FEED AFRICA
Transformation of cocoa value chains in Africa

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8 November 2016
Outline

I. AfDB’s “High 5s”

II. Feed Africa - Strategy for Agricultural Transformation in Africa (ATA)

III. Why Focus on Cocoa Value Chains

IV. Key constraints of Africa’s cocoa sector

V. The AfDB’s planned interventions in the Cocoa sector
   - Cocoa value chain transformation investments and potential revenues

VI. Conclusions
AfDB’s “High 5s”

1. Power and Light Up Africa
2. Feed Africa
3. Industrialize Africa
4. Integrate Africa
5. Improve Quality of Life of Africans
## The imperative for agricultural transformation: Where we are, Goals and Targets

<table>
<thead>
<tr>
<th>Goals</th>
<th>Status Today</th>
<th>Target by 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Contribute to the end of extreme poverty</td>
<td>49% of Africans or 420 million live under the poverty line of $1.25 per day (2014); Those living in poverty will rise to 550 million by 2025 if we do nothing.</td>
<td>~130m lifted out of extreme poverty</td>
</tr>
<tr>
<td>2. Eliminate hunger and malnutrition</td>
<td>33% of African children live in chronic hunger; 40 million stunted children under the age of 5 years as at today.</td>
<td>Food security for all Africans that are ‘undernourished’; Zero hunger and malnutrition</td>
</tr>
<tr>
<td>3. Become a net exporter of agricultural commodities</td>
<td>Staggering net food import bill of USD 35.4 billion per annum (2015); Net imports projected to increase to USD 111.0 billion by 2025 if we do nothing.</td>
<td>Eliminate large scale imports of commodities that can be produced in Africa, and selectively begin to export</td>
</tr>
<tr>
<td>4. Move to the top of key agricultural value chains</td>
<td>Low value addition to agricultural commodities and predominantly primary production; Africa's share in global production of cocoa beans is 73% vs. 16% share in ground cocoa.</td>
<td>Africa share of market value for processed commodities ~40% (Example for cocoa grinding)</td>
</tr>
</tbody>
</table>
II. Feed Africa- Strategy for Agricultural Transformation in Africa (ATA)
Feed Africa: Strategy for Agricultural Transformation

Aims:

• Transform African Agriculture into a globally competitive, inclusive and business-oriented sector that creates wealth, generates gainful employment opportunity and improves Africans’ quality of life.

Approach:

• A commodity-focused integrated approach will be pursued-where transforming priority agricultural value chains is presumed to lead to agricultural transformation.
• Bottle-necks across the entire prioritized agricultural commodity value chains and within related agro-ecological zones are simultaneously addressed.
FEED AFRICA Priority agricultural value chains and agro-ecological zones

Food self-sufficiency: rice, wheat, fish, palm oil, horticulture, cassava.

Moving-up the global value chain in cocoa, coffee, cotton, cashew.

Creating a food-secure Sahel (sorghum, millet, livestock);

Realizing the potential of the Guinea savannah (maize, soybean and livestock).

Wheat in North Africa

Sorghum, millet, cowpea, and livestock across the Sahel

Rice in West Africa

Cassava in humid and sub-humid zones

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

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

Agricultural commodity value chains and agro-ecological zones targeted by ATA
### Feed Africa Enablers

<table>
<thead>
<tr>
<th>Feed Africa Enablers</th>
<th>AfDB Role</th>
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</thead>
</table>
| **1** Increased Productivity | **Orchestrate/Design** TAAT: increase investment for dissemination of proven technologies for agricultural productivity improvement  
Inputs finance and agro-dealer network development: expand input finance and connect 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 |
| **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 |
| **3** Increased Investment in Hard & 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 |
### Expanded Agricultural Finance

#### Orchestrate / Design
- **Risk-sharing Facility**: catalyze bank lending to the ag sector through risk-sharing facility
- **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 agriculture SMEs
- **Trade Finance Facility**: scale up existing Soft Commodity Financing 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

### Improved Agribusiness Environment

#### Orchestrate / Design
- **Policy reform matrix**: coordinate establishment of an Africa-wide policy matrix detailing the five groups of key policy changes required to enable transformation; 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 advice 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
### Feed Africa Enablers

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<tbody>
<tr>
<td><strong>Increased Inclusivity, Sustainability, Nutrition</strong></td>
<td></td>
</tr>
<tr>
<td>Orchestrate/Design</td>
<td><strong>AFAWA Facility</strong>: establish a facility to promote women-owned MSMEs</td>
</tr>
<tr>
<td>Scale/Replicate</td>
<td>Increase representation of women in agricultural research, and enhance gender-responsive research, monitoring, and evaluation</td>
</tr>
<tr>
<td>Orchestrate/Design</td>
<td><strong>Jobs for Youth in Africa Agricultural Flagship Programs</strong>: establish facilities to increase youth employment and enhance skills in agribusiness (e.g. ENABLE Youth)</td>
</tr>
<tr>
<td>Orchestrate/Design</td>
<td><strong>Climate Resilience Funding</strong>: provide funds to support climate adaptation and climate smart agriculture practices</td>
</tr>
<tr>
<td>Scale/Replicate</td>
<td>Encourage scale-up and replication of nutrition programs (through the Nutrition Trust Fund and other mechanisms)</td>
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### Coordination

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<th>AfDB Role</th>
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<tr>
<td>Orchestrate/Design</td>
<td><strong>Partnership among key actors from the public sector, private sector and development institutions</strong></td>
</tr>
<tr>
<td>Scale/Replicate</td>
<td><strong>Support pan-African agriculture leadership initiatives (e.g. Leadership 4 Agriculture)</strong></td>
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III. Why Focus on Cocoa Value Chains?
Why Focus on Cocoa Value Chains?

Huge untapped growth potential
- Africa possesses significant comparative and competitive advantage.
- Significant yield gaps (50%).
- Substantial value capture opportunities currently only 30% of production is locally processed.
- Potential impact on employment.
- Close to 20 million people in Africa are engaged in the domestic cocoa value chain.
- Impact on rural poverty.
- More than 95% of cocoa production comes from small scale farmers whose daily per-capita income <$2.

<table>
<thead>
<tr>
<th>Countries</th>
<th>Cocoa export as a % of total export earnings*</th>
<th>% of imports covered by cocoa export earnings*</th>
<th>Cocoa export earning % of GDP*</th>
<th>Earnings from cocoa as % of farmers’ total income**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cote d’Ivoire</td>
<td>32%</td>
<td>40.2%</td>
<td>13.3%</td>
<td>80%</td>
</tr>
<tr>
<td>Ghana</td>
<td>31%</td>
<td>21.4%</td>
<td>8.2%</td>
<td>90%</td>
</tr>
<tr>
<td>Cameroon</td>
<td>10.2%</td>
<td>7.5%</td>
<td>1.9%</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>0.7%</td>
<td>1.27%</td>
<td>0.12%</td>
<td>60%</td>
</tr>
</tbody>
</table>

Source: *The Observatory of Economic Complexity **World Cocoa Foundation (2012). Cocoa-Livelihoods-Program
IV. Key constraints of Africa’s cocoa sector
Key constraints of Africa’s cocoa sector

Low productivity

- Limited effort and success to generate and disseminate climate change resistant and high yielding varieties.
- The dominance of cocoa farming by ageing farmers that are less likely to adopt improved farming practices and modern inputs.
- Over-aged cocoa tree stock.
- Limited research in generating labour and land saving technical change.

Low level of domestic value addition

- High processing and transaction costs (high energy and transport costs).
- Entry barriers for endogenous processors (finance and meeting standards).
- Tariff escalation and fierce competition in importing countries.
- Under capacity utilization, due to limited regional integration that constrained access to large volume and different cocoa varieties needed to meet the flavours required by clients. Currently less than 55% of installed capacity is used in Ghana—which accounts for 29% of West African grinding.

Decline in the relative profitability of cocoa production

- Low farm gate price of cocoa bean is the principal culprit!
- Undermined the ability of farmers to earn a living income despite improved cocoa yield.
- Weakened the incentive and ability of farmers to invest, use modern inputs and adopt good agricultural practices.
- Encouraged the reallocation of resources to other activities (young farmers). We cannot expect the next generation to cultivate cocoa unless it is relatively profitable.
# Constraints to fully tap the growth potential of cocoa in Africa

<table>
<thead>
<tr>
<th>Constraints</th>
<th>Increased Productivity</th>
<th>Developed Downstream Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>R&amp;D</strong></td>
<td><strong>Inputs</strong></td>
<td><strong>Aggregation</strong></td>
</tr>
<tr>
<td>• Limited research on affordable pest and disease control solutions in some countries</td>
<td>• Modern inputs are unaffordable or unavailable</td>
<td>• Yields below potential</td>
</tr>
<tr>
<td><strong>On-farm production</strong></td>
<td><strong>On-farm production</strong></td>
<td><strong>Value addition</strong></td>
</tr>
<tr>
<td>• Yields below potential</td>
<td>• High prevalence of pests and disease (30-40% losses)</td>
<td>• Single origin bean supplies limit breadth of flavors required by clients and prevent arbitrage</td>
</tr>
<tr>
<td>• Shift in cultivation to competing crops such as rubber</td>
<td>• Poor practices used</td>
<td>• Limited grinding capacity relative to production</td>
</tr>
<tr>
<td><strong>Root causes</strong></td>
<td><strong>Root causes</strong></td>
<td><strong>Market access</strong></td>
</tr>
<tr>
<td>• Limited investment in breeding improved varieties</td>
<td>• Limited access to low-interest credit in most countries</td>
<td>• High barriers to entry for local players</td>
</tr>
<tr>
<td>• Limited input distribution systems in place; little incentive for private sector</td>
<td>• Ageing trees (past peak yield)</td>
<td>• Limited grinding capacity relative to production</td>
</tr>
<tr>
<td><strong>On-farm production ability</strong></td>
<td><strong>On-farm production ability</strong></td>
<td><strong>Value addition</strong></td>
</tr>
<tr>
<td>• Ageing trees (past peak yield)</td>
<td>• Climate change susceptibility</td>
<td>• High barriers to entry for local players</td>
</tr>
<tr>
<td>• Poor access to quality extension</td>
<td>• High cost of replanting trees</td>
<td>• Limited grinding capacity relative to production</td>
</tr>
<tr>
<td>• High cost of replanting trees</td>
<td>• Price volatility leading to change to other crops</td>
<td>• Manufacturing dominated by foreign entities</td>
</tr>
<tr>
<td><strong>Key challenges</strong></td>
<td><strong>Key challenges</strong></td>
<td><strong>Market access</strong></td>
</tr>
<tr>
<td>• Volatile supply</td>
<td>• Different price setting and cocoa management regimes across countries</td>
<td>• Limited capacity to meet certified product requirements</td>
</tr>
<tr>
<td>• Different price setting and cocoa management regimes across countries</td>
<td>• High dependence on intermediaries between producers and exporters</td>
<td>• Low local demand</td>
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<td>• Price volatility leading to change to other crops</td>
<td>• Volatile supply</td>
</tr>
<tr>
<td>• Price volatility leading to change to other crops</td>
<td>• Lack of affordable financing and business support</td>
<td>• Far from major consumer markets</td>
</tr>
<tr>
<td><strong>Market access</strong></td>
<td><strong>Market access</strong></td>
<td><strong>Tariff escalation for intermediate processed goods</strong></td>
</tr>
<tr>
<td>• Tariff escalation for intermediate processed goods</td>
<td>• High processing costs including energy, transport, and inputs</td>
<td>• Inadequate quality and traceability control systems from a lack of expertise and practical methods and tools</td>
</tr>
</tbody>
</table>

Source: Stakeholder interviews; Dalberg, IFC - Ghana, Burkina Faso, Tanzania and Mozambique Value Chain Assessments Cocoa, Cashew and Cotton Value Chain Assessment For Ghana, 2013; ACET, The Cocoa Agri-Processing Opportunity in Africa: CABI, Status and Strategic Research Challenges In Cocoa and Coffee Pest Management; IFPRI – Cocoa pricing in Ghana; Dalberg analysis

Market structures and related barriers differ from country to country, and therefore require tailored intervention strategies
IV. AfDB’s planned interventions in the cocoa sector
AfDB’s planned interventions in the cocoa sector

• The Bank’s interventions aim to improve efficiency and equity through addressing market and coordination failures as well as provision of public goods and services.

Through its concessionary and private sector window financing the Bank’s intervention in the sector will focus on:

• Increase productivity.
• Increase investment into agricultural research and technology dissemination.
• Address financial market failures and provide access to finance for use of improved inputs and replacing old cocoa tree stock.
• Finance interventions that attract the youth to cocoa production.
• Finance initiatives to increase the share of cocoa locally processed.
• Facilitate aggregation and availability of cocoa bean supply for processing.
• Expand primary processing capacity (i.e., grinding).
• Provide support to increase the share of cocoa ground in Africa from 21% in 2015 to 30% by 2025.
• Improve the quality of cocoa bean exported.
• Finance research to improve the quality of cocoa bean produced.

The Bank’s objective of increasing productivity and improving quality is expected to be achieved through its TAAT programme
## Key technology interventions for cocoa

<table>
<thead>
<tr>
<th>Priority Techs (NARS, CG, Privates, NGOs)-All target countries</th>
<th>TAAT Tech recommendations</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatic embryogenesis and plant propagation techniques for improved planting materials</td>
<td>Multiplying and scaling out of clean germplasm (ICRAF/IITA/NARS)</td>
<td>Focus helps improve sector competitiveness by improving &amp; stabilizing production, unlocking major bottlenecks on access and sharing of improved germplasm (release disease free materials)</td>
</tr>
<tr>
<td>Cocoa Health Management Clinics (CMC)</td>
<td>Integrated Crop Pest Management (ICRAF/IITA)</td>
<td>Major area of improvement considering adherence to stringent EU and USA export markets based on product traceability requirements</td>
</tr>
<tr>
<td>Cocoa Rehabilitation Techniques &amp; Management</td>
<td>CREAM/ISFM/Intercropping</td>
<td>Focus helps improve sector competitiveness by improving and stabilizing production, diversification and sustainable fertilization</td>
</tr>
<tr>
<td>Cocoa value addition (improved processing, harvesting tools, apple juice &amp; vinegar processing)</td>
<td>NARS/IITA/ICRAF</td>
<td>Key value chain area, largely underdeveloped to diversify product, improve incomes &amp; enhance job creation</td>
</tr>
<tr>
<td>Climate smart cocoa model (suitability maps)</td>
<td>IITA/CIAT</td>
<td>As a guide to help design climate smart agroforestry systems in climate sensitive areas or climate smart agroforestry systems in areas where cocoa will be viable in the future or develop insurance services, products and approaches for weather-induced crops failures (flowers destruction by bad climatic conditions)</td>
</tr>
<tr>
<td>Innovation enablers</td>
<td>IITA/ICRAF/NARS</td>
<td>Key value chain area largely underdeveloped to facilitate access to market, improve income and enhance job creation</td>
</tr>
</tbody>
</table>

Source: Based on consultations with NARS, private sector, NGOs and CG centres. The NARS are CRIN Nigeria, NCRA CDI, CRIG Ghana, IRAD Cameroon, ITRA-CRA Togo, CRIN Nigeria. The privates sectors sector include small scale and large scale companies – World Cocoa Foundation (WCF) member companies, Olam and Mars Inc), private sector umbrellas (e.g. IDH, Sustainable Food Lab), NGOs (e.g. Technoserve), the extension services department of the ministries of Agriculture and the Licensed Cocoa Buying Companies, COCOBOD and FIRCA, ONCC.
**TAAT planned activities for Cocoa value Chains in select African countries with collaborating partners**

<table>
<thead>
<tr>
<th>Partners</th>
<th>Type of Engagement</th>
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<tbody>
<tr>
<td>ANADER</td>
<td>Field activities and farmer capacity building</td>
</tr>
<tr>
<td>NGOs</td>
<td>Field activities and capacity building and value addition</td>
</tr>
<tr>
<td>World Cocoa Foundation (WCF) member companies, Olam, Nestle, Mars Inc.)</td>
<td>Technology implementation</td>
</tr>
<tr>
<td></td>
<td>May help in training</td>
</tr>
<tr>
<td>IDH, Sustainable Food Lab</td>
<td>Technology implementation</td>
</tr>
<tr>
<td></td>
<td>May help in training</td>
</tr>
<tr>
<td>Technoserve</td>
<td>Technology implementation</td>
</tr>
<tr>
<td></td>
<td>Training</td>
</tr>
<tr>
<td>CG centres: ICRAF, IITA, CIAT, Africa-Harvest</td>
<td>Technology implementation</td>
</tr>
<tr>
<td></td>
<td>May help in training</td>
</tr>
<tr>
<td>Farmer Based corporations</td>
<td>Crop delivery and commercialization</td>
</tr>
<tr>
<td>Extension services department of ministries of Agriculture</td>
<td>Technology implementation</td>
</tr>
<tr>
<td></td>
<td>Training</td>
</tr>
<tr>
<td>Licensed cocoa buying companies, COCOBOD and FIRCA, ONCC</td>
<td>Finance, policy related issues</td>
</tr>
</tbody>
</table>

**Target countries for CVC transformation under TAAT**

- Cameroon
- Cote D’Ivoire
- Ghana
- Nigeria
- Togo
- Liberia
- Madagascar
- Sierra Leone
- Uganda
Cocoa value chain transformation investments and potential revenues

AfDB and public sector partners will crowd in private and institutional funding by:
- Establishing enabling environments for private investment
- Employing innovative de-risking tools and blended financing
- Proving the potential for risk-adjusted returns in agriculture projects and agribusinesses

Sources for filling the gap include:
- AfDB: Increase annual lending to USD 2.4bn/year
- Governments: co-investment in increased AfDB lending
- Commercial banks
- Sovereign wealth funds
- Pension funds
- Africa-focused PE funds

Transformation of Africa’s cocoa value chain will cost USD 1-2 bn but unlock an annual average revenue opportunity of USD 0.6 billion by 2025

Source: AfDB Analysis
VI. Conclusions
Conclusions

In the face of increasing opportunity cost of productive resources, scaling up R&D expenditure to generate and disseminate land/labour saving technical change and improve the intrinsic quality of cocoa beans are critical to maintain the long-run relative profitability and global competitiveness of the cocoa sector. Ensuring that the technologies developed are appropriate to a given condition is also equally or more important.

Although the above measures are necessary, they are not sufficient; offering cocoa farmers a competitive price is key for the sustainability of the entire cocoa value chain.

Effective institutions to make markets work efficiently for all and ensuring that the entire value chain is profitable and attractive to all. Region-wide export policy coordination is also critical to maximize Africa’s cocoa sector earnings.

Build a globally competitive processing cocoa sector. In addition to addressing entry barriers and making investments in key infrastructure, particularly power and transport, establishing a regional hub for cocoa bean aggregation is necessary to enable processors realize economies of scale and help them to meet the taste and colour specifications of buyers.
Achieving cocoa value chain Transformation in Africa will require strong partnerships and collaboration

<table>
<thead>
<tr>
<th>Increased Productivity</th>
<th>Realized Productivity</th>
<th>Hard and Soft Infrastructure</th>
<th>Agri Finance</th>
<th>Enabling Agribusiness Environment</th>
<th>Inclusivity, Sustainability, Nutrition</th>
</tr>
</thead>
</table>

**Key Potential Actors and Partners to Deliver on Feed Africa**

- **Increased Productivity**
- **Realized Productivity**
- **Hard and Soft Infrastructure**
- **Agri Finance**
- **Enabling Agribusiness Environment**
- **Inclusivity, Sustainability, Nutrition**

Co-development

Co-financing

Regional Member Countries

Partnership

- Multilateral, Bilateral Donors, Foundations, Government Organizations
- Small and Large Scale Agribusiness; Farmers Organizations; Food Companies

Non-Exhaustive
AFRICAN DEVELOPMENT BANK GROUP

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THANK YOU / MERCI