Delivering Fertilizer Solutions for Smallholder Farmers

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Kenya Fertilizer Roundtable

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IFDC Overview

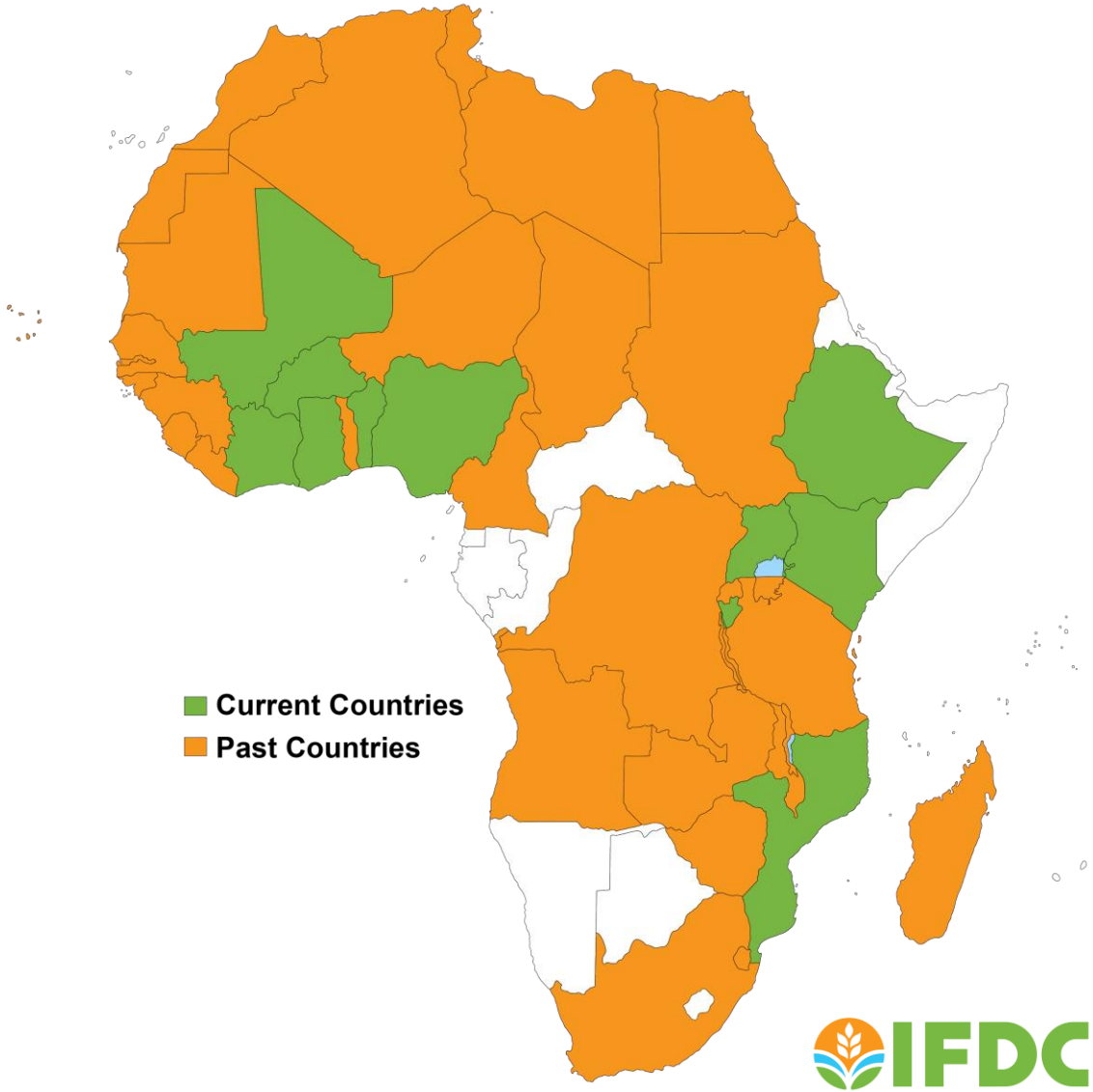
Who We Are: IFDC is a non-profit public international organization that provides solutions to food security, agricultural sustainability, and economic development.

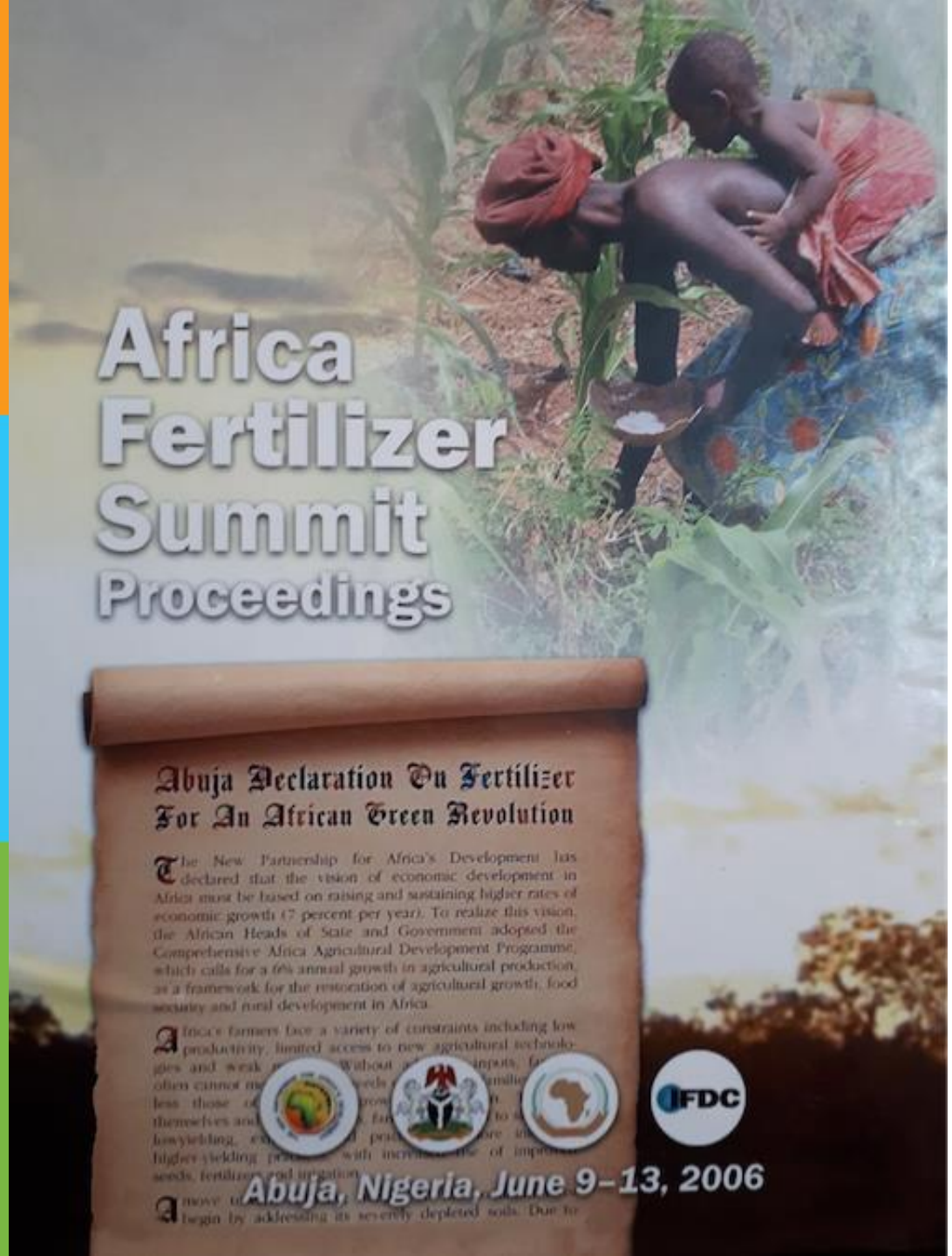
Our Mission: IFDC enables farmers to increase agricultural productivity, generate economic growth, and practice environmental stewardship by enhancing their ability to harness inputs and management practices and participate profitably in markets

IFDC in Africa

For more than 25 years, our projects have assisted millions of smallholder farmers, helping to move them away from subsistence farming. They are now agricultural entrepreneurs, able to actively participate in local and regional agricultural trade.

- Toward Sustainable Clusters in Agribusiness through Learning in Entrepreneurship **(2SCALE)** – *DGIS/Netherlands*
- Local Government Approach to the Agricultural Market **(ACMA II)** – *Netherlands Embassy/Benin*
- Feed the Future Ghana Agriculture Technology Transfer Project **(Feed the Future Ghana ATT)** – *USAID/Ghana*
- Enhancing Growth through Regional Agricultural Input Systems **(EnGRAIS)** – *USAID/West Africa*
- Smallholder Agricultural Productivity Enhancement Program **(SAPEP)** – *Islamic Development Bank*
- Scaling Up Fertilizer Deep Placement and Micro Dosing **(FDP MD)** – *USAID/Mali*
- Toyota Tsusho Fertilizer Africa, Kenya **(TTFA)** – *Toyota*
- Transforming Irrigation Management in Nigeria **(TRIMING)** – *World Bank/Nigeria*
- Supporting Agricultural Productivity in Burundi **(PAPAB)** – *Netherlands Embassy/Burundi*
- Integrated Seed Sector Development **(ISSD)** – *Netherlands Embassy/Burundi*
- Resilient Efficient Agribusiness Chains **(REACH-Uganda)** – *Netherlands Embassy/Uganda*
- Promotion of Nutrition-Sensitive Potato Value Chains in East Africa **(PNSP-Uganda)** – *GIZ/Uganda*
- Food Security through Climate Adaptation in Mozambique **(FAR-Sofala)** – *Swedish Embassy/Mozambique*





Abuja Fertilizer Summit 2006

Summary Indicator/Target
8 → 50 kg (nutrients)/ha in 2015

IFDC appointed by the African Union (AU) to undertake technical preparation and reporting:

- 12 technical background papers
- Technical facilitation (program, speakers)
- Preparation of Summit Proceedings

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Accomplishments since Abuja

Progress

- Create sense of urgency:
  - Malabo Declaration
  - CAADP Compacts
- Exploitation of local deposits
- Change in government policies
- Industry focus on Africa
- Investment in local capacity
- PPPs between governments, industry, and development partners

Monitoring

- NEPAD/CAADP data
- Bill & Melinda Gates Foundation (BMGF) Fertilizer Dashboard
- AfricaFertilizer.org/IFASTAT

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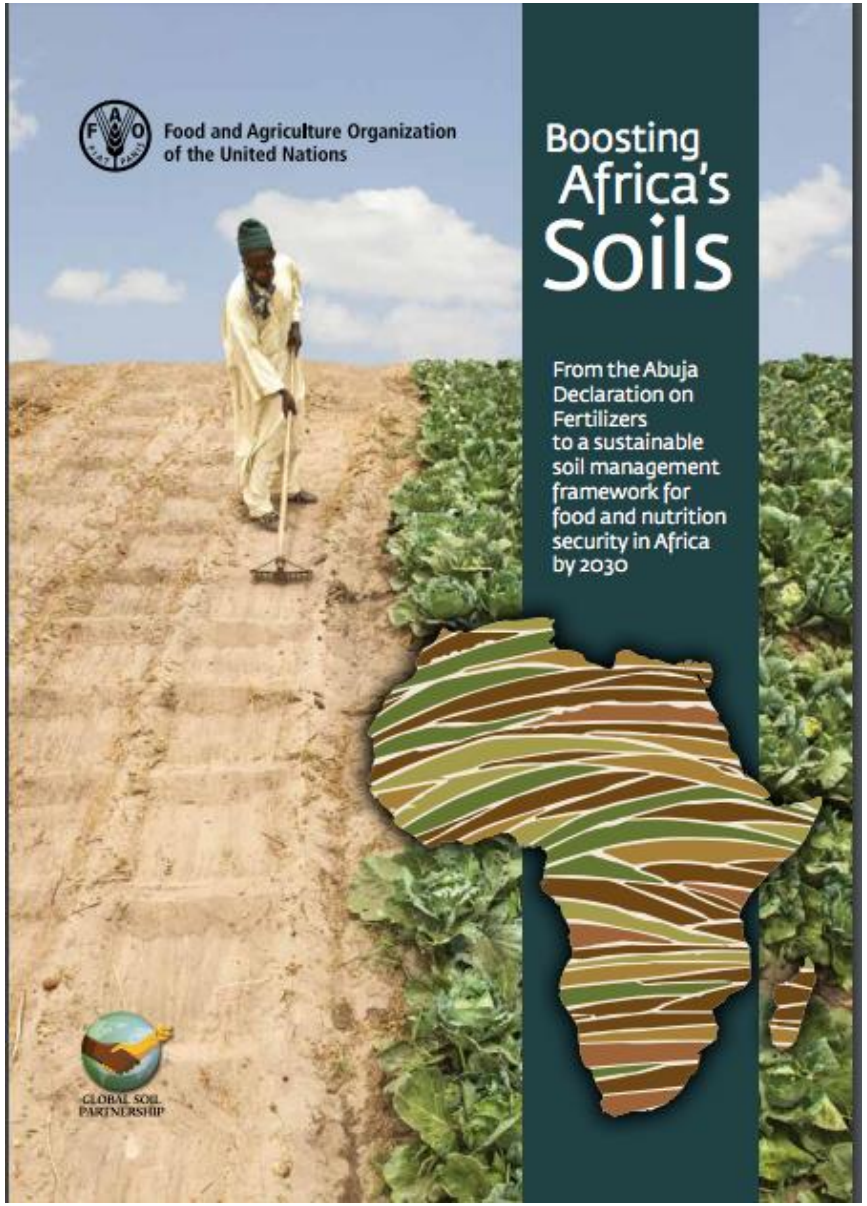
Implementation Status of *Abuja Declaration on Fertilizers*

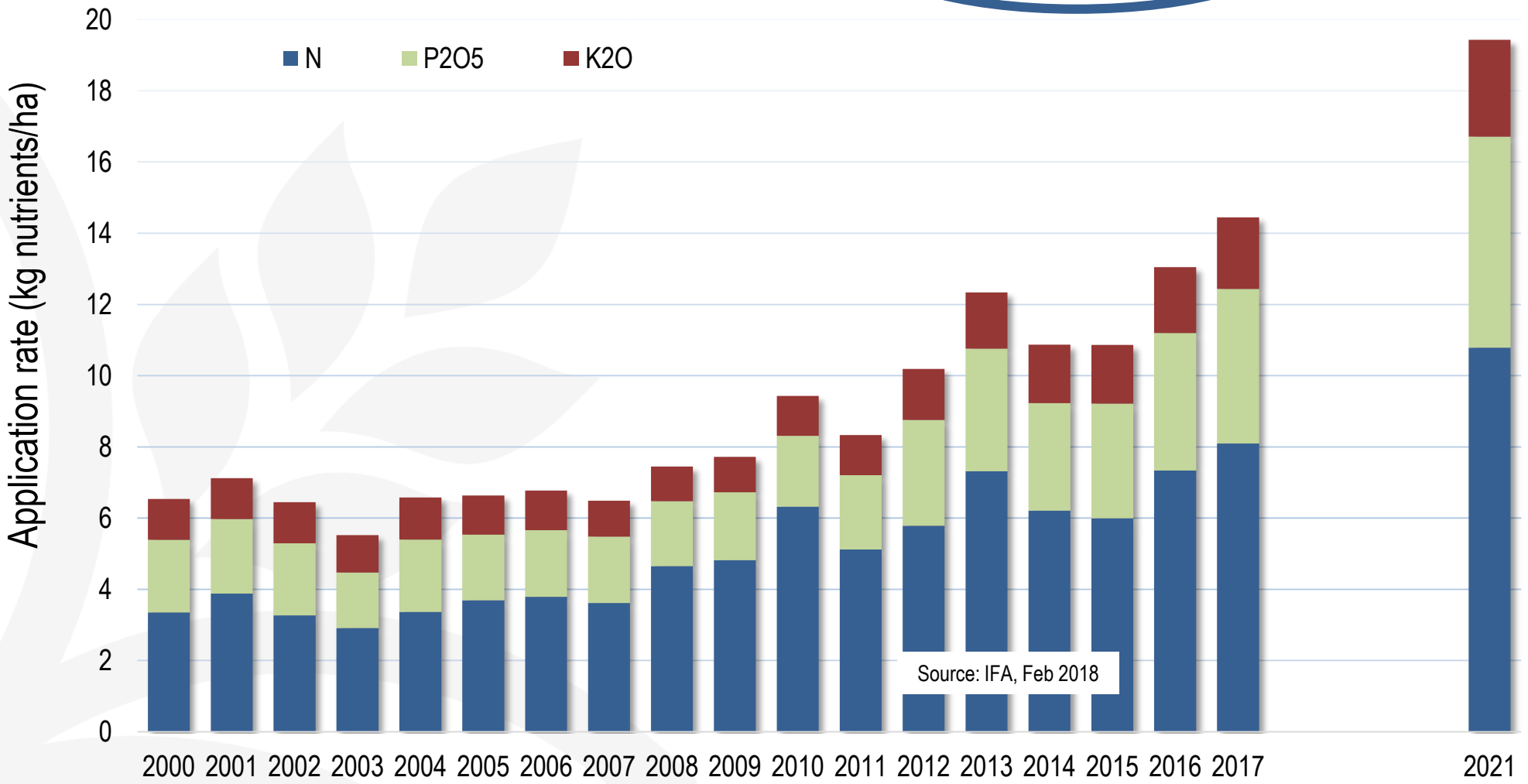


Indicator	Status
Establishment of policy and regulatory frameworks	Unsatisfactory
Capacity for quality control	Satisfactory
Elimination of taxes and tariffs	Unsatisfactory
Development of agro-dealer networks	Satisfactory
Distance traveled to purchase fertilizers	Good
Increase in the proportion of farmers using chemical fertilizers	Good
Increasing market size	Partially Satisfactory
Introducing targeted subsidies	Satisfactory
Introducing national financing facilities for importers and agro-dealers	Good
Introducing regional procurement initiatives	Satisfactory
Improving access to complementary inputs	Satisfactory
Establishment of the AFFM	Satisfactory

Source: www.nepad-caadp.net, in Boosting Africa's Soils - http://www.fao.org/3/a-i5532e.pdf

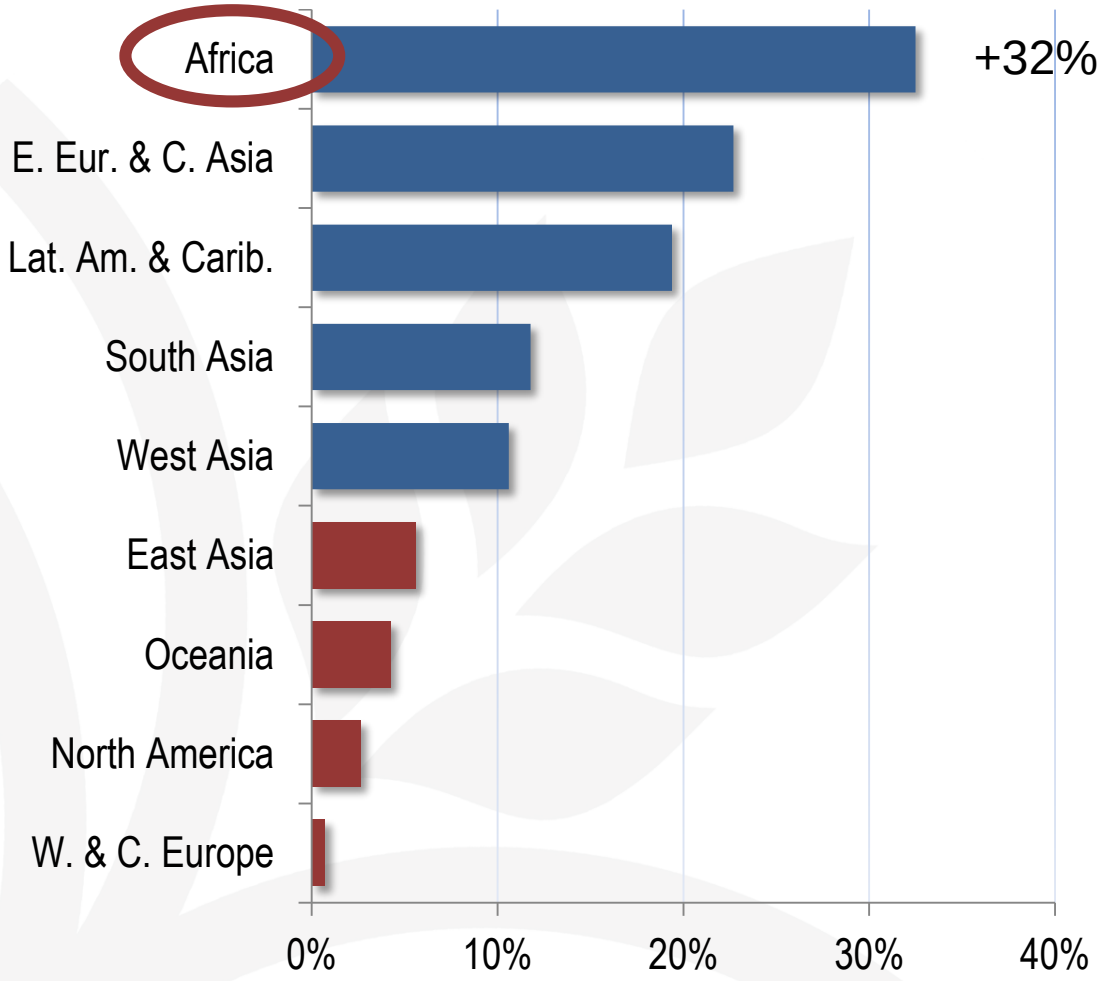
Average Application Rate Grows Steadily

Fertilizer application rate up ~1 kg/ha/yr by 2021

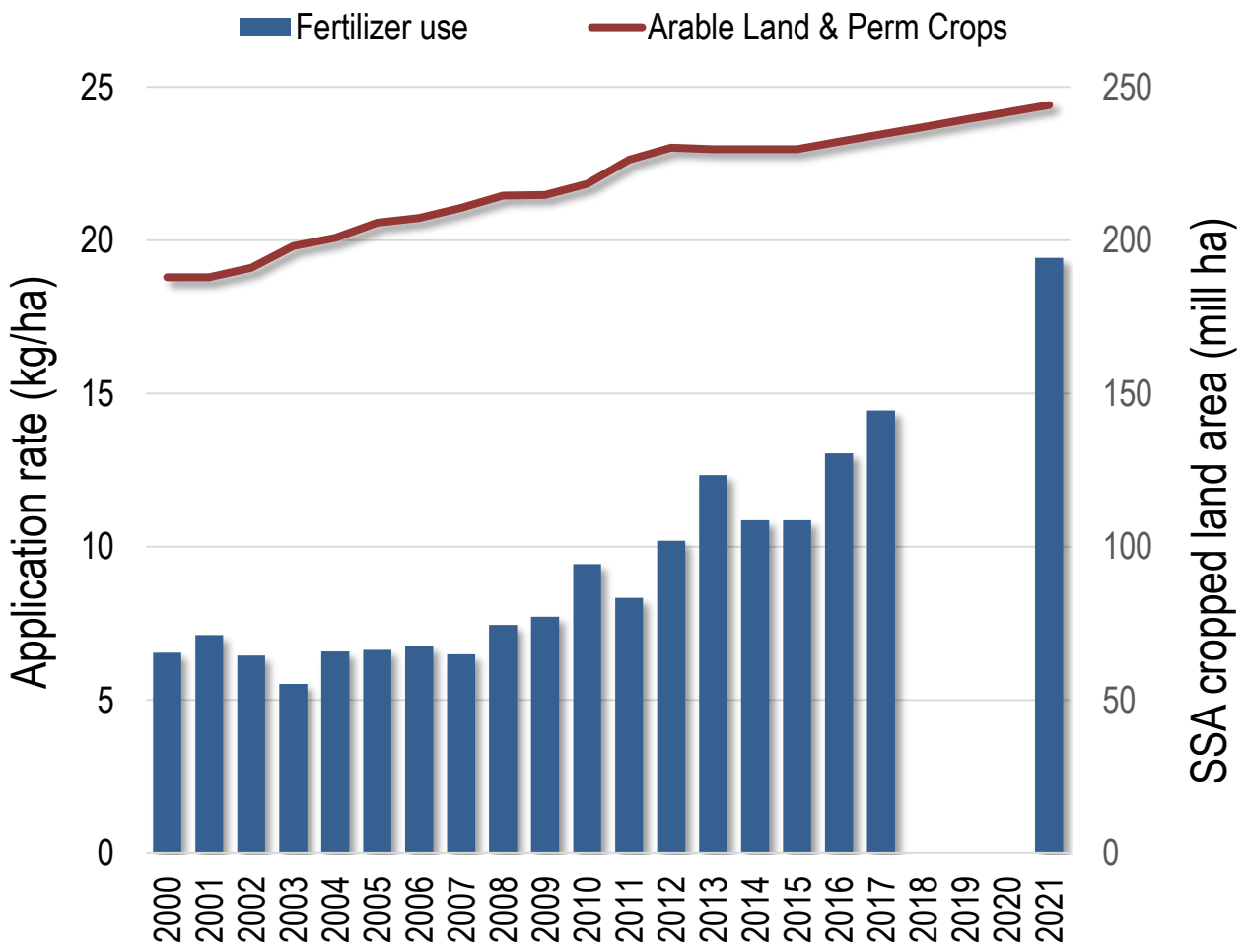


Data for SSA excluding South Africa

Anticipated Relative Growth 2021/22



Crop Land Expansion 2021/22



Source: IFA, Feb 2018

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SSA Consumed 3.7 Mt Nutrients in 2016

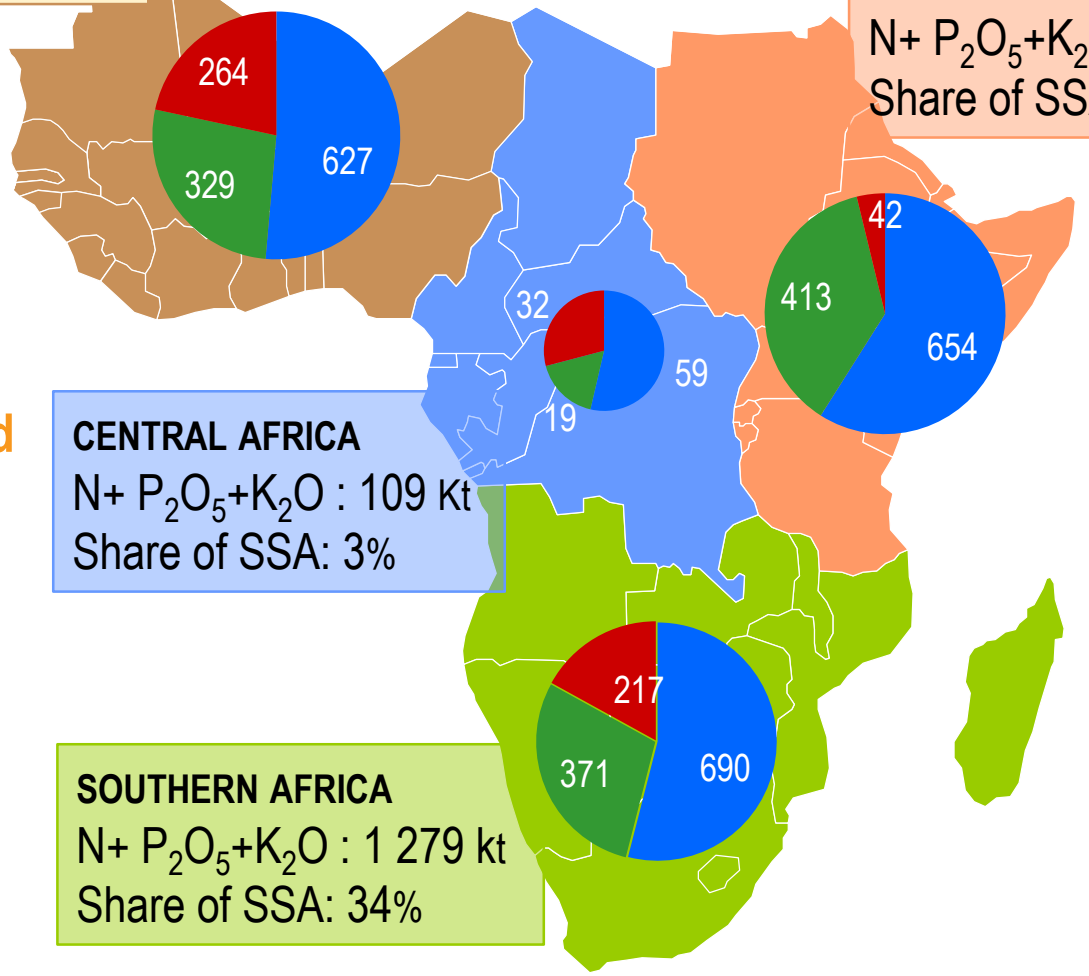
2016 Fertilizer Consumption Estimates

WESTERN AFRICA
$N+P_2O_5+K_2O$: 1 220 Kt
Share of SSA: 33%

EASTERN AFRICA
$N+P_2O_5+K_2O$: 1 109 Kt
Share of SSA: 30%

CENTRAL AFRICA
$N+P_2O_5+K_2O$: 109 Kt
Share of SSA: 3%

SOUTHERN AFRICA
$N+P_2O_5+K_2O$: 1 279 kt
Share of SSA: 34%



SSA at a Glance

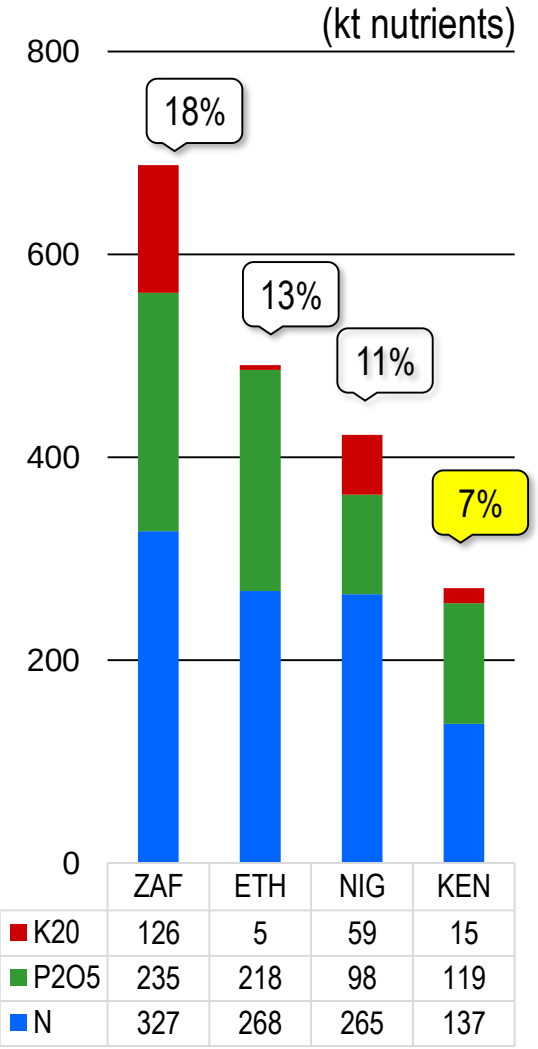
3.7 Mt nutrients

- 2.0 Mt N
- 1.1 Mt P_2O_5
- 0.6 Mt K_2O

2.0% of world demand

- 1.9% of N
- 2.4% of P_2O_5
- 1.6 of K_2O

Top-4: 50% share



Source: IFA, Feb. 2018

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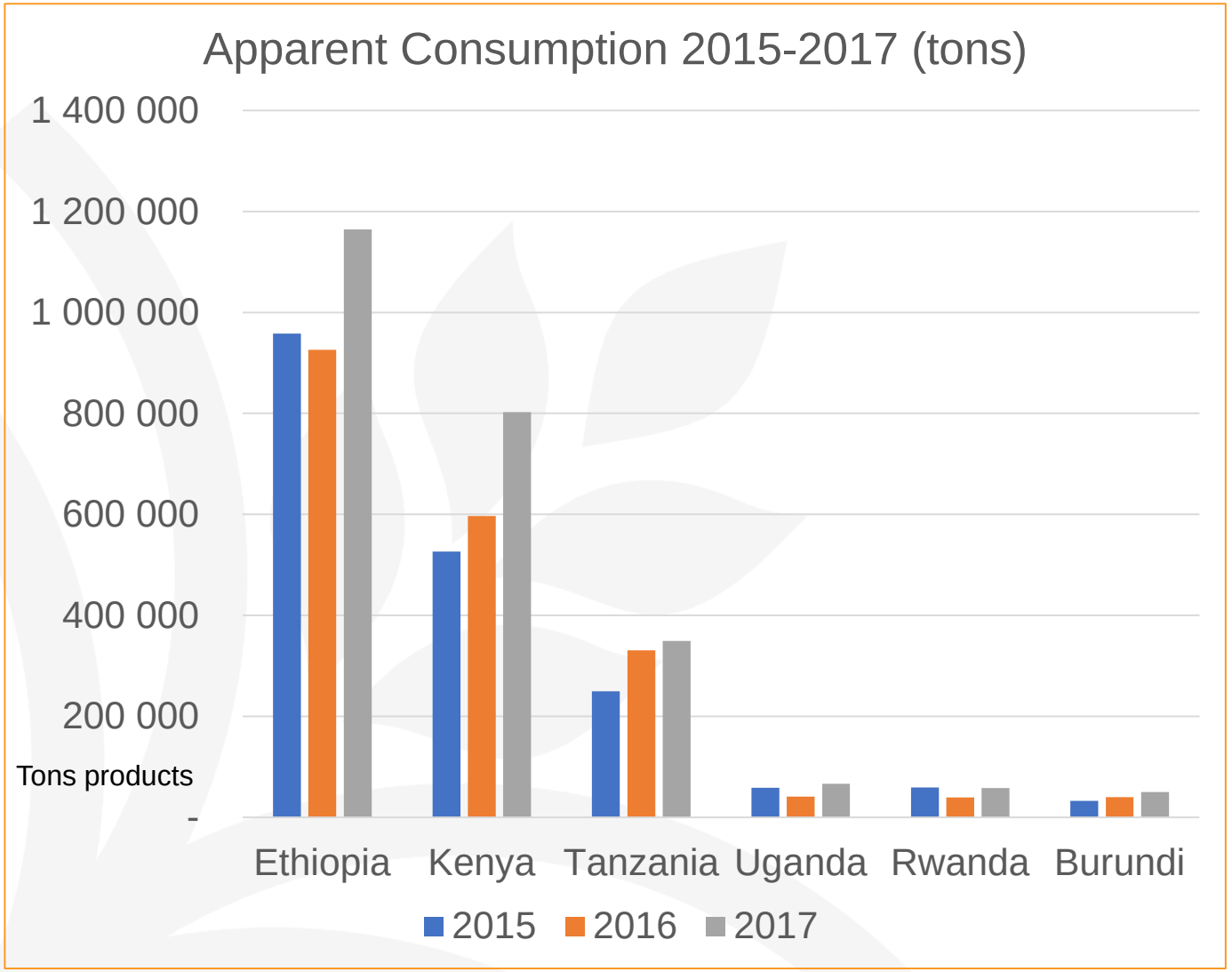
2015-2017 Consumption in Six Eastern African Countries



- 6 countries: +31% in 2 years
  - 2015 1.9 million tons
  - 2016 2.0 million tons
  - 2017 2.5 million tons
- Ethiopia + Kenya
  - 86% of consumption growth
- Key drivers:
  - National investments: subsidies and programs for food crops
  - Private sector engagement
  - Donor/investor community

Source: FTWG / AfricaFertilizer.org

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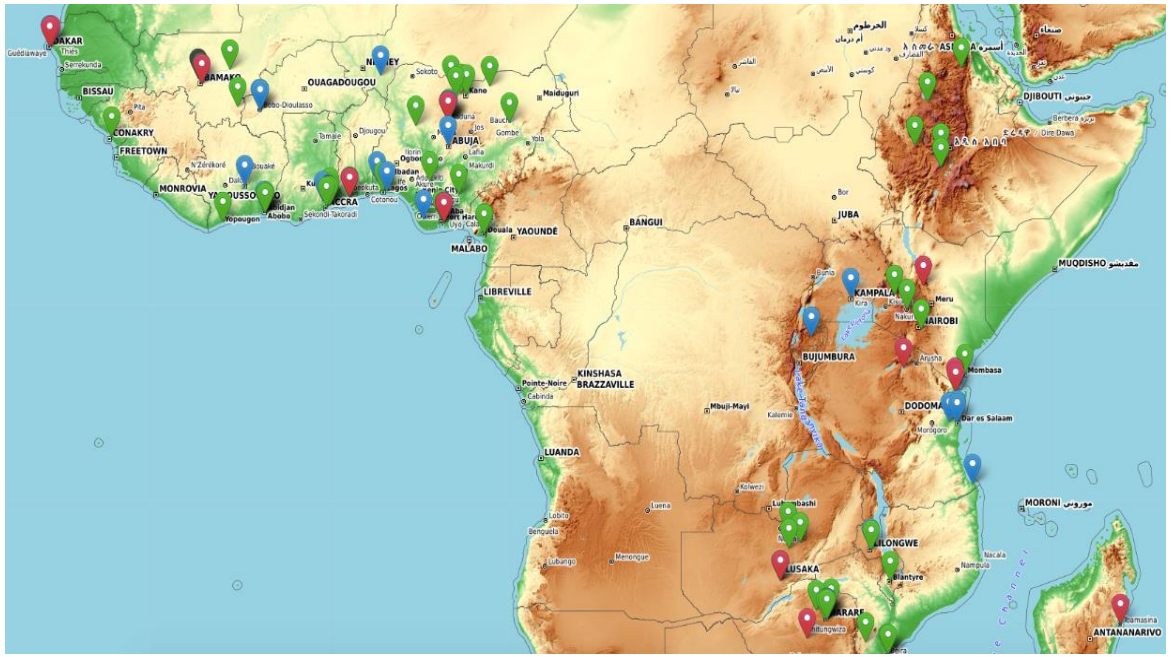
Fertilizer Production and Blending Capacities are Booming



Production plants Blending plants New projects

AfricaFertilizer.org

http://africafertilizer.org/production/

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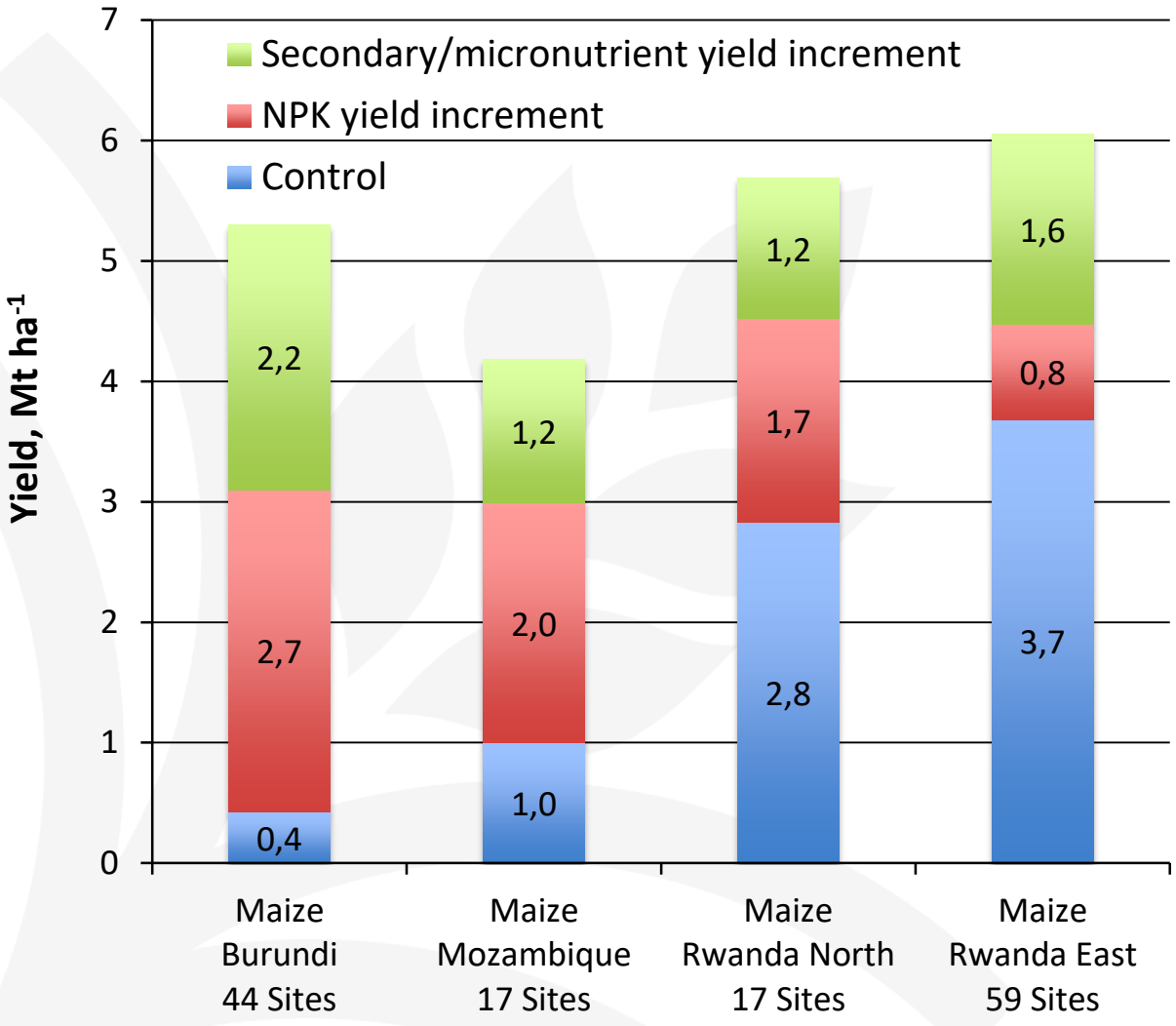
Changes in the Market: NPKs to Multinutrient Blends



- NPK fertilizers dominate in SSA:
  - Rarely meet complete nutrient demands → low return on investment.
- Multinutrient blends contain secondary and micronutrients (SMNs):
  - Additional 30%+ yield.
  - SMNs less expensive than NPKs.
- Fertilizer blenders can efficiently make targeted crop-specific blends.

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Drivers for Change – Sub-Saharan Africa

- Industry interest – investments in production (e.g., Morocco, Nigeria, Ethiopia, Kenya); Africa “last frontier.”
- Renewed donor interest: USAID, AGRA, BMGF, AfDB, World Bank, IDB.
- Subsidies: Growth fastest in subsidized markets.
- Fertilizer Industry Association: B2B opportunities and policy advocacy.
- Alternative smallholder access-to-credit solutions:
  - One Acre Fund.
  - Commercial farmer associations.
  - Agri-food industry and local commodity sourcing.
- “*Credit guarantees work*” for importers, distributors, agro-dealers (AFAP example).

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What are the Gaps?

- Policy and regulations: no harmonization; diverse standards are trade barriers.
- Subsidies: from blanket → smart → exit.
- Limited data: ag productivity, FUBC, market data.
- Capacity and coordination constraints, both public (extension) and private sector.
- Limited trade finance opportunities.

Opportunity

- Fertilizer Platform to guide public and private investments to promote a competitive fertilizer sector.

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Moving Forward: Roadmap to Abuja II

- President of Nigeria has offered AU to host next summit.
- Preparations take time: 12-18 months.
- Industry is interested if preparations are serious and if roles of public and private sector are “balanced.”
- General consensus:
  - Not a fertilizer summit but a soil health summit. Focus moves from Fertilizer → Productivity → Closing the Yield Gap.
  - Fertilizer industry to focus on “demand drivers” (urban food needs, agri-food industry, import substitution, etc.) → requires broad government/policy support.
- Closing the yield gap will be the mantra for the years to come.

THE BIG FOUR:
Commitment to 100% Food and Nutrition Security

- Redesign subsidy model
- 50% of fertilizers blended
- Liming expanded
- Double irrigated cropland by 2022
- Improve credit access for inputs
- Warehouse receipt system for price stability
- Regulatory enforcement

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Kenya Opportunity: The pieces are in place

Thank you!

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