

Nigeria fertilizer demand / supply outlook

AFCOME International Meeting

Avignon

10th November, 2017



Overview of the Dangote Group

Nigeria Agric landscape

New supply



Dangote Group is a pan-African conglomerate with operations across 10 countries and revenues of ~USD3bn



Existing businesses

New businesses

Cement

Food

Others

Oil & Gas

Agriculture

Infrastructure

- Cement plants across Africa

- Sugar
- Salt, Tomato Paste
- Seasoning
- Vegetable Oil Refining and Fractionating
- Flour, Pasta, Noodles

- Packaging
- Construction
- Truck assembly



- Upstream assets
- Sub-sea gas pipeline
- Petroleum refinery / petrochemical
- Fertilizer



- Rice
- Sugar cane
- Tomatoes
- Dairy Products



- Power



Additional information on some of our Existing Businesses

Dangote Cement PLC

- Total installed capacity of ~ 44M mtpa across eight countries (Nigeria, Ghana, Cameroon, Senegal, Ethiopia, Zambia, South Africa and Tanzania)
- Additional greenfield and brownfield capacity (~ 22M mtpa) is currently under development in several countries across SSA. Our goal is to expand total installed capacity to ~ 80M mtpa by 2020.

Dangote Flour Mills PLC

- Five wheat milling locations: Apapa, Ikorodu, Calabar, Ilorin, Kano with a combined installed capacity of 2.45Mtpa
- Its subsidiary Dangote Pasta produces pasta from its factory in Ikorodu (installed capacity of about 228,500 Mtpa)
- Another subsidiary, Dangote Noodles has its manufacturing operations in Ikorodu, Calabar & Kano (installed capacity of about 42,110 Mtpa)

Dangote Sugar Refinery PLC

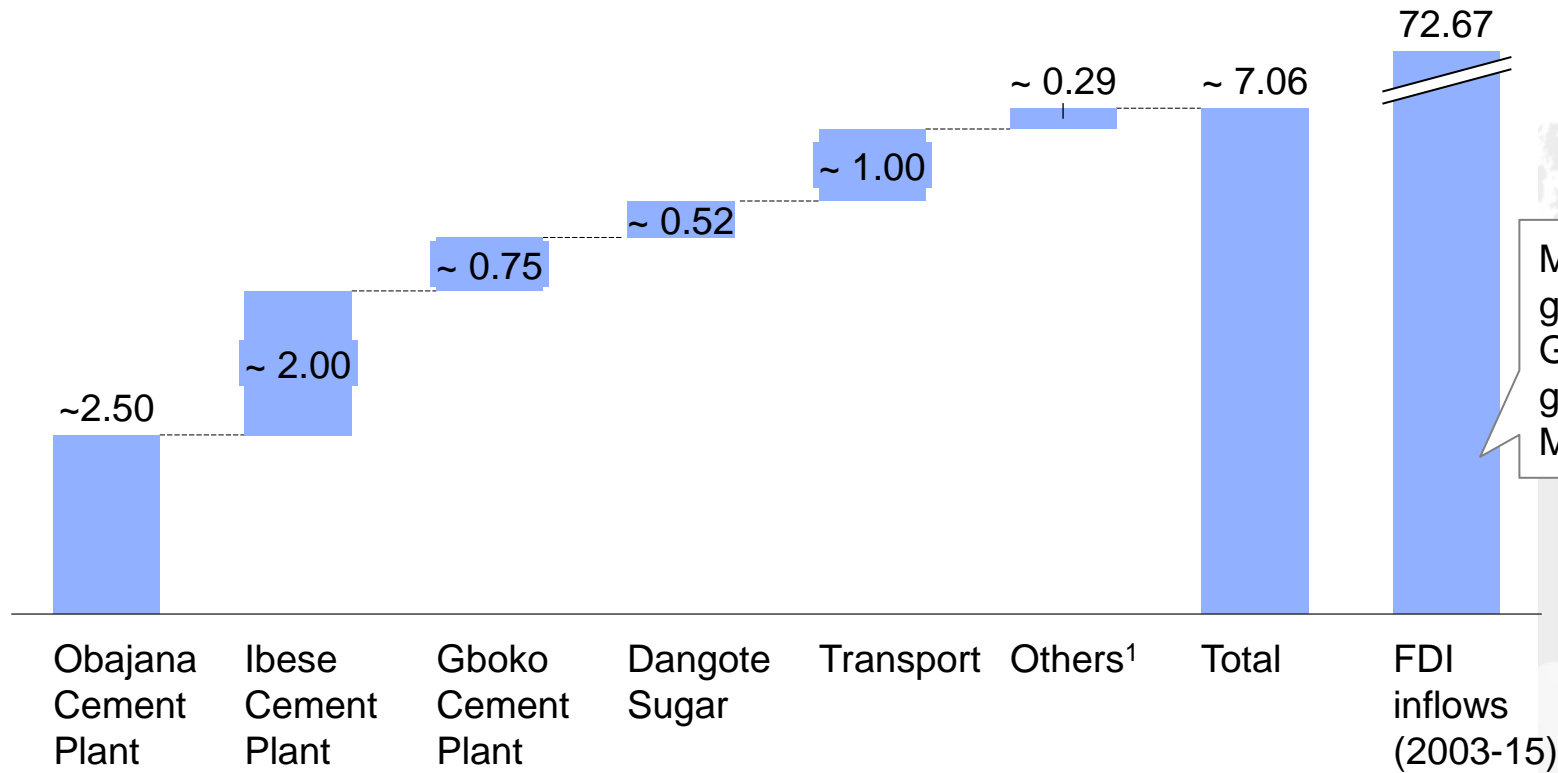
- Current capacity - 1.44M mtpa
- Largest in Sub-Saharan Africa and 2nd largest in the world
- Unfortified Industrial White Sugar and Vitamin A-fortified White Sugar
- Leader in the Nigerian sugar market, ~ 65% market share
- Savannah Sugar Company (Numan) - Backward Integration

NASCON PLC (Salt Refinery)

- Currently has a combined installed capacity of 600,000 mtpa.
- Refines, fortifies and packages table, agricultural and industrial salts
- Controls ~ 60% Nigeria's salt market
- Oil Palm refinery and fractionation, seasoning and tomato paste
- Plans are on the way to expand salt refining capacity by 300,000 Mtpa

The group has invested over \$7bn in the last 15 years. Almost 10% of the total FDI inflows during that period...

Dangote Group investments in Nigeria vs. FDI inflows, USD bn

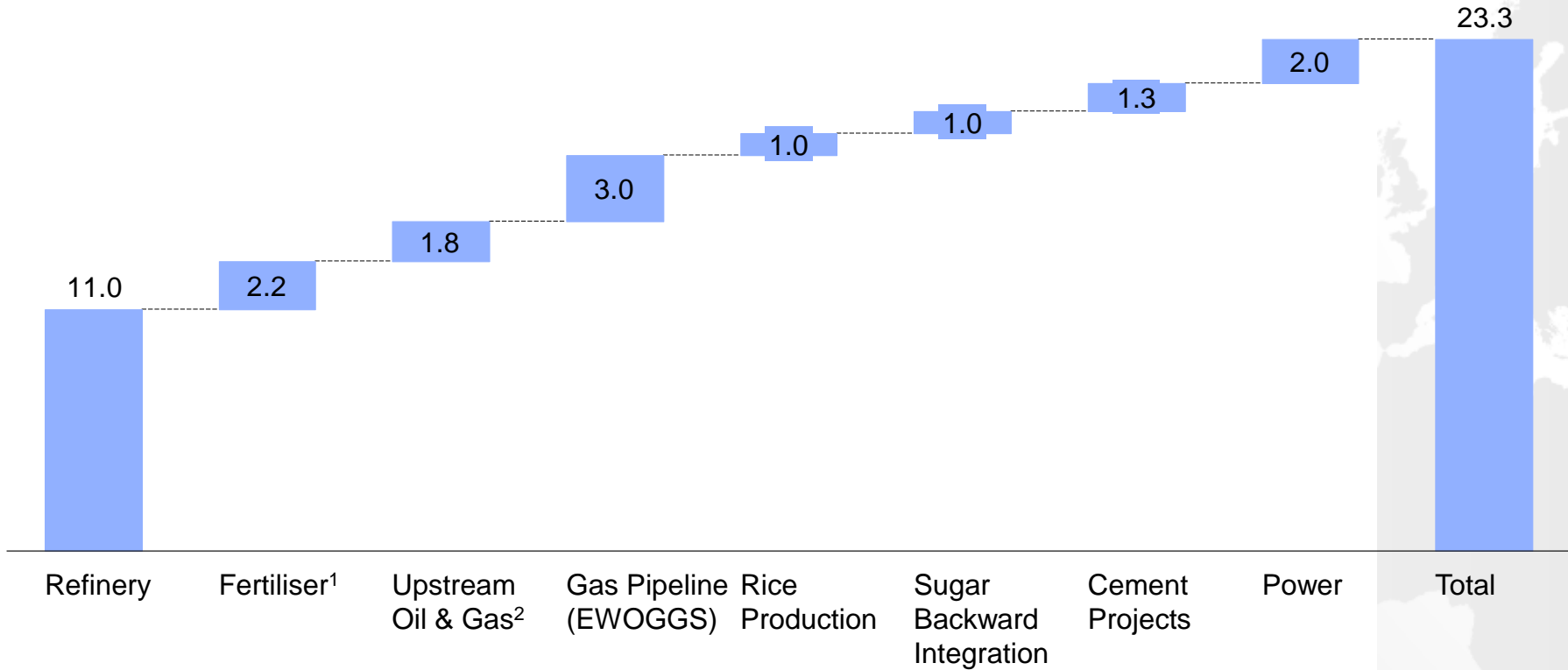


Most of this goes into Oil & Gas. Very little goes into Manufacturing

1 – Dangote Flour Mills; NASCON; Osogbo Steel Mill

...and has an investment pipeline of over \$20bn for Nigeria

Investment pipeline, USD bn

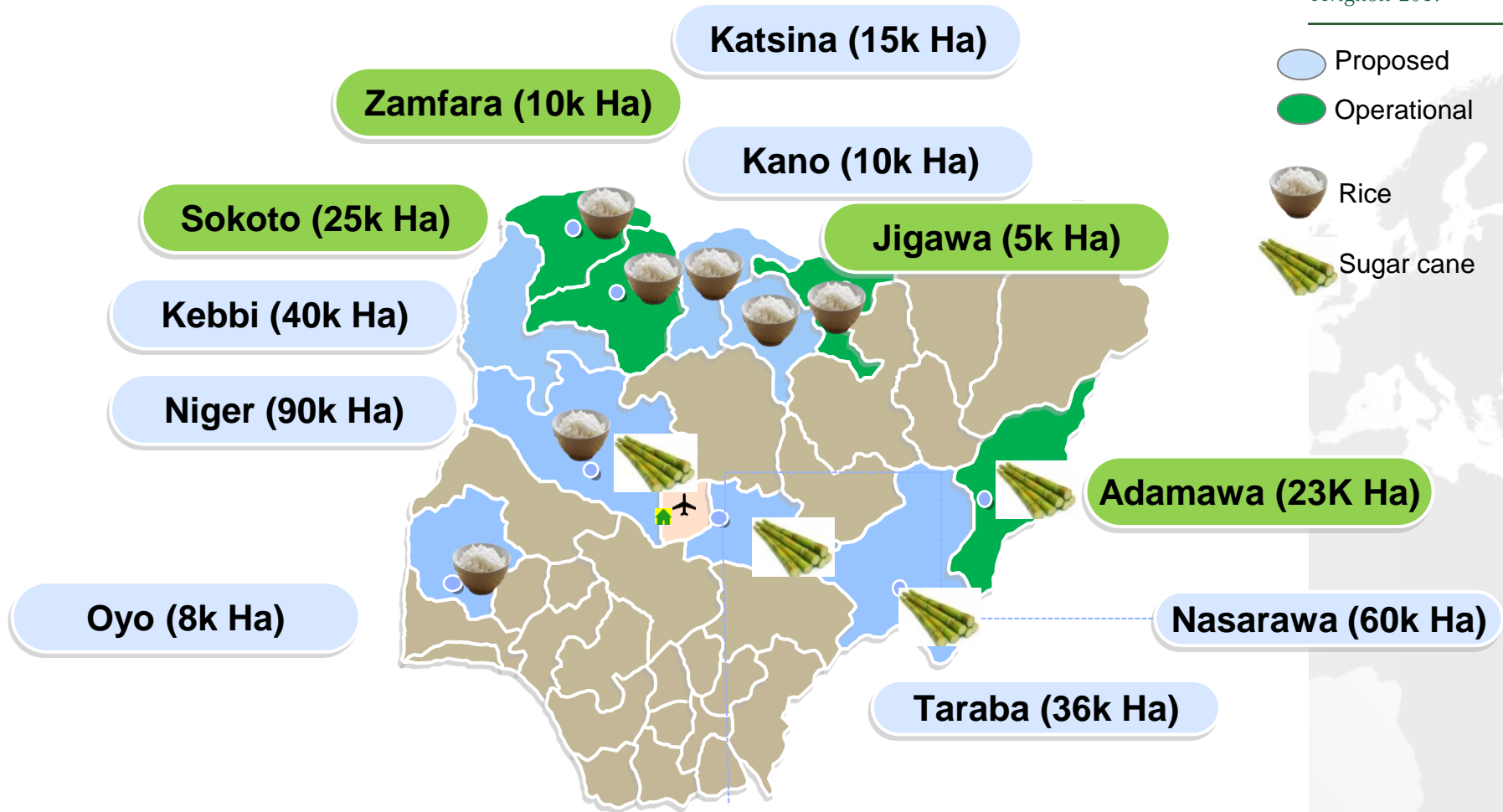


ALL projects are in various stages of progress

1 – For Urea and NPK plants

2 – Includes acquisition cost

The group is working on cultivating ~300k Ha of land with annual fertiliser requirement of ~150k MTs



Dangote Fertilizer Project is the largest Granulated Urea Fertilizer complex coming up in the Africa

- **Capacity** build up : 3 million Tonnes per annum
 - Ammonia Plants : 2 x 2,200 MTPD based on Haldor Topsoe technology
 - Urea Melt Plants: 2 x 4,000 MTPD based on Snamprogetti technology
 - Urea Granulation plants: 2 x 4,000 MTPD based on Uhde Technology
 - Captive Power plant: 3 x 40 MW Steam Turbine Generators
 - Auxiliary Boilers: 3 x 200 Tonnes per hour steam generation
- **Investment:** USD2bn (excluding land, land development, and other infrastructure development)
- **EPC Contractor:** Saipem, Italy and Saipem Construction Nigeria
- **PMC:** Tata Consulting Engineers, India
- **Location:** Lekki Free Trade Zone, Lagos
- **Target completion:** Q1 2018

Construction is progressing smoothly

Pictorial view of the construction site



Pictorial view of the construction site



Vacuum concentrator being transported on a barge



Urea reactor being offloaded at site

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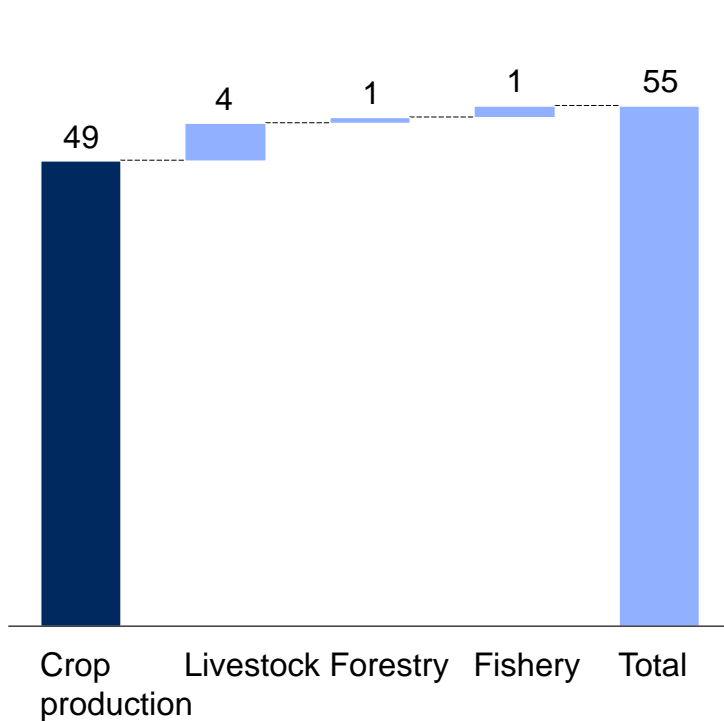
Let's start with a quick geography lesson



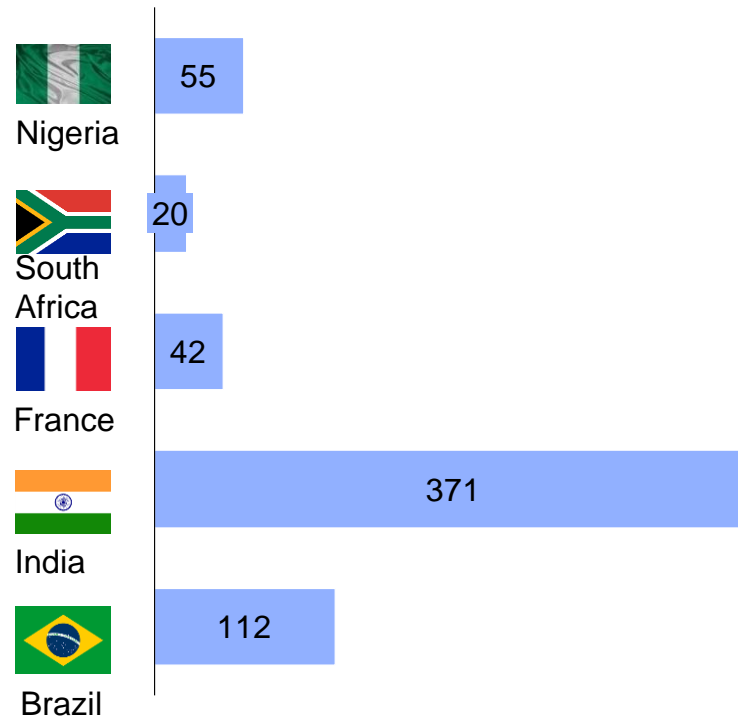
Boko Haram

Nigeria has a relatively sizeable agricultural production

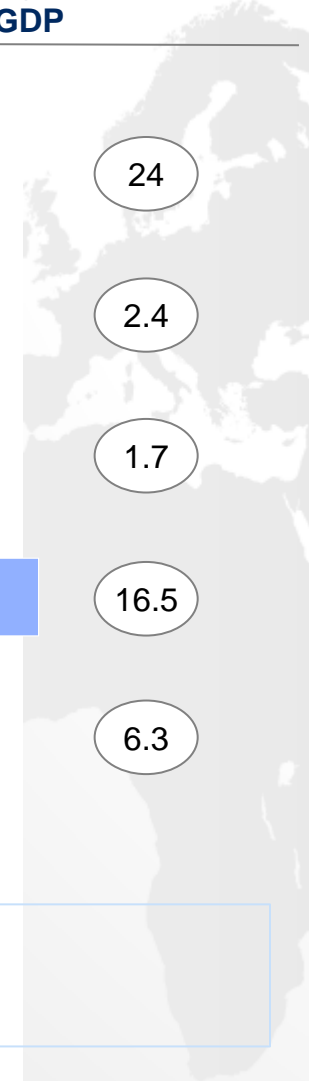
Nigeria Agricultural sector composition,
 (USD Bn), 2016



Agric GDP comparison
 (USD Bn), 2016

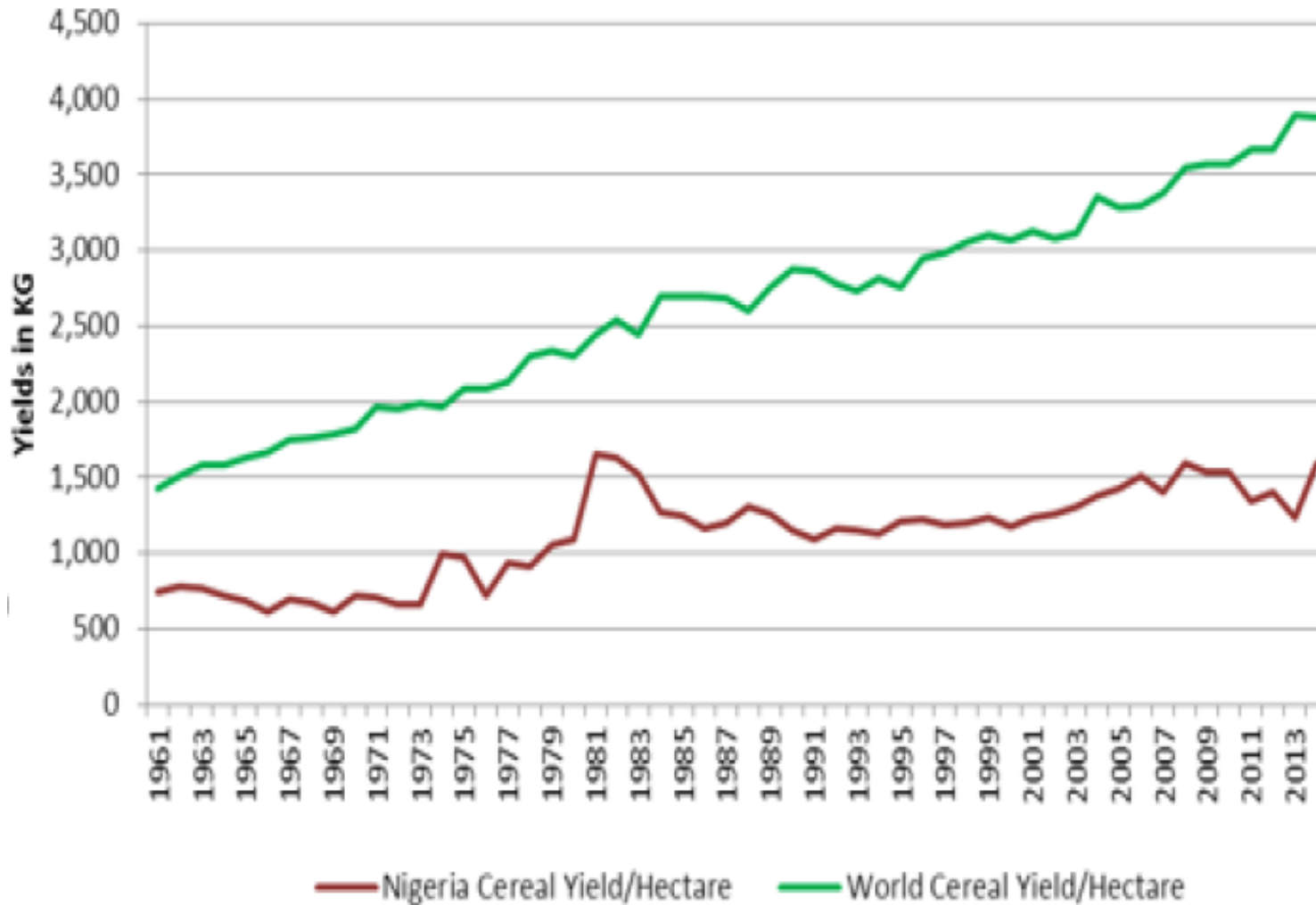


Agric as % of GDP



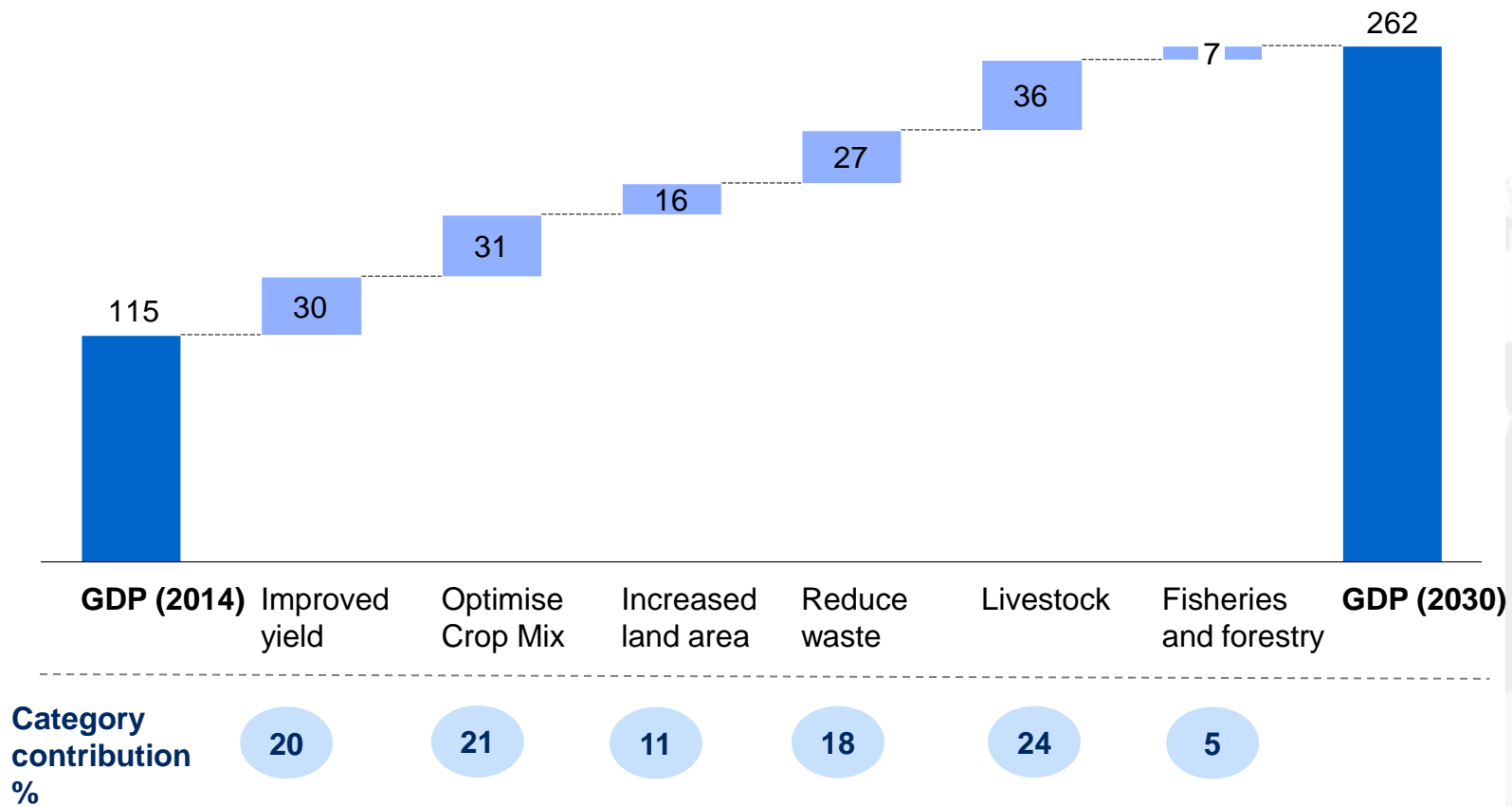
- Nigeria's agricultural output is comparable to Brazil's and twice as large as that of France
- In essence, Nigeria can be described as an agrarian economy

Yet, there is a lot of potential for further growth as crop yields lack world average



Agricultural production could potentially double if certain gaps are closed

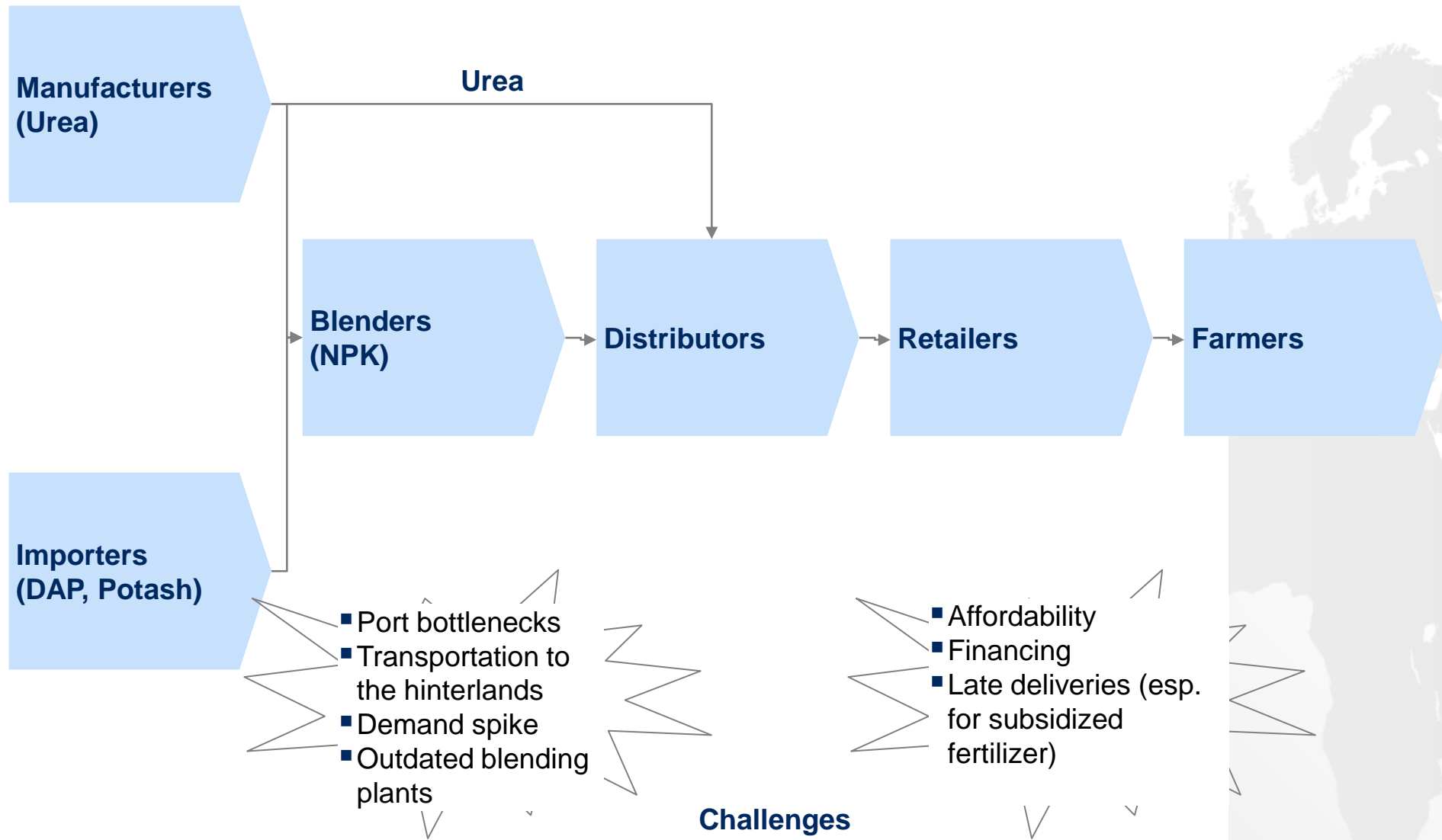
Projected GDP growth in Nigeria's agricultural sector
Real value added, basic prices, 2014 \$ billion



- Maize and rice yields in Nigeria are only about half that of South Africa or Thailand, and about a fifth that of the US
- Farmers lose more than 40% of harvests of certain crops to spoilage and waste
- Fisheries (\$2.3 billion) and forests (\$1.2 billion) constitute only 3.8% of agriculture GDP.

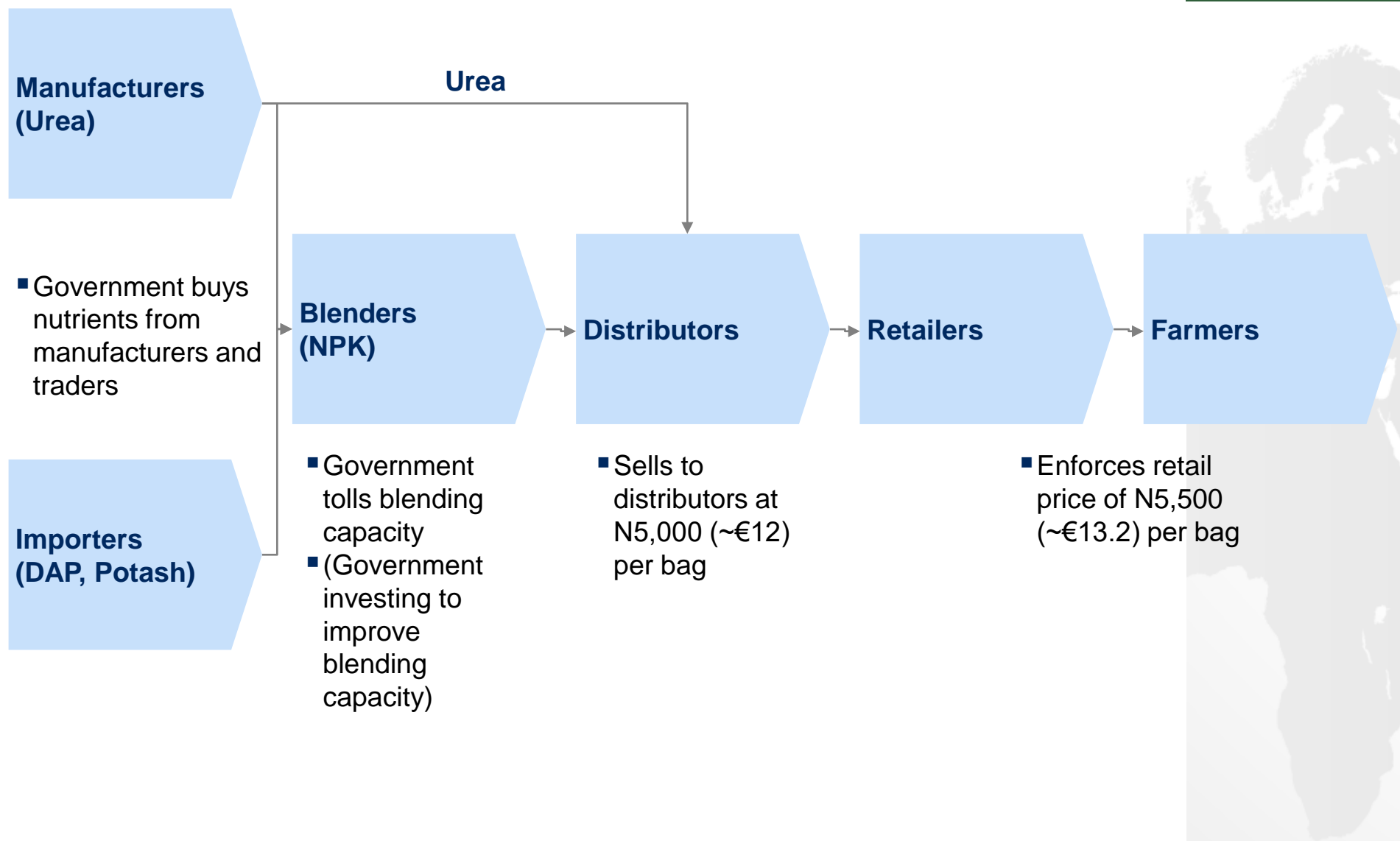
Low yield partially driven by bottlenecks in the Nigeria fertilizer value chain

The fertilizer value chain and its challenges



A large portion of fertilizer is supplied through the government

How the “Presidential fertilizer initiative” works



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By 2018, there will be about 4.9m tons production capacity in Nigeria from 3 players

- 
- DANGOTE**
- Capacity – 3mtpa
 - Location – Lekki, Lagos state



INDORAMA
CORPORATION

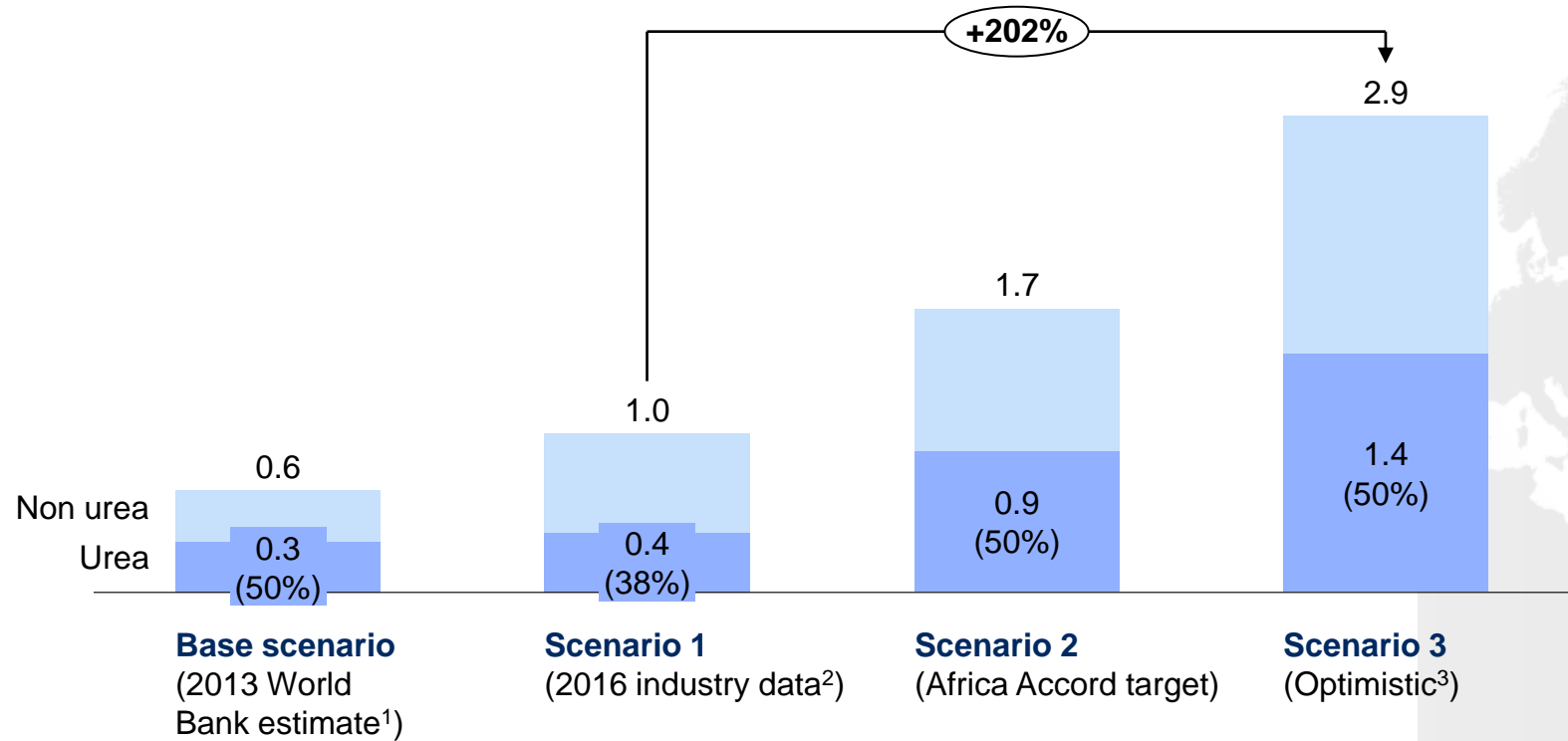
- Capacity – 1.4mtpa
- Location - Eleme Port Harcourt, Rivers state

Notore

- Capacity – 0.5mtpa
- Location – Onne, Rivers state

Current Urea consumption is only a fraction of installed industry capacity but could grow significantly

Nigeria fertilizer consumption scenarios, 000MT



Fertiliser intensity
Kg/Ha of arable land

18

27

50

70

Demand vs. Nigeria Industry Capacity, %

6.5%

9.9%

18.3%

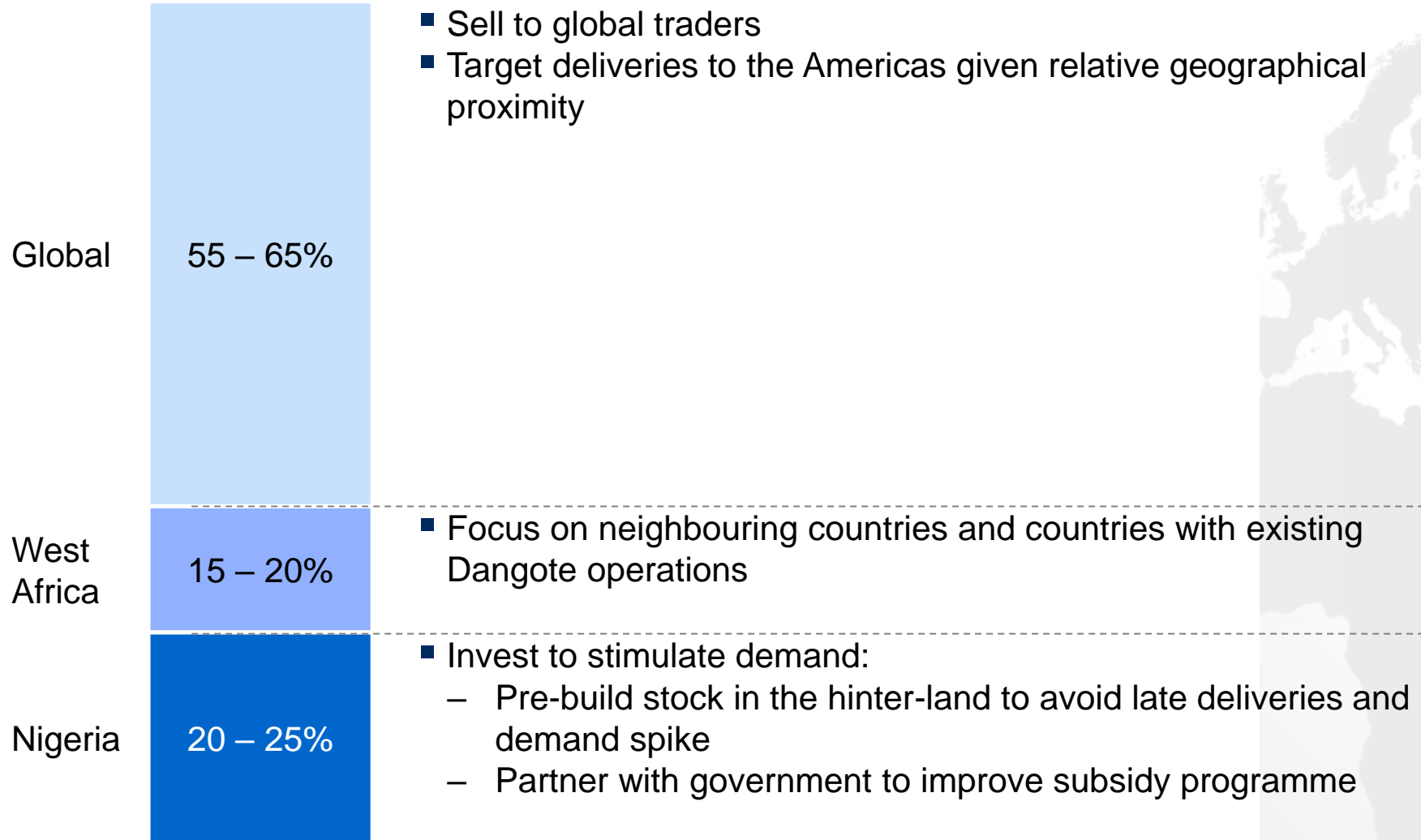
30.8%

- (1) 17.8kg/Ha of arable land x 34.5m Ha of arable land (37.3% of total land area)
- (2) Import data from customs + production data from producers – export data from customs
- (3) Consumption at Africa average of 70kg/Ha and 20% increase in land under cultivation (feasible as current statistic of only 37% of total land being under cultivation is disputed and considered too low)

In the interim, target will be to sell what we can in Nigeria and export the rest

Sales mix, %

Key success factors



Subsequently, we aim to continue to expand into other fertiliser segments

Ensure year round availability and value

- Strategic depots
- Dedicated fleet
- Leverage distributor relationships
- Extension services
- Government partnerships

Expand into NPK production

- Partner with blenders
- Local DAP/MAP production

Develop customised fertilisers

- Customised / specialty fertilizer production
- Facilitate more extensive soil testing
- Farmer education

