nutrient-rich foods
#7: Coordination of actors as a partnership to drive transformation	▪ Coordinate activities of actors in the sector and bring coherence to shared goals and commitments, intervention plans, and resource allocation ▪ Play advocacy role with Heads of States through CAADP to ensure necessary political will to achieve goals of the Strategy (via Special Panel advising President on Ten Year Strategy and other bodies)

Figure 12: Visions of success



2.9 **An important question is how this strategic approach will support fragile states.** Certain regions – notably the Horn of Africa, the Sahel, the Mano River Union, and the Great Lakes region – are home to a variety of cyclical challenges related to political, economic, and environmental factors. Over the course of the implementation of the strategy, special attention will have to be given to the 17 "core" and "moderated" fragile states identified by the Bank. Some of these RMCs have already approached the Bank for support and others will emerge as important for different priority AVCs and AEZs. They will require additional policy reform, public sector capacity-building, development of critical and missing public infrastructure, and transfer of skills to help them become more 'transformation ready'. The Bank will also, on a case by case basis, take a political commitment to implement the necessary changes for 'transformation readiness' in lieu of observed 'transformation readiness'. In terms of financing, the Bank should expect to focus a substantial amount of innovative financing in these countries, as it will be more difficult to crowd in private investors. However, it can also leverage regional-level actions to ensure that fragile states benefit.

2.10 Given the centrality of land tenure to any possible transformation agenda and the need to secure smallholder livelihoods and food security, special emphasis will be placed on support to RMCs to develop land policies and reform institutions, improve tenure security - communal and individual lands, increase access to land and tenure security for the poor and vulnerable, increase efficiency and transparency in land administration, resolving land disputes and managing expropriations, increasing the scope and effectiveness of land use planning, improving public land management, developing post-conflict land administration, strengthening land valuation functions; and developing land taxation frameworks[28].

[28] *Land tenure, policy and Governance: Unlocking the potential of land for Africa's agricultural transformation by Joan Kagwanja, UN Economic Commission for Africa at Dakar High Level Conference*.

REQUIREMENTS FOR TRANSFORMATION

2.11 **In each of the prioritized commodities, there are opportunities related to self-sufficiency and value-added processing to help achieve transformation.** For example, increasing productivity for rice, wheat, sorghum, millet, maize, soybean, livestock, dairy, fish, and poultry will help Africa become self-sufficient (i.e., meet or exceeds the projected consumption in 2025). Similarly, export-oriented commodities like cocoa, coffee, cashew, horticulture and oil palm have the opportunity to generate additional income in Africa by moving up the value chain (e.g., cocoa and coffee) and/or addressing market opportunities for increased nutrition with horticulture.

Table **2** outlines the specific requirements to transform each of the priority value chains and regions accounting for the specific barriers to be addressed in each. These overall requirements will not be the sole responsibility of the Bank.

Table 2: Transformation requirements (indicative and not exhaustive)

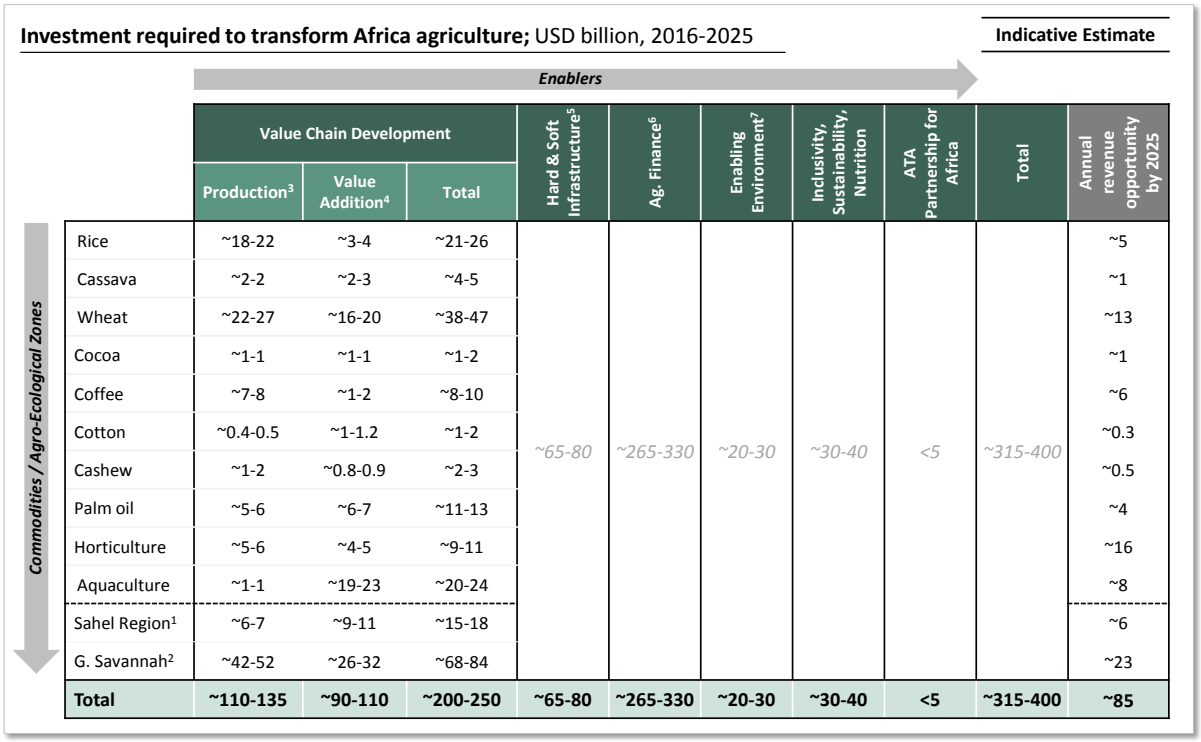
AVC/ AEZ	Key activities for transformation
Rice	• Investment in modern milling facilities to make high-quality rice (though different size of mills, according to the location) for the fastest-growing market segment, which is also driving import growth • Investment in modern parboiling technology to increase profitability over conventional methods • Strengthened governance capacity of existing rice farmer cooperatives and other farmer organizations • Large-scale dissemination and adoption of high-quality improved rice varieties • Improved access to mechanized tools for weeding and soil preparation, and sustainable irrigation for areas with more variable rainfall or flooding
Wheat	• Large-scale dissemination of drought-resistant (i.e., heat resistant), high-quality wheat varieties, including through commercialization and community-based distribution channels • Adoption of productivity-increasing methods like raised-beds, supplementary irrigation, and zero-tillage systems • Improved access to mechanized equipment for field preparation and harvest • Invest in integrated corridor-based production and milling (wheat-centric processing zones) to cover new milling capacity needs and upgrade the quality of existing mills to improve flour quality
Cassava	• Improved marketing capacity for processed products such as starches and ethanol (i.e., create new sources of demand) • Reduced post-harvest losses by increasing access to better low-cost on-farm storage methods for fresh cassava as well as off-farm technologies (such as refrigeration, deep freezing, waxing, chemical treatment, and other methods) • Investment in large-scale, industrial processing corridors to increase capacity for creating cassava value-added products
Cocoa	• Increased lending for hired farm labor, fertilizer, and select pest and disease control products • Creation of bridge financing instruments to encourage farmers to plant new cocoa trees rather than switching to production of rubber or other crops • Support for farmer aggregation and capacity building to cost-effectively certify farmers for sustainability and fair trade certifications, which allow farmers to receive premiums for their production • Support for lowering tariffs for intermediate processed goods to encourage local cocoa grinding • Competitively-priced capital for cocoa grinding and intermediate processing SMEs

AVC/ AEZ	Key activities for transformation
Coffee	• Expanded access to disease-resistant, high-yielding coffee varieties, fertilizer, and organic and inorganic pesticides • Improved smallholder knowledge of technical best practices through extension, including intercropping, use of organic fertilizer, integrated pest management (IPM) and other practices known to increase yields • Financing to support growth of coffee processing and packaging SMEs, such as those setting up and maintaining washing stations • Strengthening of marketing and governance structures of coffee cooperatives and unions • Support for removal of fees charged to smallholder coffee farmers; instead, consider placing them on processors or marketing agents
Cashews	• Investment in research and development (R&D) for commercialization of value-added products for local and export markets, building on the advancements already made at Indian research institutes and several African institutes (such as the Cocoa Research Institute of Ghana (CRIG) and Tanzania's Naliendele Agricultural Research Institute) • Building and strengthening cooperative linkages with processors and exporters (especially of value-added products) • Financing to support growth of cashew nut and cashew apple marketing and processing SMEs, particularly in urban and peri-urban areas • Negotiation of lower interest rates for farmers, cooperatives, and cashew input supply and processing SMEs to lower barriers to sector growth • Invest in integrated industrial processing, branding, and packaging for both local/regional consumption and export, in areas with high cashew production density, particularly if close to ports
Cotton	• Building and improving long-term relationships between cotton companies and farmers, including through cooperatives; monitoring to ensure sufficient benefits accrue to all participating cotton farmers, so as to incentivize farmers to improve yields • Investment in regional cotton corridors and APZs, and particularly industrial production of yarns and fabrics to be used for domestic manufacturing of apparel and home textiles • Improved enforcement of existing trade and import rules to prevent undervaluation and mislabeling of new imported textiles and clothing, particularly from Asia
Horticulture	• Large-scale dissemination of inputs and modern cultivation methods in urban areas • Establish trade corridors to meet regional demand • Develop SME agribusinesses and large-scale partnership with the private sector to support aggregation and distribution (e.g., marketing outlet) • Capital investment to develop cold and fresh chains to reduce post-harvest loss
Aquaculture	• Capital investment to upgrade fish ponds to modern facilities • Develop SME agribusiness sector to support modern input/feed operations • Capital investment to develop cold and fresh chains for regional trade and distribution
Palm Oil	• Improved farmer knowledge on best practices, including fertilizer use and weeding, through support for extension • Improved access to improved seeds/planting material, fertilizer, fungicides, and drip irrigation in drought-prone areas for smallholders • Financing for growth and improved efficiency of milling, packaging, and other palm oil value addition SMEs • Building and improving long-term relationships between oil palm processors and small farmers, including through cooperatives and out grower schemes • Securing long-term financing for tree crop revitalization

AVC/ AEZ	Key activities for transformation
Sahel Region	Crops (sorghum, millet, cowpea): • Large-scale dissemination of integrated soil fertility management practices, including indigenous practices; improved practices include legume-based agroforestry and vegetation cover after harvest to reduce wind erosion • Capital investment to expand the use of water harvesting technologies • Increased access to affordable, high quality on-farm storage systems to improve quality of raw products for processors, and to improve feed access for livestock in the dry season Livestock: • Development and deployment of index-based insurance products for small farmers • Support for SME provision of health services and distribution of disease management technologies (e.g., thermostable vaccine for Peste Des Petits Ruminants) • Widespread dissemination of sustainable feeding practices through forage and crop residues
Guinea Savannah	Crops (maize and soybean): • Widespread dissemination of modern technologies pest/disease resistant (e.g., AflaSafe for suppression of maize aflatoxin, imazapyr-resistant maize to suppress striga, and NoduMax for greater nitrogen fixation by soybean) • Access to finance and support for distribution network development of inputs (particularly lime for alkalization) • Increased membership in strong cooperatives, and strengthen capacity of other farmer groups, to ensure sufficient, aggregated quantities for processing/value addition • Provision of tailored small-scale agricultural machinery, including seeders and weeders that reduce labor input, as well as small tractors with tailored accessories • Investment in irrigation, main and feeder roads, electricity access for processing and cold chains/ storage, and improvement of overall logistics Dairy and livestock (predominantly beef and poultry): • Capital investment in dairy genetic improvement (e.g., using molecular approaches to genotyping) • Widespread dissemination of sustainable feeding practices through forage and crop residues • Capital investment to develop cold and fresh chains for regional trade and distribution • Development of the SME agribusiness sector to increase access to veterinary care, including creation of village-based companies

2.12 **Agricultural transformation will involve mobilizing resources and capital, representing a significant opportunity for potential actors along the value chains.** Transforming an initial set of these value chains will require approximately US$315bn-US$400bn over the next decade. Such an investment would likely create new markets worth ~US$85bn per year by 2025.

Figure 13: Indicative investment and estimated return



	Value Chain Development			Hard & Soft Infrastructure[5]	Ag. Finance[6]	Enabling Environment[7]	Inclusivity, Sustainability, Nutrition	ATA Partnership for Africa	Total	Annual revenue opportunity by 2025
	Production[3]	Value Addition[4]	Total							
Rice	~18-22	~3-4	~21-26							~5
Cassava	~2-2	~2-3	~4-5							~1
Wheat	~22-27	~16-20	~38-47							~13
Cocoa	~1-1	~1-1	~1-2							~1
Coffee	~7-8	~1-2	~8-10							~6
Cotton	~0.4-0.5	~1-1.2	~1-2							~0.3
Cashew	~1-2	~0.8-0.9	~2-3	*~65-80*	*~265-330*	*~20-30*	*~30-40*	*<5*	*~315-400*	~0.5
Palm oil	~5-6	~6-7	~11-13							~4
Horticulture	~5-6	~4-5	~9-11							~16
Aquaculture	~1-1	~19-23	~20-24							~8
Sahel Region[1]	~6-7	~9-11	~15-18							~6
G. Savannah[2]	~42-52	~26-32	~68-84							~23
Total	**~110-135**	**~90-110**	**~200-250**	**~65-80**	**~265-330**	**~20-30**	**~30-40**	**<5**	**~315-400**	**~85**

Notes: Period of 2016-2025; (1) Include cocoa, coffee, cashew and cotton; (2) Includes sorghum, millet, legumes, goats, sheep and cattle; (3) Includes maize, soybean, dairy and poultry; (4) Increased productivity, based on figures from TAAT proposal from CGIAR 2016, and including additional value of mechanization for Wheat and ad the Savannah; (5) Realized value of increased production, estimated base of FAO report "Achieving Zero Hunger: the critical role of investment" 2015 using data from the estimates of Improving agro processing operations at a 50% rate which is approximately the volume from priority value chains in the total of Africa's agriculture; (6) Value chain development + hard & soft infrastructure; (7) Includes estimates from rural roads from FAO report "Achieving Zero Hunger: the critical role of investment" 2015 at a 25% rate which is the investments estimated directly to agriculture for the priority value chains in the total of Africa's agriculture; (8) Return of investment calculated as 10 year revenue opportunity / total investment; (9) 2025 annual revenue opportunity includes for the value chains/AEZ of Rice, Wheat, Horticulture, fish farming, Sahel and savannah the potential savings from import substitution if Africa was self-sufficient and did not need imports from out of Africa, for the other values chains / AEZ includes revenue estimated from the TAAT proposal from CGIAR. Source: IFPRI; IITA, Dalberg analysis

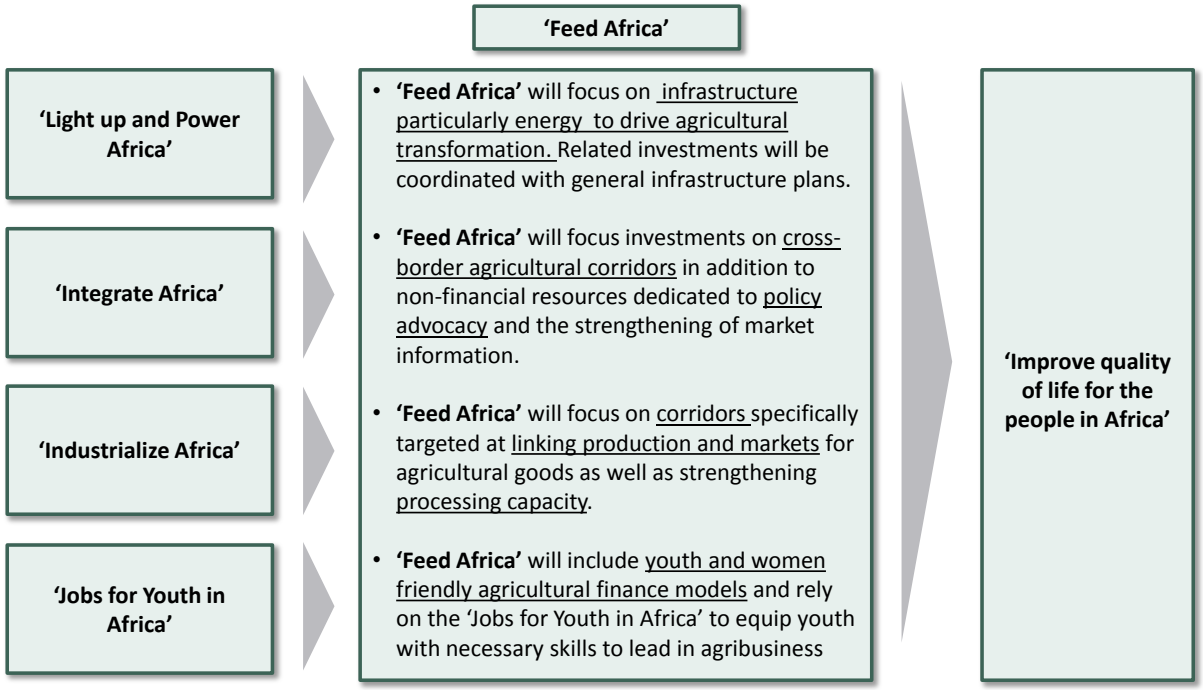
LINKAGES WITH THE OTHER AFDB 'HIGH 5s'

2.13 **This Strategy has been developed in parallel with strategies for the Bank's other "High 5s," and key priorities.** To ensure that investments across the High 5s are not duplicative, the 'Feed Africa' strategy will focus in the following ways:

- Light Up and Power Africa: Energy infrastructure will be key for driving on-farm productivity and processing zones and hubs. 'Feed Africa' will focus on agriculture-specific hard and market infrastructure (e.g. roads, irrigation, production and processing capacity) and coordinating related investments with more general infrastructure plans.
- Integrate Africa: Regional integration is key for intra-African trade of agricultural goods. 'Feed Africa' will focus investments on cross-border agricultural corridors in addition to non-financial resources dedicated to policy advocacy and the strengthening of market information.
- Industrialize Africa: Agro-industrialization requires a similar set of tools as those that will be used for general industrialization. This is especially the case when considering the intersection of agro-processing zones, corridors, and special economic zones. 'Feed Africa' will focus on corridors and smaller zones specifically targeted at linking production and markets for agricultural goods as well as strengthening processing capacity.

2.14 The Jobs for Youth in Africa: Transformation will require a new crop of young agri-preneurs who have been empowered and trained to change the traditional view of agriculture in Africa. 'Feed Africa' will include agricultural finance models that will benefit youth, as well as other groups; it will rely on the 'Jobs for Youth in Africa' strategy to increase the representation of youth in agriculture and agribusiness and equip them with the necessary skills to be successful. While it is useful to visually represent 'Jobs for Youth in Africa' as an input into 'Feed Africa', it should be noted that this strategy falls within the 'Improve quality of life for the people in Africa' High 5 Priority.

Figure 14: 'Feed Africa' and the other 'High 5s'



2.14 **'Feed Africa' – in conjunction with the other High 5s – seeks to fulfill the primary objectives of the AfDB 10-Year Strategy 2013-2022.** It is aligned with the primary objectives of driving inclusive growth – by scaling interventions either inherently or with the potential to be targeted toward historically marginalized populations – and transitioning to green growth – by prioritizing the adoption of climate-smart agricultural practices generally and within its funded initiatives, while influencing RMCs to do the same. Ultimately, for agricultural transformation to deliver sustainable results over time, it must be inclusive and green.

3. THE CATALYTIC ROLE OF THE BANK

3.1 **The AfDB has considerable experience in supporting African countries in developing their agricultural sector.** The Bank has long recognized that agriculture is central for the socioeconomic development of the continent. Between 2006 and 2014, the Bank Group carried out 198 operations in agriculture and agribusiness, amounting to UA4.5 billion, including181 of sovereign operations and 17 non-sovereign operations.

3.2 **Since 2010, the Bank's operations in agriculture have been guided by its Agriculture Sector Strategy (AgSS) 2010–2014.** The strategy aimed to contribute to greater agricultural productivity, food security, and poverty reduction. Bank interventions under the AgSS focused on two pillars: (i) agricultural infrastructure; and (ii) natural resource management. Areas of intervention included water-control management, construction and rehabilitation of rural roads, markets and storage infrastructure, agro-processing, and reduction of post-harvest losses. Annex I presents a summary of the Bank's current portfolio in the agriculture sector.

3.3 **Going forward, the AfDB can use its unique role and previous experience as a key investor for, convener of, and advisor to African nations and institutions to coordinate and amplify** the impact of a potentially otherwise disconnected set of efforts across the continent. More specifically, the Bank will work in conjunction with its partners to catalyze African agricultural transformation in three ways:

- Orchestrate activities at the sector level to create tangible plans and momentum for transformation. This includes outlining what is necessary to achieve agreed upon outcomes and coordinating the activities of the Bank and its partners in implementing. For example, the Bank can bring together RMCs, inputs-focused organizations, and private sector ICT players to build out farmer e-registration systems across the continent.
- Architect the design and lead the operation of areas that are both critical to drive transformation and for which the Bank is able to leverage its comparative advantages. This includes bringing either previous experience or current content expertise to actually define the parameters of an intervention and playing a key role in delivering on one of more of those parameters. For example, the Bank can assist RMCs in establishing ideal locations, design components, and conditions for success of agro-processing zones and corridors and play a critical role in investing in and prioritizing necessary activities.
- Scale and replicate the activities and programs of key partners that have shown success in contributing to desired transformation. For example, the Bank can provide financial support to replicate innovative farmer extension models. Here, the nature of the Bank and its resulting competitive advantage is best used to amplify the impact of other organizations that are founded on a closer relationship to the farmer.

3.4 **In general, the first two roles will require the Bank to be more involved in both the initial development and the rollout of an initiative, while the latter role assumes that another partner may develop the initiative and require financial, convening, advisory, or other support to bring it to scale across different countries.** While the Bank will take a flexible approach to its role depending of the specific needs at the country and commodity level, Table 3 provides guidance for when it will tend to

catalyze transformation as an orchestrator or architect vs. scaling and replicating transformative initiatives. The Bank will focus its efforts on those initiatives for which it plays the role of orchestrate/design; within this list, it will prioritize an even smaller set of 10-15 based on country demand. Most of these initiatives will not be set up as independent programs upfront; rather, they will be scaled across RMCs as requests are received. The Table in Annex IV provides more detail on each of these initiatives. Level 2 of the results framework presented in Annex III captures that associated targets specific to the Bank.

Table 3: Likely AfDB roles across proposed initiatives

Enabler	AfDB Role	Name and description
Enabler #1: Increased Realized Productivity	Orchestrate/ Design	**TAAT:** increase investment into agriculture research and technology dissemination
		Inputs finance and agro-dealer network development: expand input finance and connect groups of farmers to buyers
		Mechanization Program: establish facility for on-farm mechanization leasing
	Scale/ Replicate	Develop **agro-dealer supply systems**
		Support wide-scale deployment of innovative **farmer extension** models
Enabler #2: Realized Value of Increased Production	Orchestrate/ Design	**Post-Harvest Loss Prevention Facility:** invest in infrastructure and training to reduce on-farm and post-harvest loss
		Warehouse receipts systems (WRS): scale WRS as 1st step for commodity exchanges
		Agro-processing zones and corridors: increase and link production and processing capacity along key corridors
	Scale/ Replicate	Scale-up and replicate innovative models to **organize and aggregate farmers**
		Establish **agricultural commodity exchanges**
Enabler #3: Increased Investment in Hard and Soft Infrastructure	Orchestrate/ Design	**Infrastructure Coordination:** accelerate and coordinate development of **enabling hard infrastructure (energy, water, logistics)**
		Market infrastructure: build market centers and associated service infrastructure
		Farmer e-registration: launch large scale farmer e-registration systems
Enabler #4: Expanded Agricultural Finance	Orchestrate/ Design	**Risk-sharing Facility:** catalyze bank lending to the ag sector through risk-sharing facility (comprising loans and grants)
		Non-Bank SME Finance and Capacity-Building Fund: provide funding and capacity-building to SME funds as well as surrounding ecosystem (e.g. credit bureaus)
		Project Finance Facility: Increase long-term funding to ag SMEs
		Trade Finance Facility: scale up existing Soft Commodity Facility
		Sovereign Risk Support: Scale up Africa Risk Capacity (ARC) initiative (sovereign insurance solution to agro-ecological shocks)
		Diaspora Bonds: create lending products to attract diaspora and institutional capital
	Scale/ Replicate	Facilitate **lower lending rates** to agricultural players through Central Bank funds
		Deepen and broaden **agricultural insurance** markets
		Policy reform matrix: coordinate establishment of an Africa-wide policy matrix detailing the five groups of key policy changes required to enable the

Enabler #5: Improved Agribusiness Environment	Orchestrate/ Design	transformation sought by the STRATEGY; key policy areas would be: (i) Land tenure, (ii) Input subsidies, (iii) incentives for local production and processing, (iv) financial sector deepening, (v) Regional integration and trade
		Global Program for Improving Agricultural Statistics and Rural Development: improve statistical systems across African countries by building capacity in ministries and offering technical assistance
	Scale/ Replicate	Facilitate land tenure reform through the **Africa Land Policy Center**
		Provide technical advisory to governments to support **agriculture development bank set-up / reform**
		Strengthen **capacity of private-sector actors'** (e.g. Chambers of Commerce) **to advocate for favorable policies**
		Support development of **Agribusiness Environment indices**
Enabler #6: Increased Inclusivity, Sustainability, and Nutrition	Orchestrate/ Design	**AFAWA Facility:** establish a facility to promote women-owned MSMEs
	Scale/ Replicate	Increase **representation of women** in agricultural research, and enhance gender-responsive **research, monitoring, and evaluation**
	Orchestrate/ Design	**Youth Jobs for Africa Agricultural Flagship Programs:** establish facilities to increase youth employment and enhance skills in agribusiness (e.g. ENABLE Youth)
	Orchestrate/ Design	**Climate Resilience Funding:** provide funds to support climate adaptation and climate smart agriculture practices
	Scale/ Replicate	Encourage scale-up and replication of **nutrition programs (through the Nutrition Trust Fund and other mechanisms)**
Enabler #7: Partnership for Agricultural Transformation in Africa	Orchestrate/ Design	**Partnership for Agricultural Transformation in Africa:** House and convene the 'Partnership for Agricultural Transformation in Africa'
	Scale/ Replicate	**Support pan-African agriculture leadership initiatives** (e.g. Leadership 4 Agriculture)

Further detail regarding potential mechanisms for many of these initiatives as well as the roles and responsibilities that AfDB and potential partners could take on is included in Annex III.

3.5 **It is important to highlight the 6th enabler – Inclusivity, Sustainability, and Nutrition – because, while it can be translated into several specific initiatives, it must be a guiding principle for the other enablers.** It is not enough for these concerns to be spoken about in a specific forum; rather they must be mainstreamed throughout the strategy. Where there is a decision to be made about distribution network, relative resource allocation, or prioritized area of focus, inclusivity, sustainability, and nutrition will be key deciding factors for which pathway to take. Thus, beyond the specific initiatives listed in Table 3, the Bank will make efforts to elevate the importance of these issues across all of its activities.

3.6 **Gender will be a crosscutting issue across the Bank's agricultural investments, and will direct dedicated funds to support programs and projects that assist women in agriculture, agribusiness, and natural resources management**. The Bank will also seek to improve cross-border trade, especially in agriculture, which will particularly benefit women, who form the majority of agricultural traders. As part of its contributions to TAAT and CSA-financing, the Bank will also support initiatives to promote women's access to new and labor-saving agricultural technologies to boost production, including innovative technologies aimed at supporting 'climate-smart' agricultural approaches that build resilience to climatic and socioeconomic shocks. The Bank will also support measures to increase women's access to local and regional markets, and to add value to farm produce through agro-processing and post-

harvest management. The Bank will also support more effective and rigorous monitoring and evaluation of the gender-equality components of its interventions.

3.7 **The Bank will also support RMCs in making agricultural production processes 'climate smart' and assisting the transition to green pathways.** This will require attention in three main areas spanning a few of the strategy's enabler's: generation and access to appropriate technologies; establishment of the right institutional and policy environment at the local, national, and regional levels; and availability of appropriate financing mechanisms to promote uptake of improved technologies at all levels. In pursuing climate-smart agricultural production systems, the differing objectives and capacities of smallholder producers will be clearly distinguished from those of the large-scale producers. The Bank will promote projects for the enhancement of resilience of production bases and ecosystems. It will do this by supporting the restoration of degraded ecosystems and integrated management of natural resources. Integration of climate information into agriculture activities and natural resources management will be developed, to strengthen the resilience of agriculture (especially rain-fed agriculture) and vulnerable populations. The Bank will ensure that climate change is integrated in all its operations and will take a critical look at its impact on the prospects of success of its interventions. Additionally, the Bank will help RMCs in greening agriculture through practices such as agroforestry and organic farming.

3.8 **In addition to specific efforts ensuring the inclusivity of women, climate resilience, and nutrition, the ATA will prioritize the inclusion of smallholders and youth as well as the creation of a new generation of farmers.** The AfDB will actively support the strengthening of farmer cooperative and union governance and ability to offer financial and other farmer services. It will also support creation of stronger linkages with processors and buyers across many priority value chains—benefiting member farmers with higher profits for their labor, and processors and buyers with more secure, higher-quality supplies of raw product. Finally, millions of African youth will participate in agribusiness training and incubation centers, thereby gaining in-demand skills for rural and urban agro-processing and agro-allied industries, improving employment outcomes, and raising youth interest in agriculture as a respectable, commercially-minded profession.

3.9 **In the long-run, the goal is for many of the Bank's catalytic actions to create positive feedback loops in several areas such that the related activities become self-sustaining** in the absence of further significant AfDB involvement. One significant example is in the area of improving the agribusiness environment. While the Bank will dedicate resources towards strengthening the capacity of RMCs to develop policies and private sector organizations to advocate for more favorable policies, it will do so in the hope that these parties will eventually be able to sustain their own activities without as much support. Another example is in the area of agricultural finance, where several of the initiatives are intended to provide the viability of certain investment and crowd in private sector funding. In these cases, once the Bank has helped to establish a credible track record, it should be able to redeploy some of the related resources to other areas in need.

3.10 **Beyond its participation in a range of specific initiatives the Bank is also poised to step into a broader orchestration role, which will be essentially for the successful execution of the strategy and a significant break from past efforts to drive successful agriculture sector development.** A broad set of actors are already and will continue to be involved in driving the development of agriculture in Africa; although there are some disparate areas of transformation emerging, overall the investments and activities dedicated to

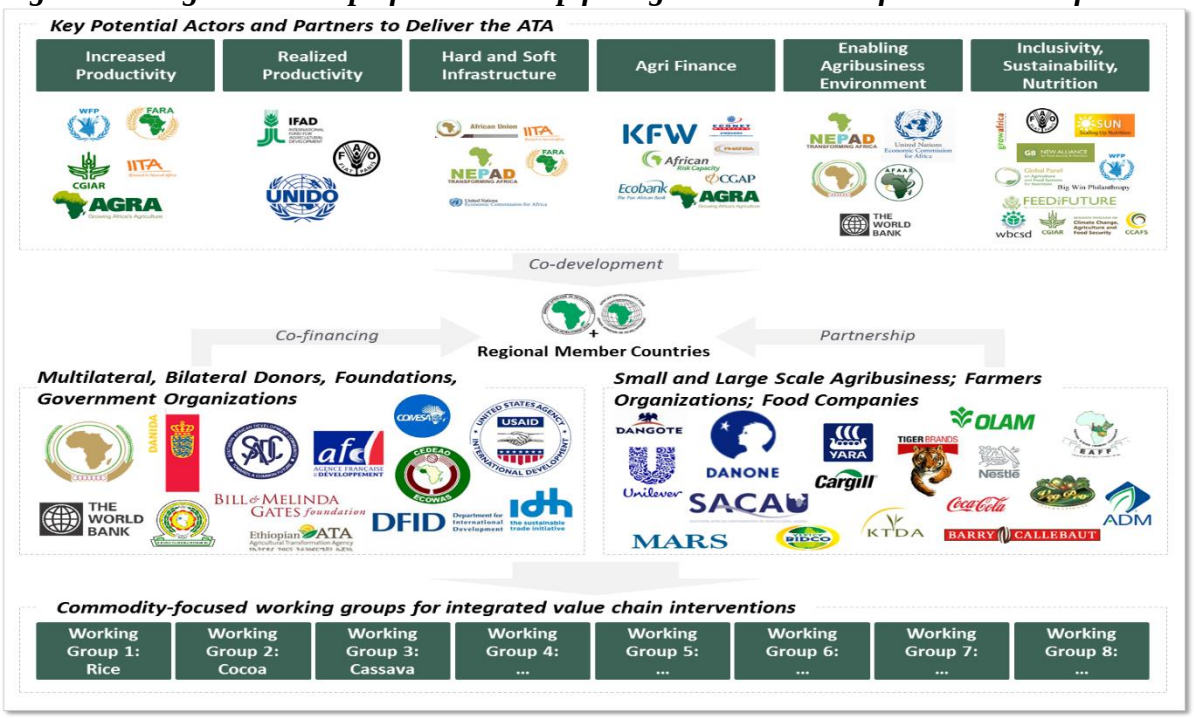
agriculture have not delivered on their promise to date. Coordination platforms already exist, but the Bank envisages a role that involves alignment around specific and targeted value-chain transformation agendas, supported by significant resources both from the AfDB and others, both of which involve a difference in approach before what has gone before.

3.11 **To make this work, key actors (from the public sector, private sector and development actors) must align on transformational goals** and ensure that their activities towards achieving key outcomes – such as those outlined in the strategic framework – are well integrated. The sector can benefit from a "Partnership for Agricultural Transformation in Africa", The PATA will facilitate a variety of activities, including:

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

3.12 While the PATA will be housed at the Bank, convening locations will rotate between partners as will some chair-related roles. To ensure buy-in, the exact operating mechanism for the PATA will be co-developed with partners at the outset of the Strategy launch. However, it is expected to be comprised commodity-focused working groups with participation from organizations working across the different enablers. Ideally, this focus will translate into concrete working group outcomes and reinforce partner commitments. Failure to hold to these commitments or, at the very least, to develop a remediation plan, will jeopardize an actor's standing within the partnership.

Figure 15: High-level setup of 'Partnership for Agricultural Transformation in Africa'



3.13 **The PATA will leverage existing CAADP mechanisms.** A key aim of the PATA is to bring together actors from across governments, development institutions, private sectors, and civil society with a focus on coordinating and financing strategies for a specific AVC in a specific region. This does not directly overlap with the purpose of most CAADP coordinating mechanisms. The most comparable body is GrowAfrica; thus, the PATA will not replicate commodity working groups in regions where GrowAfrica already has a functioning relevant group. As mentioned earlier, another key aim of the PATA is to track and hold organizations accountable to commitments and reflect on learnings around implementation. While the PATA continental and regional steering committees will meet independently on matters related to PATA steering groups, they will seek to participate in the same continent and region-wide annual and biennial meetings convened by CAADP (e.g. of the CAADP Partnership Platform and its related business meeting) to review commitments rather than convening separate meetings in parallel. The PATA will also engage coalitions and task forces that have organized to participate in the CAADP process, including the Non-State Actors Coalition of farmers' groups, civil society organizations and private sector actors as well as others.

3. 14 **To complement the work of the PATA, the Bank can also play an important role in supporting and scaling up pan-African agriculture leadership initiatives.** Strong leadership and political will are key for the successful implementation of all of the activities discussed thus far. African leaders, both those responsible directly to the agricultural sector as well as those responsible for other areas or overall development more generally, must work together to set strategic direction and feel accountable to one another for pursuing this agreed upon direction. The AfDB can reinforce and ensure this by supporting programs such as Leadership 4 Agriculture (L4Ag), a network of current and former African Ministers of Finance and Agriculture that provides technical and financial assistance to other Ministers working to transform Africa's Agricultural sector into a commercial enterprise. L4Ag was inaugurated in July of 2014, publically launched in February of 2015, and poised to mobilize more Ministers of Finance to begin delivering on activities discussed thus far.

4. IMPLEMENTATION OF THE STRATEGY FOR AGRICULTURAL TRANSFORMATION IN AFRICA

4.1 **This document serves to outline the overall direction that the Bank proposes for the Strategy for Agricultural Transformation in Africa, and does not outline an operational implementation plan [29] ; however, some key considerations regarding implementation are outlined below.**

LESSONS LEARNED, AND HOW THEY IMPACT THE BANK'S APPROACH TO IMPLEMENTATION OF THE STRATEGY FOR AGRICULTURAL TRANSFORAMTION IN AFRICA

4.2 **The approach advocated for the Agricultural Transformation Agenda overall, and the Bank's Feed Africa strategy in particular,** is informed by the Bank's own experience in aiming to drive agricultural development, as well as broader data and evidence on what has worked in stimulating transformation. Based on a review of past transformations,

[29] *A full outline of the anticipated implementation approach, phasing, resources, key roles and team structures, assets and key capabilities that the bank will develop for the execution of the strategy are included in the an 'Implementation Plan' document that is a technical annex to the Strategy..*

as well as IDEV evaluations of the Bank's performance, and discussions with AfDB on lessons learned in the past, the overall approach for implementation has been based on four principles:

- **Scaling and leveraging what is already working:** the initiatives that form the underlying execution of the strategy[30] are either universally proven to deliver results, or involve scaling up and replicating promising pilots
- **Ensuring sufficient skills and capabilities exist for follow-through:** examples of past initiatives that the Bank has aimed to pursue in agricultural development, such as the Africa Fertilizer Financing Mechanism, have attracted less funding than was originally intended (the AFFM has attracted US$13m of financing since its launch in 2008, versus the US$100m that was targeted); as and when such mechanisms are used moving forward, appropriate skills and capabilities – as well as fundamental availability of resources – will be required for follow-through
- **Being sufficiently targeted:** a key difference versus the past will be the level of focus that the Bank will adopt in pursuing the strategy; the Bank intends to both increase the scale of its funding to agriculture and direct those financial resources to a series of commodities and agro-ecological zones, and thereby avoid its investments becoming too diffuse, losing synergies in driving multi-country value chain synergies, and require a breadth of commodity and agro-industry expertise that could not be viably created.
- **Candor on the importance of political will**: transformation will involve substantial reform, and will therefore require a high degree of political priority, coordination across ministries, and the willingness to push through in the context of affected established interests in current market structures. The Bank will prioritize activities in countries that demonstrate the political will to adopt an ambitious agenda for reform, and work with other countries to support these conditions arising in order to open up access to large scale transformation investments.

RESOURCES THAT THE BANK WILL COMMIT TO CATALYZE AGRICULTURAL TRANSFORMATION IN AFRICA

4.3 **The AfDB has historically invested an average of US$612m per year in agricultural and agribusiness over the period 2011-2015.** As one of its High 5 strategic priorities, the Bank envisages agricultural investment rising to US$2.4bn per year going forward. Mobilizing funding to this level will position the Bank as the largest catalytic investor into African agriculture[31].

4.4 **The Bank will finance this strategy through a combination** of the ADB and ADF windows, the Nigeria Trust Fund, other existing special funds at the Bank, and additional funds mobilized from the private sector, foundations, bilateral donors and development finance institutions for targeted funds for the Agricultural Transformation Agenda.

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[30] Details on the initiatives that will form the actual implementation plan can be found in the Implementation Plan which outlines the Operating Plan and, within this, the initiatives that the Bank will architect or scale / replicate

[31] The sources of all overseas development assistance from multilateral and bilateral donors and development banks (excluding the AfDB), plus the Bill and Melinda Gates Foundation, into African agriculture was estimated to be c.$1.8bn in 2010 (based on OECD DAC data, and Dalberg estimates)

4.5 **The allocation of the Bank's financial resources across the different areas of the Agricultural Transformation Agenda will be based on two principles that drive an overall 'Return on Investment' philosophy**:

- **Catalyze additional funding**: although the Bank intends to become a major source of catalytic funding, the scale of investments required for the strategy are substantial, with approximately US$315bn – US$400bn to be invested to address prioritized agricultural commodity value chains, and potentially US$1.8tr to pursue full transformation over a 10year horizon. As a result, the Bank aims to use blended financing to crowd in private sources of finance – especially from capital markets and the African financial sector – to support the scale of investments required.
- **Make investments with high 'additionality'**: the Bank aims to catalyze inclusive agricultural growth, and for some key commodities and target agro-ecological zones (e.g. sorghum and millet, and the overall case for transforming the Sahel region) the commercial business case for investments across much of the value chain, as well as underlying infrastructure, is challenging. These investments remain critical to support broad based and systemic agricultural transformation; as a result, the Bank will act with additionality, investing into areas likely to remain sub-commercial for some time.

4.6 **As a result, the investment strategy of the Bank will be split into two main tracks:** investments of equity, quasi equity, debt and risk instruments to catalyze investments from the private sector at the scale required to meet the objectives of the strategy; and the complementary provision of grants and concessional loans to sovereign and non-sovereign actors to direct capital into areas required to enable full value-chain transformation. Existing trust funds and bilateral funds targeting the agricultural sector and housed at the AfDB will also be included.[32] and **Figure *17*** present the current projected OSAN pipeline. While the mix of projects is expected to shift to become more representative of the ATA, the pipeline for 2016 shows that there are enough viable agriculture requests to absorb the planned $2.4bn of lending annually.

[32] *Includes the Agriculture Fast Track Fund, Climate Development Africa Special Fund, Horn of Africa Program, Sahel Program Action Fund, Marrakech Initiative, African Fertilizer Financing Mechanism and The Africa Trade Fund. Details of these funds can be found in the appendices to this report.*

Figure 16: Current OSAN project lending pipeline, 2016-2019 (US$mn)[33]

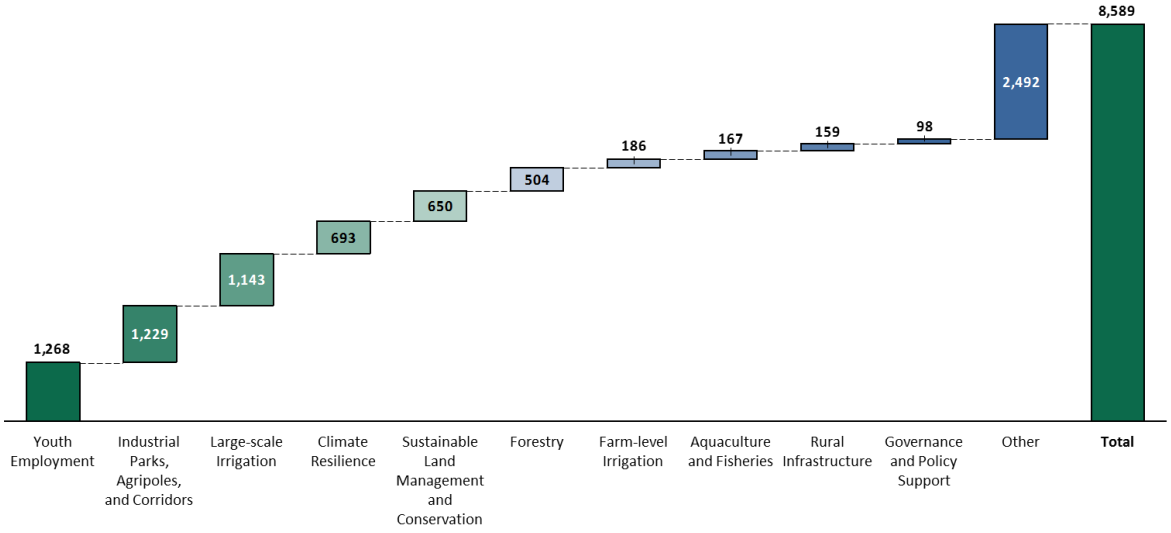
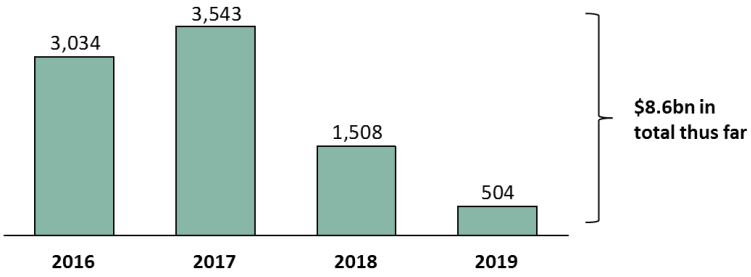


Figure 17: Current OSAN planned lending for 2016-2019 (US$m)[34]



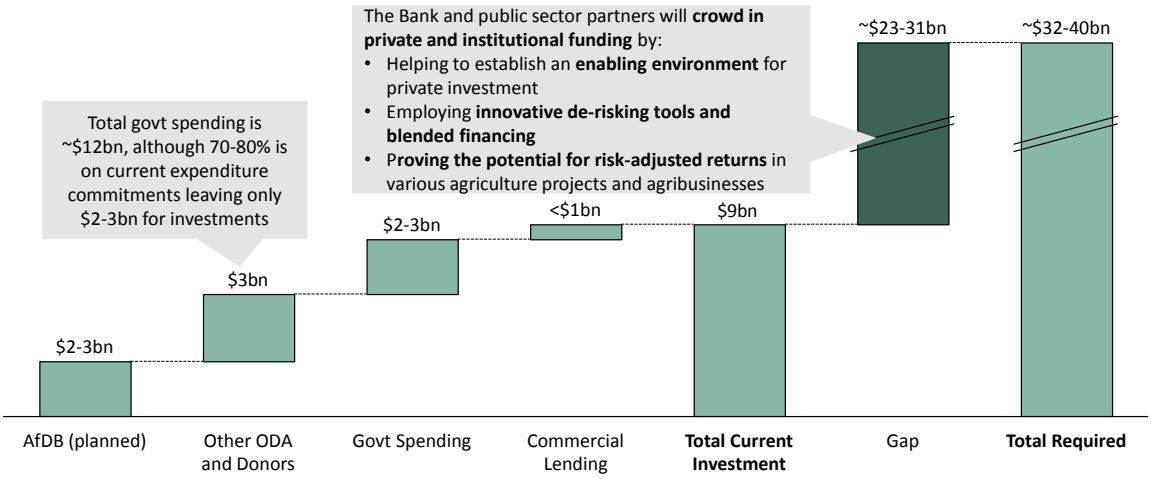
4.7 **The Bank's funds for agricultural transformation will be available for agricultural commodities and agro-ecological zones that are within the focus of the strategy.** The Bank will continue to support programs for investments outside these areas through existing ADB and ADF windows.

FINANCING THE TOTAL COST FOR AGRICULTURAL TRANSFORMATION IN AFRICA

4.8 **The total cost for agricultural transformation for the priority commodities and agro-ecological zones in the strategy is between US$315bn and US$400bn over 10 years, equivalent to US$32bn – $40bn per year.** Current sources of finance for agricultural development are primarily from three areas: funds from sovereign and non-sovereign investments into agriculture from the multi-lateral and bilateral development partners including the AfDB; public sector spending; and private sector investments into agriculture. Overall these total ~$9bn per year of investments into African agriculture (of the AfDB's level of spend is assumed to be $2.4bn per year, rather than the current $0.6bn per year), leaving a gap of $23bn to $31bn per annum to be mobilized in order to drive transformation.

[33] *OSAN, April 4, 2016.*
[34] *OSAN, April 4, 2016.*

Figure 18: Current funding for agriculture development in Africa vs. requirements for transformation (US$bn/year)



Sources: OECD DAC CRS database; http://www.governmentspendingwatch.org/spending-data; Initiative for Smallholder Finance, "A Roadmap For Growth: Positioning Local Banks For Success In Smallholder Finance," 2013; Dalberg, "Catalyzing Smallholder Agricultural Finance," 2012; IFC, "Closing the Credit Gap for Formal and Informal Micro, Small, and Medium Enterprises; EY, "Africa 2015 Making Choices"; IFC, "Private Equity and Emerging Markets Agribusiness: Building Value Through Sustainability," 2015

4.9 **There are sufficient resources within Africa and key potential partners for this gap to be met**. What is required is a combination of raising government spending on agricultural transformation, raising more catalytic funding from the Bank and other multilateral and bilateral institutions, and catalyzing greater investments from the private sector:

- African governments spent ~$12bn on agriculture in 2014. Meeting the Malabo commitments of allocating 10% of public budgets to agriculture would imply raising this level of spending to ~$40bn based on 2014 budgets, which would be more than sufficient to meet the entire financing needs of transformation. However, the feasibility of increasing public spending to this level, given the original Maputo declaration was made in 2003, is low; financing a business-led transformation agenda 100% through government funding is unlikely to achieve desired results without significant distortionary effects. A partial increase of government investment into transformation is important, especially for country-level ownership, but other levers are required.

- Multilateral and bilateral donors, plus foundations and non-governmental organizations spent ~$3.8bn on agriculture in Africa in 2014. The AfDB intends to raise its average annual investments into agriculture by $1.8bn to reach $2.4bn per year, raising total level of available funds from this category of financing to ~$5.6bn per year.

- Private sector and institutional capital will be a critical source of financing; commercial bank lending to agriculture is ~$660m per year, out of a total of ~$14bn per year[35], or 4.8% of annual lending. Existing net assets in Africa are also material: net banking assets are ~$800bn in Sub-Saharan Africa alone[36], African sovereign wealth funds have assets under management ('AUM') of ~$160bn, pension funds constitute $380bn

[35] *Based on the World Bank's definition commercial bank lending (public and publicly guaranteed, plus private non-guaranteed) and other private credits, for Sub-Saharan Africa and North Africa, for 2014*
[36] *KPMG, 2014*

AUM, while Africa-based or heavily Africa weighted private equity funds are estimated to have ~US$25-35bn AUM as at the end of 2014. Combined, sovereign, pension and private equity funds constitute net assets of $550-600bn. While noting that access to these funds are determined by the availability of the right instruments, the Bank will facilitate the development of innovative financing instruments that would help in accessing these funds. Leveraging commercial bank lending and private investment sources requires using innovative finance, in particular blended finance structures, to leverage government and donor financing to catalyze these sources; the Bank will play a key leadership role in developing and assisting the development of innovative financial instruments[37]. The Bank has recently approved the creation of a new Department of Agricultural Finance that will be specifically dedicated to developing these instruments.

4.10 **Beyond this, there are several other potential sources of finance for agricultural transformation;**

- Foreign Direct Investment into agriculture and agribusiness in Africa was worth $10bn in 2014. Creating the appropriate conditions for agribusiness growth, and aligning existing investment strategies of the private sector to the goals of transformation, should, as a marker of success, 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 to realizing the ambitions agreed in COP 21, and associated climate finance commitments of mobilizing $100bn per year for investments in adaptation in developing countries, as well as calls for direct funding of $16bn for supporting Africa to adapt to climate change[38] (of which $5.7bn will be funded by the World Bank's International Development Association) represent an additional and material source of funding for key parts of agricultural transformation, especially sustainable intensification of commodity production, and sustainable natural resource management.

- Other, more targeted, funds can be approached to support those components of the strategy failing directly in their mandates.(e.g. Africa50 Infrastructure Fund).

4.11 **The Bank will contribute to the raising of these funds in a few direct and indirect ways.** In the first place, several of its strategic initiatives (e.g. risk sharing facility, diaspora bonds, blended instruments to increase investment in PHL technologies) will be designed to increase private financing for agriculture. The Bank will also engage in resource mobilization to actively fundraise from a variety of parties. Finally, and perhaps most important, it will work to bridge the gap between the needs of the private sector and the actions of governments to facilitate improvement of the investment environment.

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[37] Detail on the array of facilities and funds that are anticipated to be developed for the Agricultural transformation Agenda, as well as adaptation of existing Bank funds and facilities, is provided in the Implementation Plan annex to this report; a high level overview is also provided in Annex III.

[38] Per the Africa Business Climate Plan; http://www.worldbank.org/en/news/feature/2015/12/12/paris-agreement-paves-way-for-world-bank-group-helping-countries-deliver-on-climate-commitments

BANK CAPABILITIES AND ASSETS TO BE DEVELOPED[39]

4.12 **The AfDB's activities in agriculture and agribusiness are broader than those solely addressed by the Agriculture and Agro-Industry team (OSAN);** the Bank has invested over US$600m into private sector agribusiness through the Private Sector Department (OPSD), supported the development of the financial sector and increased lending through the Financial Sector Department (OFSD), as well as broader activities in regional development to support market access, processing zone investment, policy advisory, training and development and large scale rural infrastructure (for water, energy and transport) and a broad set of technical advisory to support project development and effective use of bank lending.

4.13 However, the Bank will focus on developing skills and capabilities in several key areas:

- **Agricultural Finance**: Given the specific requirements for the agricultural sector in terms of product design and technical knowledge these features as well as the scale of Bank investments to financial intermediaries and private sector investors of >US$1bn per annum, the Bank will develop skills and sufficient manpower to administer investment activities in this area.

- **ICT and Technology**: the potential for reducing high costs associated with reaching farmers with financial products, delivering market information across value chains and driving modernization of agricultural logistics and trading is substantial and realizing these gains are critical to successfully executing several areas in the Agricultural Transformation Agenda; the Bank will develop in-house skills to effectively lead and coordinate large scale deployment of agriculture and agribusiness ICT.

- **Applied Agricultural Research**: The Bank will not undertake R&D activities directly, but will require that investments to ensure applied R&D investments are directed in line with the strategy; the Bank will also work closely with the CGIAR to ensure that agricultural R&D is applied to Bank lending activities to ensure that appropriate technologies and agricultural processes are incorporated into program design; appropriate expertise will be required to allow the Bank to work as the effective interface between R&D and its application across its investment activities and stakeholders.

- **Rural Development**: a process to make rural areas livable and attractive where business-minded agro-entrepreneurs and their families may decide to live. This would require developing a broad range of education, health, water and sanitation, transport and energy related services.

- **Policy Analysis and Development:** the development of effective policy and advocacy with governments will be a critical capability for success; the Bank will further develop its existing skillset in policy analysis to ensure that it can advise RMCs, RECs and other bodies on key levers within the overall policy matrix (including input policies, business enabling environment and land tenure) that are critical to driving transformation.

[39] *A more detailed assessment of the skills and capabilities to be developed, including a suggested structure for the Bank's Feed Africa Department, responsibilities across teams, and additional assets that the Bank will develop (including a convening 'Agricultural Transformation Partnership for Africa') and potential organization to manage specific Special Funds and Investment Funds, is provided in the Operational Plan*

- **Agricultural Statistics and Monitoring and Evaluation:** to act as an effective coordinator of activities and investments across the African region, the Bank will need to be able to provide a depth of analysis that goes beyond supporting its own decision-making, and is authoritative enough to influence and guide the decisions of other organizations; sophisticated agriculture and agribusiness technical analysis capability to support individual investment decisions, as well as providing the Bank with a rigorous platform to act as a major advocate for agribusiness in the continent will need to be developed. It can leverage its current Global Program for Improving Agricultural Statistics and Rural Development housed in ESTA to both source the necessary date from monitoring and evaluation and enhance the capabilities of RMCs to collect and provide quality data to guide strategic decision-making.

- **Agro-Industry and Agribusiness Expertise:** as a financial institution poised to catalyze lending to the agro-industry and agribusiness sectors, the Bank will need to ensure that it is equipped with sufficient in-house expertise to critically evaluate its approaches and ensure that these two areas are appropriately understood in depth as related but separate from on-farm production.

4.14 **A review of the human resources implications to address the above areas indicates that there will be a requirement for 18-20 people, in the following roles.** These gaps can be filled by either hiring new FTEs, replacing existing FTEs, or repurposing roles of existing FTEs[40]. Hiring all of these FTEs would imply a UA1.4-1.5m annual increase to the OSAN budget.

Figure 19: Bank required capabilities for the implementation of the Strategy

✓ Some previous experience
✓ ✓ Some expertise, but scale-up required
✓ ✓ ✓ Adequate expertise at scale

Required skills	OSAN	OFSD	OPSD	OSHD	ANRC	ONRI	OITC	ESTA
Applied R&D	✓							
Agro-inputs and –Dealer Networks	✓✓							
Agribusiness and Agro-industry	✓							
Ag. Infrastructure and Rural Dev.	✓✓✓			✓✓			✓	
Agricultural Finance	✓	✓	✓					
Policy Analysis and Development					✓✓	✓		
Climate-Smart Agriculture	✓✓					✓		
Gender Inclusivity in Agriculture	✓✓							
Nutrition and Agriculture				✓				
ICT		✓						
Technical Analysis and Statistics								✓✓

[40] A more detailed capabilities assessment can be found in Annex V.

Table 4: Skills profile

Skill Area	No.
Applied Agricultural R&D	2
Agro-Inputs and Agro-Dealer Networks	2
Agribusiness and Agro-Industry	3
Agricultural Infrastructure and Rural Development	3
Agricultural Finance	5
Policy Analysis and Development	2-3
Climate-Smart Agriculture	2
Gender Inclusivity in Agriculture	2
ICT	3
Technical Analysts (M&E, budget, portfolio..)	2-3
TOTAL	**26-28**

Staff Grade	No.
PL 6	4
PL 5	5
PL 4	14
PL 3	5
TOTAL	**28**

PHASING OF IMPLEMENTATION

4.15 **To meet the 10 year goals of transformation, it will be necessary to transform a broad set of agricultural commodity value chains, across the continent.** However, the breadth of this requirement and the resources required are substantial, while at the same time some of the investments and supporting market conditions required to transform one value chain apply to others – this is especially the case for broad based policy reform to support agribusiness, and developing hard infrastructure. As a result, there is a need to taking a focused approach initially and significant ongoing benefits from taking such a phased approach.

- **Phase 1 – Initiate Transformation (Years 1-3):** The Bank will catalyze the development of a defined set of agricultural commodity value chains across several agro-ecological zones. The agenda will initially focus on a tight subset: rice, cassava, cocoa, cashew, soybean, dairy, beef and horticulture. Critically, the Bank will also skew the focus of its activities towards countries that have a high 'readiness to transform' in terms of the agribusiness enabling environment and/or political will to make the required associated reforms and supporting investments.

- **Phase 2 – Broaden and Deepen Transformation (Years 4-6):** Within countries where transformation of selected commodity value chains has begun and started to show signs of success, the Bank will proactively support investments to transform a broader set of commodities, including but not limited to, coffee, cotton, poultry,

sorghum, millet, maize, wheat and fish. The Bank will also replicate the success in earlier value chain transformation, in new countries, with the aim of leveraging learnings from initial activities and momentum from earlier success to support quality of execution and political will to transform elsewhere

- **Phase 3 – Drive Full Transformation (Years 7-10):** in order to fully reach the goals of the Agricultural Transformation Agenda, a very broad range of agribusiness sectors will need to be developed and modernized; these include continuing to move up the value chain into more sophisticated intermediate products for the food manufacturing industry (e.g. glucose, lecithin), as well as African fast-moving consumer goods products (e.g. butter, margarine, seasonings) that can compete with international branded products.

4.16 **'Fragile states' will be treated somewhat differently so as to minimize marginalization of countries that are likely already receiving less attention and investment.** The Bank will also target those 'fragile states' that express interest in and commitment to the aims and approach of the strategy; however, it will focus on the capacity building and policy reform. In doing so, it will help governments be better-prepared to play their enabling role in the transformation, while cultivating the enabling environment necessary to attract and maintain investors and other actors. This interventions will include strengthening the capacity of agriculture ministries and related parastatals and supporting financial sector deepening. As in the past, these states will also continue to receive concessional loans in amounts that can be appropriately absorbed.

5. RISKS AND MITIGATIONS

Risk	Mitigation Strategy
1. Insufficient funding for transformation	Because the ATA requires a large investment for transformation, it is important that the private sector is properly incentivized to participate. Thus, the ATA will position agriculture as a business and focus on the creation of competitive returns – through innovative blended finance structures, financial sector development, and other efforts. Creating attractive investment opportunities will allow it to target a variety of pools of capital, including: multi-lateral development banks and bi-laterals; governments and Central Banks; foundations & donors; commercial lenders; private equity venture capital firms; sovereign wealth funds, pension funds, and other sources of institutional capital
2. Lack of political will from RMCs to undertake the reforms necessary to drive transformation	It is impossible for the Bank to guarantee political will on the part of RMCs over a ten year horizon to drive transformation. However, it is recognized that a lack of political will is a critical risk factor (and typically a major driver of failure of past attempts for transformation) and therefore, his risk must be maximally mitigated in the construction of the strategy and implementation plan. It is notable that the current President of the African Development Bank was formerly in the role of the key stakeholders that the Bank will need to engage with to drive, from a government perspective, transformation; the formulation of this strategy has benefitted from the nuanced understanding of the challenges that exist from the side of RMC ministers, and a full appreciation of what the ATA asks of them. There are therefore several ways in which the strategy takes this into account: - The overall framing of the strategy, and key goals, are aligned to the pressing priorities of RMC governments to drive economic growth, and situate agriculture within this (rather than, as before, a way of life); there is a target for ATA investments to deliver significant return on investment for RMC governments and open up agribusiness markets worth more than USD 150 billion per year.. - Implementation commences with countries that already have the current political will to transform; demonstration of positive results in these countries (where it should be easiest) supports the creation of will to undertake required reforms and move ATA up the agenda of remaining RMC governments. Countries for which there is a promising entry point in terms of political will and the enabling environment to drive transformation have been identified; this de-risks attaining results. - The PATA platform is also a key mechanism to drive consensus, coordination and momentum on

Risk	Mitigation Strategy
	transformation agendas Finally, the prior role of the President and the credibility that this confers should not be discounted in terms of opening up opportunities for an open dialogue with RMCs around what is possible and how to build effective political will for transformation.
3. Lack of coordination between partners	An important component of the ATA will be the 'Partnership for Agricultural Transformation in Africa', which will serve as a coordination platform for the overall strategy. The AfDB will play a direct role in convening partners and facilitating them to hold each other accountable for agreed-upon targets. The PATA will be a forum through which partners can translate high-level commitments into concrete strategies to transforming specific agricultural value chains and agro-ecological zones. The AfDB will build internal capabilities to track and monitor progress against these collective commitments.
4. Lack of accountability from RMCs and partners	
5. Mismatch between current AfDB capabilities and those required for implementation	The ATA implementation plan includes a detailed assessment of the capabilities required to execute against the strategy relative to the current capabilities at the Bank. It also provides recommendations for how to address identified gaps, whether through building in-house expertise or leveraging key partnerships. The Bank will not execute the strategy alone; target partners have been identified for each of the initiatives under the Bank's enablers, and as a result, the Bank will be drawing on a broad spectrum of expertise in order to drive execution. Coordination of such partnerships inevitably involves a trade-off between risks associated with capabilities at the Bank, versus the complexity of coordination, and as a result, the coordination platform of PATA is critical, while the Bank will also work with multiple alternative partners for key initiatives, ensuring that there is associated breadth and depth in terms of partner capabilities in key execution areas.
6. Potential job loss for the smallest farmers as a result of increases in productivity	The strategy aims to increase total output to achieve self-sufficiency in a range of value chains - in these areas we do not expect a net decline in employment. In 2 value chains - wheat and soy production - there will be a reduced level of net employment in production, through the application of mechanization. The net increase in overall agro-processing and agro-allied industry will more than offset the reduction in production employment in these value chains

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 **There is a massive opportunity to reframe the current social and economic costs associated with the low productivity of the agricultural sector.** What has – up till now – been an area of relative weakness for the African continent, can be recast as an area of strength and, more importantly, one of the fastest options for feeding, employing, and lifting millions of people out of poverty. Agricultural transformation has proven to be a complex endeavor, but is becoming increasingly understood as pockets of successful interventions spring up across the continent. New technologies – especially in the ICT realm – are bringing with them new ways of achieving and scaling success.

6.2 **Critical to realizing this opportunity will be shifting the development of the sector from 'agriculture as a way of life' to 'agriculture as a business'.** The public-sector has an essential role to play in fostering a private-sector led transformation of agriculture. Farmers, entrepreneurs, and investors alike will find a way to develop thriving agribusinesses if given the opportunity in the form of access to sufficient and affordable capital, access to markets and the right overall conditions in terms of policy and infrastructure. Lessons have been learned from emerging successes in the African continent, as well as internationally, on how to create these conditions, while new technologies are opening up new opportunities to modernize agriculture in a particularly inclusive way. It is now for public sector actors to do what is possible in their power to provide these conditions and help build the partnerships necessary to catalyze investment.

6.3 **Africa needs a multi-stakeholder, public sector-enabled, but private sector-led transformation that will allow it to realize the potential of agriculture as a business and create a foundation for prosperity, nutrition, and quality of life for all Africans.**

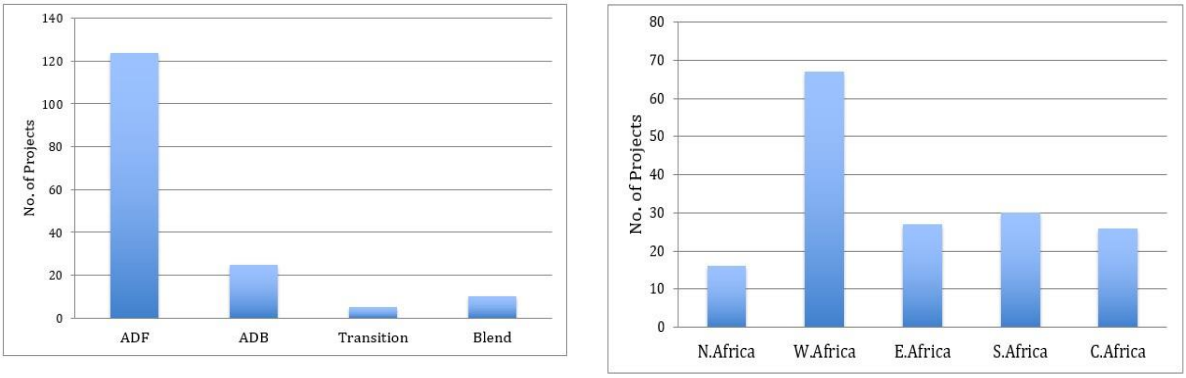
6.4 **Senior management recommends the approval, by the Boards of Directors, of the Strategy for Agricultural Transformation in Africa 2016-2025.** Upon approval by the Board, this new strategy will supersede the Bank Group Agriculture Sector Strategy 2010–2014 (ADB/BD/WP/2009/234/Rev.1 - ADF/BD/WP/2009/164/Rev.1).

ANNEX I: HISTORIC AFDB AGRICULTURE FOCUS AND LESSONS LEARNED

THE AFDB'S CURRENT PORTFOLIO IN AGRICULTURE AND AGRIBUSINESS

The bulk of the sovereign projects (124, or approximately 69% of all projects) has been allocated to ADF-classified countries (UA3.1 billion), representing 80% of the total OSAN portfolio. A total of 25 projects (14% of the total) have been allocated to ADB-classified countries, amounting to UA396 million, 10% of the total OSAN portfolio. Blend and transition countries have received approximately UA127 million and UA256 million respectively (financing 15 projects in total), amounting to a cumulative 9% of the overall portfolio. Projects considered to be multinational (15) have received approximately UA268 million in financing. Between 2006 and 2014, the majority of sovereign projects were concentrated in the West Africa region (67); North Africa (16); East Africa (27); South Africa (30); and Central Africa (26).

Figure 20: AfDB sovereign projects in agriculture by country and region (2006-2014)

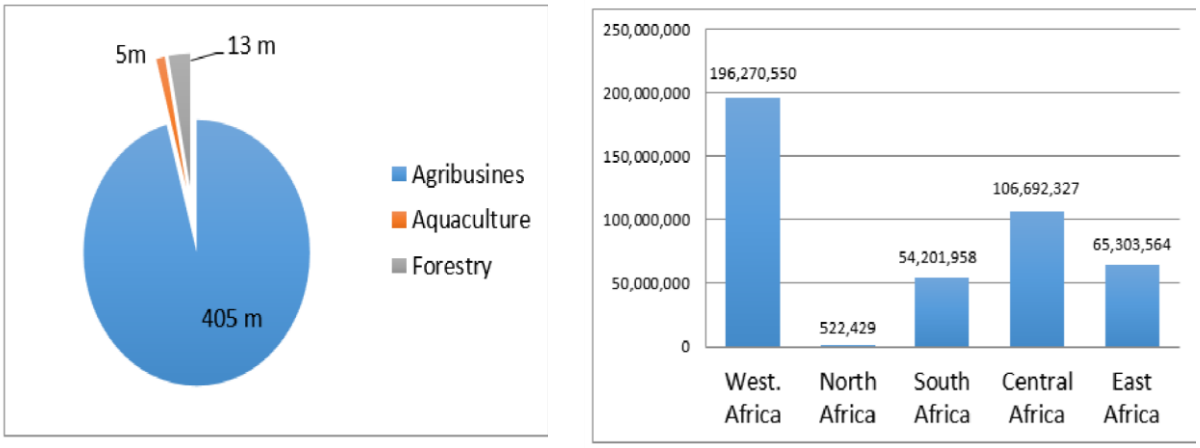


Note: Approved and effective, as well as closed, projects are included; canceled ones are not.
Source: AfDB 2014

The Bank has contributed to agribusiness development in Africa through its private sector window. Non-sovereign operations are categorized in three groups: agribusiness, aquaculture, and forestry, with the 'lion's share' of investment in projects classified as agribusiness.

Non-sovereign investments remain limited and are concentrated in agribusiness in the West Africa region. Similarly to the sovereign operations, 46% projects are predominantly in the West Africa region. Additionally, 60% of projects are located in countries the Bank classifies as being low income or middle income. A major contribution of the Bank to agribusiness development during the implementation of AgSS 2010-2014 is, the African Agriculture Fund (AAF), which was created in 2010 and has now about US$ 250 million. Since 2008, US$0.5 billion was committed in non-sovereign guaranteed projects like the Morocco Office Chérifien des Phosphates (phosphate production, Morocco) or OKIPP (Oku-Iboku Pulp & Paper, Nigeria), while private equity funds such as the Agri-Vie, an equity participation in SMEs in the agribusiness sector. These investments cover the agriculture value chain from production to processing. However, only sizeable projects can benefit from Bank support, mainly because of the AfDB's transaction costs and timeline. Particular attention will be paid in the future to increase the inclusiveness of Bank-financed project, for instance via small and medium-scale enterprise (SME) linkages for industrial projects or out-grower schemes with smallholder farmers for industrial plantations.

Figure 21: AfDB capital approvals by sub-sector and region (UAmn, 2006-2014)



Source: AfDB 2014

The Bank has also been at the forefront in supporting RMCs to manage their natural resources. This is done by: (i) supporting the sustainable development of fisheries; (ii) participatory forest management; and (iii) the restoration of degraded land and ecosystems. The Bank has also taken part in initiatives to reduce emissions from deforestation and forest degradation (REDD+) through the financing the Forest Investment Program (FIP) and Congo Basin Forest Fund (CBFF). However, the continued degradation of renewable natural resources, due to climate change and demographic pressure, requires more consistent investment and improved governance to enhance the resilience of production bases and ecosystems.

The Agriculture Sector Strategy 2010–2014 (AgSS) was aimed primarily at: (i) improving rural infrastructure, including water management and storage, and trade-related capacities for access to local and regional markets; and (ii) extending the area that was being sustainably managed to improve the resilience of the natural resource base, and thereby protect investments. A review of the achievements realized during the AgSS period is summarized below.

Table 5: Key achievements of the Agriculture Sector Strategy 2010-2014

Targets	Achievements
8.5 billion m³ of water mobilized	101 billion m^3 of water were mobilized
10,000 km of feeder and access roads to be constructed	8,791 km of roads were constructed
10 RMCs with market access to be incorporated in CAADP compacts	24 RMCs have signed compacts with market access incorporated
3 RMCs to have improved fisheries services	12 RMCs have improved fisheries services
3 RMCs with improved livestock services	25 RMCs have improved livestock services

10 renewable energy schemes to be elaborated	582 schemes elaborated
Targets	**Achievements**
50,000 professionals to be trained in good agricultural practices	322,255 professionals trained in good agricultural practices
50,000 hectares of protected areas	5,349,223 hectares of protected areas
50,000 hectares of community forest plantations to be created	47,604 hectares of community forest plantations have been created
A framework paper and business action plans for water mobilization, post-harvest losses, and capacity building to be prepared	A water business plan and a framework paper for reduction of post-harvest losses were prepared; no paper on capacity building was prepared
Country-specific action plans prepared	No country-specific action plans were prepared; rather, approved relevant projects in the selected RMCs were designed to address: (i) business action plans for water mobilization, (ii) post-harvest losses, and (iii) capacity building
60 projects / programs in the sector portfolio with gender mainstreaming	Mainstreaming gender for OSAN's Project Appraisal Reports increased from 83% in 2013 to 100% in 2014
16 projects / programs with climate proofing	35 projects were approved with climate proofing
25 projects / programs with a project completion report (PCR)	109 PCRs were completed
35 projects / programs with completed mid-term review (MTR)	59 MTRs were completed
25 projects / programs with environmental and social management plans (ESMPs) / audits carried out	74 projects / programs with ESMP / audits carried out in 2011, 2013 and 2014

Furthermore:

- An agricultural water business plan (AWBP) was developed to support global efforts to develop an area up to 500,000 hectares and increase the water storage capacity of Africa by at least 1.0%. The Bank Group financing for 48 agricultural water management and water storage projects amounted to UA808.92 million. This solely Bank-financed support brought an additional area of 142,798 hectares under improved water management and increased water storage by 4,116 billion cubic meters. In effect therefore, Bank support met just less than 30% of the global target hectares.

- The implementation of agricultural water management and water storage projects has helped to increase agricultural productivity, through crop intensification and support to farm households in the targeted countries to make productive use of irrigation systems, and/including multiple water use. The total approved financial resources in support of implementation of the AWBP were UA924.31 million, with a shortfall of 47%. As a result of reduced financial allocation to the business plan, the total agricultural water management area and water storage targets were not fully achieved.

ANNEX II: LESSONS LEARNED FROM PAST BANK AGRICULTURESTRATEGIES[41]

Recent Bank interventions (under the 2010-2014 AgSS) have primarily focused on building infrastructure for sustainable agricultural development, including rural roads, irrigation, storage facilities, and markets – its areas of comparative advantage. The Bank has collaborated with other specialized agencies such as the Food and Agriculture Organization (FAO), the International Fund for Agriculture Development (IFAD) and others better positioned to intervene in different parts of the value chain, such as seeds, fertilizer, and research and extension. The Bank has also made efforts to leverage funds from partnerships and trust funds to complement its traditional funding sources (the African Development Fund [ADF], African Development Bank (ADB) and Nigeria Trust Fund [NTF]), in order to meet the demands of its RMCs in the agriculture sector. The Bank has also mobilized resources from global funds such as the Global Agriculture and Food Security Program (GAFSP) and climate investment funds, including the Pilot Program on Climate Resilience (PPCR) and the Forest Investment Program (FIP).

A mid-term review (MTR) of the AgSS found that overall the Bank had made good progress in implementing the strategy. While being proactive in supporting the demands of the Bank's RMCs, the Bank has aimed to remain selective, focused, and innovative. More than 80% of the agriculture sector's approvals between 2010 and 2012 were allocated to rural and value-chain development. The MTR further highlighted that the Bank was particularly successful in leveraging resources through partnerships, co-financing, and initiatives. The AgSS MTR identified the following lessons, which could be learned in guiding the Bank's future interventions in the agriculture sector: (i) the need to develop large-scale privately owned and managed operations in low-income countries, similar to its interventions in middle-income countries; (ii) the need to improve capacity building within the Bank to ensure effective implementation; (iii) the importance of enhancing strategic thinking with a repositioning of operations to focus on infrastructure development; (iv) the need to increase the Bank's dialogue with Regional Member Countries (RMCs); (v) that the Bank should improve collaboration between projects; and (vi) that it should improve monitoring and evaluation of projects, which should include measuring outputs at several levels, including at the regional and country levels.

Mainstreaming gender through the Bank's interventions in the agriculture sector was identified as a major shortfall in the AgSS mid-term review. The MTR identified the need for better handling of gender issues in agriculture projects, beyond disaggregated indicators by gender. The MTR also identified the need to develop the relevant gender analyses and tailored gender interventions. The Bank faces challenges in mainstreaming gender in project design and assessing the gender impact of projects and programs. This is majorly due to insufficient sex disaggregated statistics, and gender-sensitive baseline and gender-specific information.

Although the Bank Group remains a significant player in the agriculture sector in Africa, it has made only limited use of all available instruments and capacities to support the sector. Bank Group support to agriculture has been predominantly from the public sector window and directed mainly to ADF-eligible countries. Use of sector budget-support instruments, for example, has been limited. There is tremendous scope for the Bank to expand its support to agriculture in all its RMCs, including through the private sector. In this regard, the Bank needs to market itself more prominently in RMCs as a development-financing

[41] *Developed by OSAN in 2015.*

institution that promotes innovative and sustainable solutions to support Africa's transformation in general and the agriculture sector in particular.

The share of bank-intermediated trade finance that is devoted to intra-African trade is limited, and comprises approximately 18% (US$68 billion) of the total trade finance assets of African banks.

ANNEX III: M&E Strategy and Results Framework

Monitoring and evaluation is core to the design of the ATA. Tracking progress is vital for agricultural transformation in Africa; transformation is an ambition that has failed to deliver in the past in part because ideas were transplanted without tailoring for unique contexts and transformation strategies were not revised when interventions under-delivered.

The inclusion of the ATA in Bank-wide performance management systems will ensure adequate monitoring and accountability for the proposed activities. The strategy makes use of existing Bank systems and will support increased monitoring at the Bank-wide, department, and project-specific level. In addition, new indicators will be added to the One Bank Results Measurement Framework (RMF) and the Executive Results Dashboard so that the Bank can monitor progress on indicators related to the Agricultural Transformation Agenda.

The results framework specific to the ATA includes indicators that capture results across the four goals of (1) ending extreme poverty, (2) eliminating hunger and malnutrition, (3) becoming a net agricultural exporter, and (4) moving to the top of strategic agricultural value chains. For all commodities, agro-ecological zones, and intervention mechanisms, monitoring and evaluation will entail the inclusion of agricultural transformation indicators in project results-based logical frameworks. Measurement of outcomes will also be strengthened by additional monitoring and evaluation throughout each project's lifecycle.

Monitoring and evaluation requires on collaboration across Bank departments. Efforts to monitor operations will be led by OSAN and a number of Bank departments, including ORQR. Successful monitoring and evaluation will also require close collaboration between the Bank, RMCs, and partner organizations, in order to invest adequate human and financial resources in measuring progress and results. To do so, monitoring and evaluation will build on the Bank's broader capacity development efforts, and Bank departments and staff will need to be held accountable for delivery, through the Executive Results Dashboard and other mechanisms.

The following results framework is pending structural refinement, and full population with baseline and target data. A final version will be included in the implementation plan annex to the strategy.

Figure 22: Comprehensive results framework

AfDB Agricultural Transformation Agenda						
Results Framework v.15						
Level 1: Agriculture and agribusiness development in Africa **Indicator**	**Unit**	**Base-line 2015**	**Indicative Target 2020**	**Indicative Target 2025**	**Associated CAADP Results Indicator**	**Source**
Goals						
Contribute to the end of extreme poverty						
% of people living under $1.25/day - target agro-ecological zones (AEZs)	%	49%	43%[42]	37%	1.1.1	World Bank, IFPRI
Incremental number or people lifted out of poverty	Million	0	65	130[43]	1.1.1	World Bank, IFPRI
Eliminate hunger and malnutrition						
Number of people hungry or malnourished	Million	240	120	0	1.2.1	World Bank, FAO, WFP
Become a net exporter of agricultural commodities						
Africa's net agricultural trade balance	$bn/yr	-35	-22	0[44]	2.2.2	FAO; IFPRI; Itracen
Move to the top of key agricultural value chains						
Africa share of cocoa grindings[45]	%, by value	21%	26%	30%	2.3.1	ICCO; FAO; AfDB
Africa share of green coffee market[46]	%, by value	10%	27%	41%	2.3.1	ICO; FAO; AfDB

[42] Includes 6 AEZ zones (humid, sub humid, semi-arid. Arid, highland and sub-tropical). The % is the result of lifting 130 million people out of poverty.
[43] In 2015, Africa was estimated to have 50 million farmers. Out of the total # of farmers, 52.4% were estimated to be involved in the priority AVCs included in this strategy (i.e., 26 million). The household size in rural Africa is 5, so the result is 130 million people.
[44] Target in 2020 based only on the priority AVCs and AEZs in the strategy. In 2025 this includes transformation of long term markets (i.e., sugar, advanced horticulture, sunflower oil and Irish and sweet potatoes). The main goal is to become a net exporter of agricultural commodities (i.e., have a trade balance >=0).
[45] Goal: Be the top global player in grinding. Therefore African needs to increase its grinding share to 30% to be better than Europe.
[46] Goal: Be the top global player in green coffee exports (i.e., market share of 40%).

Africa share of processed cashew nut market[47]	%, by value	36%	39%	42%	2.3.1	ACA; FAO; AfDB
Africa share of processed cotton market[48]	%, by value	10%	24%	38%	2.3.1	FAO; AfDB
Visions of success						
Self-sufficiency in key commodities[49]						
Rice self-sufficiency - Net trade balance (excludes intra-regional trade)	Million mT/yr	-9.6	-4.8	0.0	2.2.2	FAO; IFPRI
Wheat-self-sufficiency - Net trade balance (excludes intra-regional trade)	Million mT/yr	-37.2	-18.6	0.0	2.2.2	FAO; IFPRI
Maize self-sufficiency - Net trade balance (excludes intra-regional trade)	Million mT/yr	-22.3	-11.6	0.0	2.2.2	FAO; IFPRI
Aquaculture self-sufficiency - Net trade balance (excludes intra-regional trade)	Million mT/yr	-2.1	-1.1	0.0	2.2.2	FAO; IFPRI
Sorghum self-sufficiency - Net trade balance (excludes intra-regional trade)	Million mT/yr	-0.6	-0.3	0.0	2.2.2	FAO; IFPRI
Millet self-sufficiency - Net trade balance (excludes intra-regional trade)	Million mT/yr	-0.3	-0.1	0.0	2.2.2	FAO; IFPRI
Cowpea self-sufficiency - Net trade balance (excludes intra-regional trade)	Million mT/yr	-0.2	-0.1	0.0	2.2.2	FAO; IFPRI
Palm oil self-sufficiency - Net trade balance (excludes intra-regional trade)	Million mT/yr	-3.4	-1.7	0.0	2.2.2	FAO; IFPRI
Soy products self-sufficiency - Net trade balance (excludes intra-regional trade)	Million mT/yr	-10.5	-5.3	0.0	2.2.2	FAO; IFPRI
Livestock (cattle meat) self-sufficiency - Net trade balance (excludes intra-regional trade)	Million mT/yr	-0.5	-0.3	0.0	2.2.2	FAO; IFPRI
Livestock (poultry meat) self-sufficiency - Net trade balance (excludes intra-regional trade)	Million mT/yr	-0.9	-0.5	0.0	2.2.2	FAO; IFPRI
Dairy (fresh cow milk) self-sufficiency - Net trade balance (excludes intra-regional trade)	Million mT/yr	-9.4	-4.7	0.0	2.2.2	FAO; IFPRI
Horticulture self-sufficiency - Net trade balance (excludes intra-regional trade)	Million mT/yr	2.0	1.7	0.0	2.2.2	FAO; IFPRI
Be a top player of export-oriented value chains						
Cocoa - Rank of cocoa grinding by market share vs other continents[50]	Rank	2	2	1		ICCO; FAO; AfDB
Coffee - Rank of green coffee exports vs other continents[51]	Rank	3	2	1		ICO; FAO; AfDB

[47] *Goal: Increase exports of processed products until Africa is the top player in the value chain (i.e., 42% of market share).*
[48] *Goal: Double the African share of processed cotton products (including oil and cake of cotton seed; carded and combed cotton; and cotton waste and linters); this does not include cotton lint.*
[49] *Negative numbers represent imports. For African self-sufficiency, the trade balance must be equal to 0.*
[50] *Europe is currently # 1.*
[51] *America is currently # 1 and Asia # 2.*

Cashew - Rank of market share in the value chain vs other continents[52]	Rank	2	2	1		ACA; FAO; AfDB
Cotton - Double exports of African processed cotton products[53]	Multiplier vs 2015	1	1.5	2		FAO; AfDB
Leverage under-tapped productivity of strategic agro-ecological zones						
Guinea Savannah - % of people living under $1.25/day[54]	%	57%	47%	36%	1.1.1	World Bank
Guinea Savannah - % of land under cultivation[55]	%	10%	13%	16%		FAO; IFPRI
Sahel Region - % of people living under $1.25/day[56]	%	47%	39%	30%	1.1.1	World Bank
Sahel region - % of land under cultivation[57]	%	9%	9%	10%		FAO; IFPRI
Realize the opportunity for African starch						
Cassava import substitution of other products - Incremental processing capacity	Million mT/yr	0	4.2	11.8	2.3.1	AfDB
Outputs						
Average use of fertilizer per hectare in Africa[58]	Kg/Ha	32	56	80		FAO
Agribusiness as % of Africa's GDP[59]	% GDP	21%	27%	33%		FAO; World Bank
Well-funded private sector - investment by non-donors into agriculture (cumulative)[60]	$bn	0	145	290		AfDB
Number of farmers practicing climate-smart agriculture	Million	N/A[61]	10	25		CGIAR (CCAFS)

[52] Asia is currently # 1.
[53] Compared to 2015 exports of processed cotton products (inc. oil and cake of cotton seed; carded and combed cotton; and cotton waste and linters); does not include cotton lint.
[54] Baseline is 2014 data. Poverty reduction will happen all across Africa, but will focus in the priority AEZs (70-30%) given the intervention in this zones.
[55] Baseline is 2014 data. The increase from 2014 to 2025 is = to 31.2 million new hectares. In total there are 400 million ha of cultivable land in the GS. The increase is related to the surplus in production needed in terms of the following commodities: sorghum, millet, cowpea and livestock.
[56] Baseline is 2014 data. Poverty reduction will happen all across Africa, but will focus in the priority AEZs (70-30%) given the intervention in this zones.
[57] Baseline is 2014 data. The increase from 2014 to 2025 is = to 17.8 million new hectares. The increase is related to the surplus in production needed in terms of the following commodities: maize, soy, dairy, poultry and livestock.
[58] Goal in 2025 is to reach 50% of the average of other continents (i.e., America, Europe and Asia).
[59] Goal in 2025 is to reach the same level as countries where transformation has already occurred (i.e., average of % of agribusiness as % of GDP in Brazil, Mexico, Indonesia and Thailand).
[60] 2025 is the average of the annual, funding gap which is between $25-33 billion. AfDB is proposed as the key institution to measure this indicator.
[61] Assume nil, until validated data from national governments is reported.

Level 2: Bank's and its partners' contribution to agriculture and agribusiness development Indicator[62]	Unit (cumulative)	Base-line 2015	Indicative Target 2020	Indicative Target 2025	Associated CAADP Results Indicator	Source
Increased Realized Productivity						
# of additional farmers with access to input finance[63]	Million	0	1.0	2.1		AfDB
# of additional farmers using improved inputs, including micro-irrigation, fertilizer, and seed[64]	Million	0	1.0	2.1		AfDB
# of additional farmers using mechanized tools[65]	Million	0	0.6	1.2		AfDB
Realized Value of Increased Production						
# of additional farmers that are part of large off-take agreements or buyer schemes[66]	Million	0	1.0	2.1		AfDB
# of additional farmers using improved storage and other PHL technologies[67]	Million	0	1.0	2.1		AfDB
# of new APZs, processing clusters, or corridors[68]	Number	0	30	55		AfDB
Increased Investment in Hard & Soft Infrastructure						
New / improved feeder roads / access roads	km	0	20,000	40,000		AfDB[69]
% of farmers electronically registered (in countries with transformation)	%	<5%	50%	95%		AfDB

[62] *All units are cumulative unless the indicator specifically says that is it year-on-year.*
[63] *In 2015, Africa had ~50 million farmers; it's expected to have 58.8 million by 2025. Out of the total number of farmers, it is estimated that 52.4% are involved in the priority AVCs included in this strategy (i.e., 30.8 million in 2025). AfDB will reach 6.7% of the 30.8 million farmers (which is $24 billion out of the $320-400 billion needed for transformation).*
[64] *In 2015, Africa had ~50 million farmers; it's expected to have 58.8 million by 2025. Out of the total number of farmers, it is estimated that 52.4% are involved in the priority AVCs included in this strategy (i.e., 30.8 million in 2025). AfDB will reach 6.7% of the 30.8 million farmers (which is $24 billion out of the $320-400 billion needed for transformation).*
[65] *Given the assumption of 30.8 million farmers growing the priority commodities in 2025, AfDB is expected to reach 3.9% of the 30.8 million (3.9% is a subset of the 6.7% used before, focusing mostly in commodities that rely more on mechanized tools (e.g., Wheat and crops in the Guinea Savannah).*
[66] *Given the assumption of 30.8 million farmers growing the priority commodities in 2025, AfDB is expected to reach 3.9% of the 30.8 million (3.9% is a subset of the 6.7% used before, focusing mostly in commodities that rely more on mechanized tools (e.g., Wheat and crops in the Guinea Savannah).*
[67] *Given the assumption of 30.8 million farmers growing the priority commodities in 2025, AfDB is expected to reach 3.9% of the 30.8 million (3.9% is a subset of the 6.7% used before, focusing mostly in commodities that rely more on mechanized tools (e.g., Wheat and crops in the Guinea Savannah).*
[68] *In 2016, AfDB had a pipeline of 10 APZs, processing clusters, or corridors. It is assumed that 50% of that pipeline each year moves forward. This value means that in 2025, AfDB will have a 25% participation in the total # of APZs, processing clusters, or corridors required for the ATA.*
[69] *From the AfDB "Agriculture and Agribusiness Strategy 2015–2019."*

Increase Supply of and Access to Agriculture Finance						
Commercial bank lending: % of partner commercial financial institution portfolios invested in ag[70]	%	[~4-6%][71]	10%	17%		AfDB
Catalyzed private sector investment into agriculture and agribusiness sector (cumulative)[72]	$bn	N/A[73]	20	41		AfDB
Cumulative investment in agriculture and agribusiness SMEs by AfDB[74]	$bn	0.3	1.2	2.4		AfDB
Improved Agribusiness Environment						
% of farmers with clear title / access rights / beneficial use rights (in countries with transformation)	%	N/A[75]	25%	50%		AfDB
# of countries supported by AfDB in implementing ATA-aligned policy reforms[76]	Number	0	>30	>40		AfDB
Average score for Africa in the Enabling the Business of Agriculture Index (in countries with transformation)[77]	Number (Max 100)	54	>65	>80		World Bank; AfDB
Increased Inclusivity, Sustainability, and Nutrition						
Increased number of women receiving SMEs credit for agriculture	Number	0	150,000	300,000[78]	2.3.1	AfDB
Increased number of youth accessing agri-business economic opportunities (excludes jobs from Enable Youth)	Number	0	40,000	200,000[79]	2.3.1	AfDB

[70] Assumes 50% of the gap is filled by commercial lending and that the partner commercial financial institution lends 2x more than other banks.
[71] This use current annual lending, which is $660m (4.8% of ~$14bn), as a proxy.
[72] ATA needs to catalyze USD 250-330 billion in 10 years from non-donors, of which ~50% will come from the private sector. This money will be raised using more than just AfDB money, so AfDB is only accountable for a part of it, which we estimate will be ~USD 2.4 billion out of USD 8.5 billion (the 8.5 includes government, ODA and donor funding, and current commercial lending).
[73] Does not apply in 2015.
[74] OSPD investment was USD 0.6 billion over a five-year period. Assuming 50% typically goes to agriculture and agribusiness SMEs (USD 0.3 billion), this amount is assumed to increase by the same amount as the OSAN budget (4X).
[75] Assume nil, until validated data from national governments is reported.
[76] By 2025, more than 40 out of the 54 RMCs in Africa will be supported by AfDB to implement ATA-aligned policy reforms.
[77] Baseline is the average of African countries as measured in the 2016 edition of the "Enabling Business of Agriculture Index" of the World Bank for all topics. Target in 2020 is to be top 10 by score, and in 2025 to be top 5 by score.
[78] AFAWA has a target capitalization of USD 300 million. The average loan size is assumed to be USD 1,000.
[79] From the Jobs for Youth High 5 Agenda results framework. This number does not include Enable Youth figures, and therefore might be different from the numbers used in Employ Africa.

ENABLE Youth: # of agribusinesses started by youth agripreneurs	Number	0	6,774	10,197[80]	2.3.1	AfDB
Number of farmers practicing climate-smart agriculture	Million	N/A[81]	0.7	1.7[82]		AfDB
# of people no longer malnourished[83]	Million	0	11	21		AfDB
# of children aged 0-5 years with access to nutrient-rich foods (children who were affected for severe wasting)[84]	Million	0	0.2	0.4		AfDB; UNICEF, WHO
ATA Partnership						
# of commodity-specific multi-stakeholder transformation agenda working groups	Number/yr	0	9[85]	18	3.4.1	AfDB
# of collaborations (projects) resulting from PATA participation	Number/yr	0	>9[86]	>18		AfDB

[80] In Nigeria, ENABLE Youth's expected outcome is 37,000 agripreneurs in 5 years. If all of them go into agribusiness and assuming a 50% failure rate, we would have 18,500 new businesses. AfDB is contributing USD 300 million out of USD 2.8 billion, which is the total cost of the project (~10.7%). We assume the same impact per dollar will be replicated in all other countries. For all countries already in the pipeline, investment will be for the first 5 years; for all other countries, it will be from 2020 to 2025.

[81] Assume nil, until validated data from national governments is reported.

*[82] Equivalent to 6.7% of the 25 million farmers expected to be practicing CSA by 2025 in Africa (based on USD 24 billion out of the total USD 400 billion). *Assume nil, until validated data from National governments reporting*

[83] In 2015, ~240million people were malnourished in Africa. This number is expected to reach 315 million by 2025 (based on population growth). The ATA is expected to feed Africa and make this number close to zero. AfDB will be responsible for reaching 6.7% of them (USD 24 billion out of the 320-400 billion needed for transformation).

[84] UNICEF-WHO-World Bank reports estimate that in Africa in 2014, 4.3 million children were severely wasted; projected by population growth, this means that ~5.6 million children will be affected by 2025. The ATA is expected to feed Africa and make this number close to zero. AfDB will be responsible for reaching 6.7% of them.

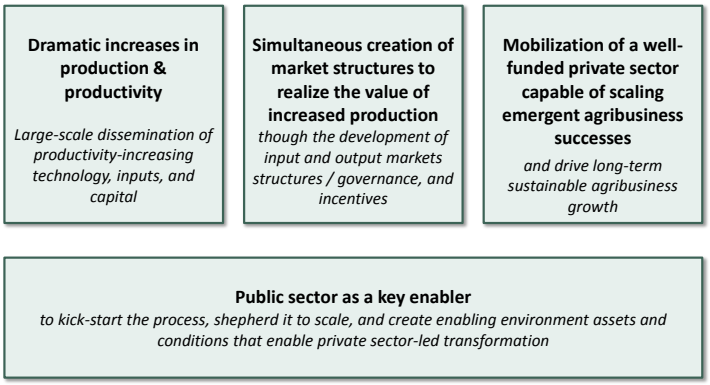
[85] By 2025, there would be 18 Tier 1 and Tier 2 commodities undergoing transformation; each one would ideally have a specific multi-stakeholder working group.

[86] Assumes at least one collaboration per year by each commodity-specific working group.

ANNEX IV: OVERVIEW OF STRATEGY INITIATIVES

The implementation of the Agricultural Transformation Agenda involves identifying a focused set of agricultural commodity value chains to transform, and creating the conditions for transformation: (i) dramatic increases in production and productivity through the dissemination of productivity increasing technology, and raised input and mechanization intensity; (ii) the creation of organized and well-functioning markets to fully realize the value of increased production; and (iii) ensuring the creation of a well-funded private sector that is capable of taking emergent successes to scale.

There is a critical role for the public sector to enable transformation, by kick starting the process, shepherding it to scale and creating the enabling environment policies, reforms and associated investments in assets (especially infrastructure) that will allow private sector agribusiness to grow to scale.



The implementation of the Agricultural Transformation Agenda from the perspective of the public sector therefore involves enabling transformation, and specifically in 7 areas, as outlined below:

A series of ~35 specific enabling 'initiatives' exist, underneath the above set of enablers; bringing these together for a specific RMC, to address the requirements for transformation for their specific situation and target agricultural commodity value chains, as well as an associated borrowing plan, constitutes a country-level transformation agenda against which resources and activities can be deployed to implement.

In an upcoming 'Implementation Plan' annex to the draft strategy a full exposition of each of these initiatives, including overall objectives, structure, potential execution actors (including the Bank and/or other Partners as appropriate) is provided. A summary of key initiatives is provided in the following table:

Table 6: The major initiatives for the transformation

Type	Name / description	Proposed implementing partners	Related existing AfDB funds[87]
Enabler #1: Increased Realized Productivity	**TAAT** : increase investment into agriculture research and technology dissemination by supporting the CGIAR in creating a clearinghouse of proven agricultural transformation technologies that are tailored to the African context, and are ready to be scaled beyond pilots	• IITA, FARA • IFPRI and other CG centers	
	Inputs finance and agro-dealer network development: provide capital for domestic input production, extend concessional financing to lower the costs of input purchases for farmers, and help to broker off-take agreements with large agricultural buyers in order to improve the value proposition of improved inputs for farmers with limited market access	• AFAP • WFP-PPP • AGRA • Microfinance actors (e.g. PAMIGA)	• African Fertilizer Financing Mechanism (AFFM) • Rural Water Supply and Sanitation Initiative (RWSSI) • African Water Facility (AWF) • African Agriculture Fund (AAF)
	Mechanization Program: expand mechanized agricultural equipment hiring by partnering with RMC's to create equipment hiring enterprises and complementary manufacturing and repair workshops by providing concessional financing for equipment hiring and purchase in more mature markets and fund technical assistance and data collection on mechanization access across Africa	TBC	
	Develop **agro-dealer supply systems**: Partner with large buyers to guarantee uptake of final produce which would incentivize farmers to use inputs, also partner with distributors to ensure steady supply of inputs Support wide-scale deployment of innovative **farmer extension models**: Support effective private sector led approaches to the provision of farmer extension services	• WFP-PPP • IDH • Yara • Digital Green • FAO • IFAD	

[87] *Includes existing AfDB funds with activities that can synergize with the ATA or that entail a direct expansion of the fund by incorporating the proposed initiative.*

Enabler #2: Realized Value of Increased Production	**Post-Harvest Loss Prevention Facility:** provide long term financing and a technical assistance facility to producers and retailers of proven, culturally appropriate PHL solutions; in addition, create a window for leasing PHL equipment by agricultural cooperatives and SMEs via on-lending	• Rockefeller Foundation • GAIN • FAO	• AAF • Agriculture Fast-Track Fund
	Warehouse receipts systems: increase the number of licensed warehouses that can be used by African commodity exchange by providing financing to SME's, farmer organizations, among other, towards building warehouses and training warehouse staff on requisite quality standards	• World Bank	
	Agro-processing zones and corridors: Provide funding towards concentrating resources such as input supply, transportation, storage and marketing in order to alleviate logistical constraints to production and value addition and strength value chain linkages between producers and processors within high potential areas	• UNIDO • DFID	• Agriculture Fast-Track Fund
	Scale-up and replicate innovative models **to organize and aggregate farmers**: Support effective approaches to organizing farmers through farmer groups, cooperatives or other innovative ways Establish **agricultural commodity exchanges**: Offer analysis, advice, and support to the growing number of country-level and regional commodity exchanges	• FAO • WFP • AGRA • World Bank	• Fund for African Private Sector Assistance (FAPA)
Enabler #3: Increased Investment in Hard & Soft Infrastructure	**ATA Infrastructure Coordination:** accelerate and coordinate development of enabling hard infrastructure (energy, water, transport, logistics, ICT) projects within the overall Bank infrastructure pipeline as well as with outside partners.	• IFC • IFAD	• Infrastructure Consortium for Africa • RWSSI • Sustainable Energy Fund For Africa (SEFA) • AWF
	Market infrastructure: build market centers with a focus on integrating the strategy's focus value chains into market selection, planning, and support; the Bank will also build associate service infrastructure such as warehouses, cold storage units, feeder roads, among others	• USAID	• Fund for African Private Sector Assistance (FAPA)
	Farmer e-registration: support the creation of electronic databases to facilitate large scale registration of farmers at a national level in order to facilitate direct distribution of input vouchers and other vital service to farmers	• GSMA	• Agriculture Fast-Track Fund
Enabler #4: Expanded Agricultural Finance	**Risk-sharing Facility:** Scale up continental risk-sharing and portfolio refinancing for agricultural debt by setting up a continental risk-sharing facility (comprising loans and guarantees) with the objective of catalyzing private investment and bank lending in the sector	• KfW	

	Non-Bank SME Finance and Capacity-Building: Build long-term agriculture sector capacity, develop innovative vehicles for dedicated SME financing and provide technical assistance to investment funds and other non-banking financial institutions that provide equity and working capital finance for SMEs in agricultural value chains. Provide direct funding, technical assistance and capacity-building to SME funds as well as surrounding ecosystem players (e.g. credit bureaus and data analytics providers).	• KfW • IFC	• Making Finance Work for Africa Partnership (MFW4A) • AAF • NEPAD-IPPF
	Project Finance Facility: Support value chain strengthening through two activities: i) structured finance in syndicate deals with commercial banks and other creditors (e.g., mezzanine debt, credit guarantees, etc.) to advance public-private partnerships and other infrastructure projects aligned with the ATA's objectives, and ii) project development and other advisory services to increase quality of agricultural infrastructure projects throughout the continent. The two can be performed independent of each other.	• IFC • IFAD	• NEPAD - IPPF
	Trade Finance Facility: Provide financing in strategic agriculture value chains for intra-African and inter-continental trade by scaling up existing trade finance activities of the Bank	• IFC	• Soft Commodity Finance Facility • Africa Trade Fund (AfTRA)
	Sovereign Risk Support: Scale-up the Africa Risk Capacity (ARC) initiative of the African Union to build sovereign insurance solutions to address agro-ecological shocks across the continent; the Bank will capitalize the ARC, providing technical assistance, and convene partners and governments	• ARC • AU	
	Diaspora Bonds: Support the creation and issuance of diaspora bonds by African states by the Bank using its brand presence, expertise, relationship to governments, and institutional partners to overcome the regulatory, financial, and reputational challenges to issuing a bond	• World Bank	• Making Finance Work for Africa (MFW4A)
	Facilitate **lower lending rates to agriculture players** through Central Bank funds: incentivize banks to lend to farmers and agro-enterprises by supporting the establishment of a risk sharing facility which guarantees loans to the agriculture sector **Deepen and broaden agricultural insurance markets**: de-risk lending to the agricultural value chain by supporting expanded insurance facility	• MFIs and aggregators	• Making Finance Work for Africa Partnership
Enabler #5: Improved Agribusiness Environment	**Policy reform matrix:** coordinate establishment of an Africa-wide policy matrix detailing the five groups of key policy changes required to enable the transformation sought by the ATA; key policy areas would be: (i) Land tenure, (ii) Input subsidies, (iii) incentives for local production and processing, (iv) financial sector deepening, (v) Regional integration and trade	• World Bank • IFPRI	

	Global Program for Improving Agricultural Statistics and Rural Development: improve statistical systems across African countries by building capacity in national ministries as well as providing technical assistance	• UNECA • FAO	• Global Strategy to Improve Agriculture & Rural Statistics Fund
	Facilitate land tenure reform through the **Africa Land Policy Center** The Bank will continue to support RMCs in addressing specific challenges in land administration and reform. Land, which is the dominant agricultural resource and forms the basis of subsistence and investment, will require particular attention. Policies on rights of access to, and responsibility for control over, land is central to understanding patterns of rural growth and stagnation, social inclusion, and geopolitical dynamics. The Bank will continue to support RMCs to create a proper institutional and policy environment for sound land management. An integral part of this is to ensure that the different pressures on land, including the recent surge in land speculation practices, are closely monitored and proper actions taken at the right time. Provide technical advisory to governments to support **agriculture development bank set-up / reform** Strengthen **capacity of private-sector actors'** (e.g. Chambers of Commerce) **to advocate for favorable policies** Support development of **Agribusiness Environment indices**	• ALPC • World Bank	• Fund for African Private Sector Assistance; • Global Strategy to Improve Agriculture & Rural Statistics Fund
Enabler #6: Increased Inclusivity, Sustainability, and Nutrition	**AFAWA Facility:** establish a facility to promote women-owned MSMEs The AfDB will improve women farmers' incomes and social welfare by improving their access to credit for agriculture and agribusiness. The Affirmative Financing Action for Women (AFAWA) Facility will improve women's access to credit by de-risking bank investments in women-owned agriculture and agribusiness enterprises, as commercial banks in Africa are currently hesitant to lend to women, who typically have little to no collateral given low levels of land tenure.	• GREAT	• African Agriculture Fund (AAF)
	Youth Jobs for Africa Agricultural Flagship Programs: establish facilities to increase youth employment and enhance skills in agribusiness (e.g. ENABLE Youth)	• IITA • FARA	

	Climate Resilience Funding: provide funds to support climate adaptation and climate-smart agriculture practices Eligible investments would include large-scale sustainable and climate-smart agriculture, agroforestry, ecotourism, and agri-tourism projects, including in partnership with funds that have demonstrated success in managing and scaling sustainable agriculture projects in Africa, such as the Livelihoods Fund for Family Farming, the Moringa Fund, and the Althelia Climate Fund. Invest in country level systems and data to support Climate-Smart Agriculture practices and agriculture sector resilience; develop the acquisition, application and management of big data for resilience decision tools and services; invest in country-level infrastructure and training for meeting CSA targets, monitoring GHG emissions and supporting innovation; support the design and development of agriculture climate risk tools and products.	• CGIAR CCAFS • World Business Council for Sustainable Development	• Africa Climate Change Fund • Congo Basin Forest Fund (CBFF) • Clim-Dev Fund • Agriculture Fast-Track Fund • African Water Facility (AWF) • Climate Investment Funds (CIF)
	Encourage scale-up and replication of **nutrition programs (through the Nutrition Trust Fund and other mechanisms)** AfDB will improve food security and prevent malnutrition by increasing support for community-led nutrition programs in high-need countries. The trust fund will initially invest in initiatives such as harmonizing norms for bio-fortification across countries, and capacity-building at the country level. Beyond this fund, the Bank will also seek to finance programs to support the increased production of nutrient-rich foods. Increase representation of women in agricultural research Enhance gender-responsive research, monitoring, and evaluation	• BMGF • Micronutrient Initiative • Dangote Foundation • AWARD • GREAT	
Enabler #7: Partnership for Agricultural Transformation in Africa	**Agricultural Partnership for Transformation in Africa:** House and convene the 'Agricultural Partnership for Transformation in Africa'	• AUC • UNECA	
	Support pan-African agriculture leadership initiatives (e.g. Leadership 4 Agriculture)	• L4Ag (Rockefeller Foundation)	

It should be noted that while the ‘proposed partners’ are logical options for many reasons, RMCs will have the flexibility of working with others and final partner selection will be based on which organizations are more competitive for with respect to the required services.

ANNEX V: HIGH-LEVEL AFDB CAPABILITIES GAP ASSESSMENT

Skill	Assessment	Required resources	FTE require-ment (OSAN)
Applied Agricultural R&D	**Limited prior experience:** The OSAN team does not contain any experts in the area of agricultural R&D. While the AfDB has contributed significantly to the design of the TAAT program, it does not yet house permanent expertise in the related areas.	While the Bank will not be directly involved in R&D itself, it will need to liaise with the CG system and national agricultural research institutes (NARIs). In particular, staff will need to manage the integration of CG input across the Bank's borrowing plans and into the design of specific projects. This FTE will need to have previous experience – whether academic or practical – with barriers to development and dissemination of context-appropriate technologies in Africa so as to identify appropriate projects for and make informed decisions regarding the exchange of and dissemination of technology across projects. He/she will also need to be able to manage activities across a large portfolio of ongoing projects.	2
Agro-Inputs and Agro-Dealer Networks	**Some expertise, but scale-up required:** Previous experience with AFFM can be leveraged as a strong foundation for increasing agro-input investments and working with partners developing agro-dealer networks.	The Bank will need to expand its input systems expertise to work both directly on expanding the AFFM and also to work with the public and private sector to further develop agro-input supply systems and networks. While the Bank—with the primary role of investor and program architect—will not necessary work directly with farmers and agro-dealers, it will need to be able to understand the underlying economic and structural problems and work intelligently with key actors in these spaces (e.g., AGRA). The required FTE(s) must have previous experience with the planning and establishment of successful public and private agro-inputs systems. They will understand the requirements for and barriers to growth of these systems and be able to display prior instances of working with key stakeholders involved, including farmers, implementers of government subsidy programs, and private suppliers, among others.	2
Agribusiness and Agro-Industry	**Some expertise, but scale-up required:** The Bank has previous experience in agro-industry and agribusiness, having provided 12% of its portfolio spending since its creation for private sector enterprises in cash crop production and processing. However, over 90% of project spending is on cash crop agriculture (particularly plantation farming),	The AfDB will require expertise in both agribusiness and agro-industry. The agribusiness expert(s) will need to understand necessary considerations for SME growth and the commercialization of agriculture, in particular those related to finance. They will need to work closely with private sector experts at the Bank to scale up investments in agribusiness. The agro-industry expert(s) will need to be able to reference previous experiences to display a deep understanding of the investments required for the development of necessary infrastructure to support industrial agriculture – particularly for	3

Skill	Assessment	Required resources	FTE require-ment (OSAN)
	reflecting a relatively limited exposure to processing.[88]	commercialization and agro-processing. Both sets of experts will work closely on helping to establish agro-processing hubs in promising zones and along key corridors. They will also inform on necessary enabling infrastructure.	
Agricultural Infrastructure and Rural Development	**Adequate expertise at scale:** The Bank has a strong track record in both general and agricultural infrastructure such as roads and markets.	While the requisite expertise may exist within OSAN, the Bank may need to consider deploying some of these experts to the general energy and infrastructure departments so as to ensure the prioritization of rural needs. Additionally, regular communication and collaboration between 'Feed Africa' and other relevant complexes will be necessary for ensuring that actual projects are coordinated. For example, those planning major road projects should account for connections to feeder roads and those planning feeder roads projects should consider how best to integrate them with the broader logistics network.	3
Agricultural Finance	**Previous experience, but need to develop expertise at scale:** The Bank has significant experience working with commercial banks across an array of issues, including trade credit, project finance, on-lending for microfinance, and credit guarantees. It should be noted, however, that the Bank's financial sector activities have not historically prioritized agriculture, and initiatives outside of the bank's core commercial bank support, such as rural microfinance, have produced more mixed results. The Bank has some experience managing investment and guarantee funds, such as the USD 250 million African Agriculture Fund managed by Phatisa and the USD 67 million African Guarantee Fund, although the bulk of its experience with non-banking financial institutions occurred in the context of projects concerning other sectors. The Bank's financial tools for doing so—lines of credit	Given the specific requirements for the agricultural sector, in terms of product design and technical knowledge of these features, the agriculture team will need its own specialized investment experts to provide technical and advisory services aimed at preparing and supporting private sector and public-private partnership (PPP) operations. Some of these staff members will also need to drive mobilization of domestic and foreign resources for investment in the ATA through co-financing operations with other institutions, commercial banks, and export credit agencies. The required FTEs must have a background in agricultural finance, economics and/or business and be able to display an understanding of financial markets and, in particular, the farm credit system. They will have previous experience expanding access to finance, particularly for rural and other underserved populations, as well as designing and/or using innovative financial instruments to crowd-in new – especially private – sources of financing. Given the important task of resource mobilization, they should also display a history of or potential for generating private investment in agriculture. *(Note: this applies to the combined profile of the FTEs; thus, not all 5 FTEs need to bring the full range of experience individually)*	5

[88] Dalberg analysis, AfDB Project Database, 2016

Skill	Assessment	Required resources	FTE require-ment (OSAN)
	and risk participation agreements—remain very traditional. More generally, OPSD currently lacks the necessary agriculture expertise to scale up agribusiness investments.		
Policy Analysis and Development	**Previous expertise, but need to develop expertise at scale:** The Bank's current track record on policy is limited, with clients indicating that one of the main barriers to selecting the Bank as a preferred development partner is its limited engagement in policy formulation and expertise. Stakeholders are genuinely encouraging the Bank to develop capacity in this role as a natively African institution capable of providing policy advice and facilitating policy formulation, particularly on infrastructure, agriculture and food security, employment promotion, reducing inequality, climate change adaptation, and investment promotion. [89] Currently, OSAN does not have a sufficient number of policy experts, and has not been able to decisively become a leader on country-level policy dialogue and advice. However, ONRI has been building some of these capabilities.	The Bank will need to hire policy experts that can be relied upon to conduct policy analysis and development, advocate for these policies through continental and regional economic bodies, and support governments and private sectors actors in doing similar activities over time. In particular, these experts will need to focus their efforts on pushing an agenda of key agricultural policy priorities as defined in the ATA policy matrix. The priorities have been proposed as input subsidies, land and property rights, regional integration and trade, incentives to develop local industries and markets, and financial sector deepening. However, these may be adjusted through partner consultation, particularly with the World Bank. Regardless of the final list of priorities, these experts must have a command of the subject matter and must have the credibility to convene relevant key actors (e.g., UNECA, World Bank) so as to effectively advocate for the change required to enable agricultural transformation. They will work with IFPRI through the TAAT as well as with other policy teams within the Bank. The required FTEs must have previous experience developing and advocating for agriculture-related policy at multiple levels (e.g. national, regional, international) in the African context. They must have a deep understanding of and/or past working relationship with the most relevant actors mentioned earlier (e.g. UNECA, World Bank, IFPRI). At least one FTE must also have experience engaging the private sector in policy advocacy.	2-3
Climate-Smart Agriculture	**Some experts, but scale-up required:** The ClimDev-Africa Special Fund group within OSAN and other climate actors at the AfDB do some work around climate adaptation.	The Bank will need to ensure that the agricultural organization has expertise focused exclusively on climate-smart agriculture and best practices. More specifically, these team members will need to display a deep understanding of previous and current trends in CSA as well as how to adapt these to different local African contexts and career in climate change issues that spans the past 10-15 years significant developments in the space. They will need to convene	2

[89] AfDB. 2012. "The preferred partner – a client assessment of the AfDB."

Skill	Assessment	Required resources	FTE require-ment (OSAN)
		platforms and forums for demonstrating CSA approaches and exchange ideas on practice. They will also need to possess the technical skills to evaluate proposals for the design and development of agriculture climate risk tools and products. These FTEs will work with the existing OSAN climate team as well as the broader group working on climate resilience across the Bank.	
Gender	**Some expertise, but scale-up required:** While there a Bank-wide Special Envoy on Gender, there is only one gender expert on the OSAN team.	The Bank will require agriculture-focused gender expertise to ensure that all aspects—both in terms of implementation and M&E—of the ATA are as gender-responsive as possible. The required FTE must have previous experience working specially at the intersection of gender and agriculture, with particular consideration given to access to productive resources and finance, as well as inclusive political and institutional representation.	2
ICT	**Previous experience, but need to develop expertise at scale:** The Bank's communication portfolio currently accounts for only 1% of its total resource allocation, illustrating the relatively constrained scale of activities from the AfDB in this area. Unlike other infrastructure, much of the ICT network growth has been spearheaded by private sector actors, and efforts to deepen the Bank's engagement with the sector will require close collaboration with the major telecommunications and network providers of the continent.[90] The Bank has historically interacted very little with innovative technology solutions providers, due in part to the differences in ticket sizes, funding models, and risk appetites of technology start-ups and NGOs and major development banks; however the financial inclusion team within OFSD is working to change this.	The Bank will need to develop in-house expertise to stay apprised of trends in—and be able to coordinate large scale deployment of—agriculture and agribusiness ICT (e.g., farmer e-registration and mobile platforms for facilitating transactions). These projects involve new and often cutting edge technologies that may have limited track records, will involve taking a more VC-type approach to managing investments, and potentially a more interventionist approach. As the Bank gains clarity on the role of ICT in driving financial inclusion, information dissemination, and service deployment in agricultural value chains, there are also opportunities to capture and leverage lessons from repeated deployments, further supporting the rationale for deepening in-house capability to institutionalize capacity and know-how and drive success and return on ICT-for-Agriculture investments. The required FTE(s) must be able to display and understanding of current trends in use of ICT, such as computers, mobile phones, satellites, applications, information systems, and digital platforms, to enable and enhance agricultural production at a variety of stages. In particular, they will have had experience using these to farmers' access to products, services and information.	3

[90] AfDB Project Database. 2016.

Skill	Assessment	Required resources	FTE require-ment (OSAN)
Technical Analysis	**Some expertise, but scale-up required:** The ESTA team launched the Global Program for Improving Agricultural Statistics and Rural Development and has since developed a set of agricultural indicators and begun collecting data. The team has collected one year's worth of data (2014) from 40 countries, is working with national governments to improve agricultural statistics, and will be working on an ATA-specific composite indicator.	The Bank will require a large enough team to both collect the necessary data, track progress against ATA goals, and build the capacity of national governments to contribute more to these activities over time. Currently, the ESTA team is responsible for agricultural M&E. In addition to the current three AfDB FTEs and 14 consultants, it may require additional permanent staff based at the Bank to collate data and run analysis. Regardless of how ESTA is further built out, the OSAN team will need to track progress and ensure that it is adjusting its activities accordingly towards achieving its goals. Specifically, these FTEs should have some background in econometrics, as well as previous experience conducting statistical analyses and using and assessing M&E frameworks.	2-3
Total proposed additional FTEs			**26-28**

Annex VI: Indicative Project Pipeline for 2016-2019

Country	Project Title
Algeria	Appui Technique à la mise en place de l'Agropole de Setif et de Cluster de Pêche de Zemmouri
Algeria	Appui Technique à la modernisation de l'irrigation
Angola	Cabinda Province Commodity Value Chain Development
Angola	Support to Angola Agriculture Transformation Program: Consists of: (i) Lobito Agricultural Corridor Development Project; (ii) Northern Provinces Agriculture Value Chain Project; and (iii) Southern Provinces Value Chain Development Project.
Benin	PPF for National ENABLE Youth Program
Benin	PAGEFCOM II - Gestion forets communales
Benin	Integrated Prog for Dvpt & Clim change Adaptation in Niger Basin (ABN II)
Benin	Projet Appui au Dvpt Participatif pour la Pêche & Aquaculture II
Benin	Projet d'appui à la gouvernance du secteur agricole (Appui budgétaire sectoriel)
Burkina	Projet d'insertion des jeunes et des femmes dans les secteurs agro-sylvo-pastoraux, halieutiques et fauniques (PIJEF) PPF
Burkina	Projet emploi des jeunes
Burkina	Projet chaînes de valeur dans les hauts bassins
Burkina	Projet Bagré Pôle Phase 2
Burkina Faso	PPF for National ENABLE Youth Program
Burkina Faso	Integrated Prog for Dvpt & Clim change Adaptation in Niger Basin (ABN II)
Burkina Faso	PPF for Bagre Agropole II
Burundi	Aménagement des bassins versants et Amélioration de la résilience climatique : Phase II
Cameroon	Programme de développement des chaines de valeurs agricoles (PD-CVA)
Cameroon	Integrated Prog for Dvpt & Clim change Adaptation in Niger Basin (ABN II)
Cameroun	Projet de développement de la chaîne de valeurs des produits forestiers
Cape Verde	MIC-Cap vert économie bleue
Centrafrique	Projet d'appui à la relance du secteur agricole
Centrafrique	GAFSP/Projet d'appui à la sécurité alimentaire
Centrafrique	Projet d'appui au développement des chaines de valeur agricoles
Chad	Integrated Prog for Dvpt & Clim change Adaptation in Niger Basin (ABN II)
Congo	Etude de faisabilité PD-CVAP
Congo	Projet de développement de la chaîne de valeur de la filière bois-énergie
Côte d Ivoire	Projet de pôle agro-industriel dans la région du poro (PPAI-PORO) PPF
Côte d Ivoire	Projet d'appui aux chaines de valeur dans la région de l'indénié-djuablin (PAC-ID)
Côte d Ivoire	PPF to prepare its blue economy strategy
Côte d Ivoire	Projet de pôle agro-industriel dans la région de bélier (2PAI-BÉLIER)
Cote d'Ivoire	PPF for National ENABLE Youth Program
Côte d'Ivoire	Projet de pôle agro-industriel dans la région du Poro (PPAI-PORO)
Côte d'Ivoire	Projet de développement de la chaîne de valeurs des produits forestiers
Côte d'Ivoire	Integrated Prog for Dvpt & Clim change Adaptation in Niger Basin (ABN II)
Côte d'Ivoire	Projet de pôle agro-industriel dans la région de Tokpi (2PAI-TONKPI)
Dem. Rep. of Congo	Etude de faisabilité des parcs industriels
Egypt	Integrated water resources management of Nubaria and Ismailia canals
Egypt	Land Reclamation Project
Egypt	Irrigation Improvement for El Fayoum Gov.
Egypt	Farm Level Irrigation Improvement Project
Egypt	Zefta Barrage Project
Egypt	Irrigation Development Using Renewable Energy
Eq Guinea	Projet d'appui au plan national de développement forestier communautaire
Eq Guinea	Projet d'appui à la gouvernance du secteur agricole (Appui budgétaire sectoriel)
Eq Guinea	Projet de Développement des chaines de valeur

Eritrea	Eritrea DRSLP-IV
Ethiopia	PPF for Agriculture Industrial Parks Project
Ethiopia	Integrated Agro-Industrial Park project
Ethiopia	PPCR Drought Resilient Agricultural Development Project
G. Bissau	PPF for National ENABLE Youth Program
Gabon	Etude de préparation du programme appui à l'initiative Gabon Vert
Gabon	Appui Programme National d'évaluation de l'état des lieux des Sites Industriels et des Services Environnementaux (PESISE)
Gabon	Etude de préparation d'une stratégie de transformation de l'agriculture basée sur le développement des chaines de valeur
Gabon	Etude de préparation d'un projet d'appui au Programme GRAINE
Gabon	Programme PPP Agricole et Agro-industries
Gabon	Projet d'appui à la gouvernance du secteur agricole (Appui budgétaire sectoriel)
Gabon	Appui à l'initiative Gabon Vert
Gambia	PPCR Climate Smart Value Chain Development Project
Gambia	Agricultural Transformation Agenda
Ghana	Support to Agriculture Transformation Agenda
Guinea	Etude de préparation d'une stratégie de transformation de l'agriculture basée sur le développement des chaines de valeur
Guinea	Integrated Prog for Dvpt & Clim change Adaptation in Niger Basin (ABN II)
Guinea-Bissau	Projet du port de pêche (PASP II)
Guinea-Bissau	Projet dev Chaines valeur Riz
Kenya	Kocholia Irrigation Development and Watershed Management Project (KIDWMP)
Kenya	ENABLE Youth project
Liberia	Liberia Agricultural Transformation Agenda (e-registration and input supply)
Madagascar	PPF - Programme entrepreneuriat des jeunes dans l'agriculture et l'agro-industrie (ENABLE Youth)
Madagascar	FPP-Programme de transformation de l'agriculture malgache
Madagascar	ENABLE Youth
Madagascar	Programme de transformation de l'agriculture malgache
Madagascar	PPCR Sustainable Land & Water Mgt Project
Malawi	Agricultural infrastructure and youth skill development in agribusiness project
Malawi	SHIRE VALLEY IRRIGATION PROJECT
Malawi	PPCR Sustainable Lane & Water Mgt Project
Mali	Programme emploi jeunes et agribusiness
Mali	PPF for l'Agropole Koulikoro-Bamako Péri-urbain
Mali	Integrated Prog for Dvpt & Clim change Adaptation in Niger Basin (ABN II)
Mauritania	PPF: Appui Technique à la promotion des Jeunes Entrepreneurs Agricole et l'Entreprenariat féminin
Mauritania	Projet petits barrage et aménagement BV
Morocco	PRI: Appui Technique à la promotion des chaines de valeur au Maroc
Morocco	PRI: Appui Technique à l'inclusion financière des jeunes et des femmes
Morocco	Projet d'appui au programme national d'économie d'eau d'irrigation au Maroc tranche ii (PAPNEEI-II)
Morocco	Promotion des chaines de valeur et de l'entreprenariat agricoles
Morocco	PAPMV III
Mozambique	PPF for National ENABLE Youth Program
Mozambique	COFAMOSA Irrigation Project
Mozambique	Development of the Pemba/Luchinga Agriculture Growth Corridor
Mozambique	Integrated landscape management Project
Niger	Integrated Prog for Dvpt & Clim change Adaptation in Niger Basin (ABN II)
Niger	Projet d'hydraulique pastorale
Niger	Financement additionnel KANDADJI
Nigeria	MIC Grant (US$1.0 million) for institutional support to Ministry of Agriculture and SPCPZ (US$ 300.000 from UNIDO)
Nigeria	ENABLE youth empowerment in agribusiness programme-YEAP
Nigeria	ATASP-II
Nigeria	Integrated Prog for Dvpt & Clim change Adaptation in Niger Basin (ABN II)

RDC	Projet entreprenariat jeunes dans l'Agriculture et l'Agro-business (PEJAB)
RDC	Programme de développement de parcs agro-industriel du pôle central
Rwanda	Projet de développement de la chaîne de valeur arboricole
Rwanda	PPCR Water Tower Climate Resilient Agriculture Development Project
Rwanda and Burundi	Akanyaru Multipurpose Water Resources Development Project
Sierra Leone	PPF National ENABLE Youth Program
Sao Tome and Principe	Etude élaboration de plan d'aménagement de territoire STP
Senegal	PPF for programme de développement de l'Agropole de Mpal
Senegal	Projet national appui irrigation locale PNAPIL
Senegal	Projet PPP riziculture vallée fleuve Sénégal
Senegal	Projet de Sauvegarde du Parc national du Niokolo Koba
Senegal	PPF - Projet de développement Chaine de valeur riz dans la vallée du fleuve Sénégal (PDCV RIZ)
Senegal	PPF for Agripreneurs Program
Senegal	PAR for Budget Support for National Fertilizer Sector Reform. (to be confirmed by government)
Seychelles	TA development of the blue economy (MIC TF GRANT)
Sudan	ENABLE Youth project
Swaziland	Lower Usuthu smallholder irrigation project II
Tanzania	Bagamoyo sugar infrastructure and sustainable community programme (BASIC)
Togo	PPF - Projet de développement des agropoles au Togo
Togo	PPF for Agropole de Mandouri-Mango, Agbassa-Danpkene et Agropole Kambolé-Morétan
Togo	Projet de développement des agricoles
Tunisia	Don MIC pour l'étude sur la gestion des risques et la mise en place d'un système d'assurance et de micro-assurance agricoles
Tunisia	ENABLE Youth
Tunisia	PDAI de Zaghouan
Tunisia	Chaine de valeur de l'olive à huile
Tunisie	Projet de développement de la chaîne de valeurs des produits forestiers et arboricoles
Tunisie	Projet d'appui au développement du secteur de la Pêche et de l'Aquaculture

Uganda	FIEFOC2 farm income enhancement and forest conservation project
Uganda	Woods value chain development Project
Uganda	Agricultural Value Chain Project
Uganda	Agricultural Infrastructure Development Programme
Uganda	FIEFOC3 farm income enhancement and forest conservation programme: Project-3 (FIEFOC-3)
Uganda	PPCR Drought Resilient Agriculture Development Project
Uganda/Kenya	Shared Angololo Irrigation Development and Watershed Management Project
Uganda/Kenya	SIO-Malaba-malakisi river basin management project
Zambia	MIC TAF grant Luswishi farm block
Zambia	MIC TAF grant youth in agribusiness and agriculture commodity corridors
Zambia	Aquaculture infrastructure support project
Zambia	Climate Resilient Livestock Development Project
Zambia	Parks Promoting Commercial Game Ranching
Zambia	Luswishi Farm Block Development Project
Zambia	Youth in Agribusiness and Agriculture Commodity Corridors Project
Zambia	Development value chain of forest products Project
Zimbabwe	PPF for Beitbridge, Plumtree and Harare Agricultural Corridors Development Program
Multinational	Technologies for African agricultural transformation
Multinational	Projet 2 du P2RS Résilience au Sahel
Multinational ORWA	Integrated Prog for Dvpt & Clim change Adaptation in Niger Basin (ABN II)
Multinational SARC	SADC Regional fisheries monitoring control
Multinational	Institutional support to African climate institutions project
Multinational	MANO River forest ecosystems conservation Programme
Multinational	Gestion intégrée des ressources en eau et aménagement de la plaine de Ruzizi dans la région des grands lacs (Rwanda, Burundi et RDC)