



Time for Africa

*Capturing the African Poultry
Investment Opportunity*



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Time for Africa

Global poultry markets have been growing for years and this is set to continue—a demand growth of more than 60% is expected over the next 20 years. This leads to significant global investment streams in an industry that is evolving from a national and regional basis to a more global platform. Most recent investments have focused on Europe, the Americas and Asia, driven by bullish market circumstances. Africa has attracted relatively limited investor interest. But this is changing.

Driven by a rising middle class and rapid urbanisation, a more modern poultry industry is taking shape in Africa. The growing middle class is changing its consumption patterns, moving from vegetable-based consumption to a more protein-rich diet.

Supermarkets and Quick Service Restaurants have responded to the opportunity of a rising African middle class, and are expanding across the continent, pulling new investments into the region.

Modern poultry supply chains are attracting investors—with companies usually starting with feed mills and hatcheries and building from there. We see a trend of building a smarter poultry value chain, encompassing breeding, grow-out farms, and processing facilities. In some cases, companies also invest in distribution, through butcher shops and restaurant chains.

However, capturing this African poultry investment opportunity is not easy. It requires a pioneering spirit, a good market and risk assessment, capable local partners and patience, as investment risks can be high. If done well, the rewards can be large, especially for companies that move early and are well prepared.

Rabobank has built up significant knowledge and experience in the African poultry industry, and is ready to support investors with market and industry assessments, Export Finance, Mergers & Acquisitions activities, leasing, and full-service local banking via Rabobank's network of partner banks in Africa.



Kees Verbeek

Senior Banker Africa, Rabobank

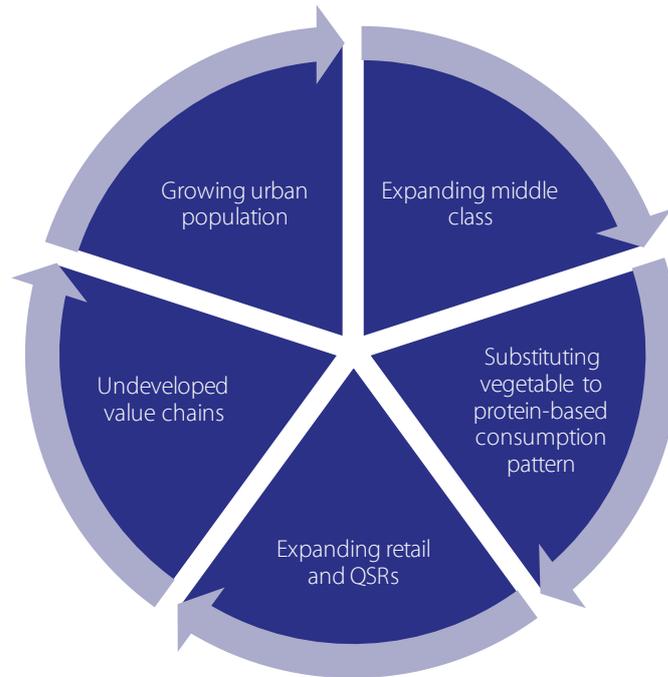


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Time for Africa: Benefit from early-mover investment opportunities

The changing investment environment in Africa



Source: Rabobank analysis, 2017

The early investor opportunity:

- Need for new investors to strengthen the grains-to-feed-to-meat value chain
- Compound feed and hatchery as base
- Gradual move to vertically-integrated models: up- and downstream
- Various strategies to reduce business risks in the value chain

Early-mover benefits can be significant

More favourable macro conditions push market change

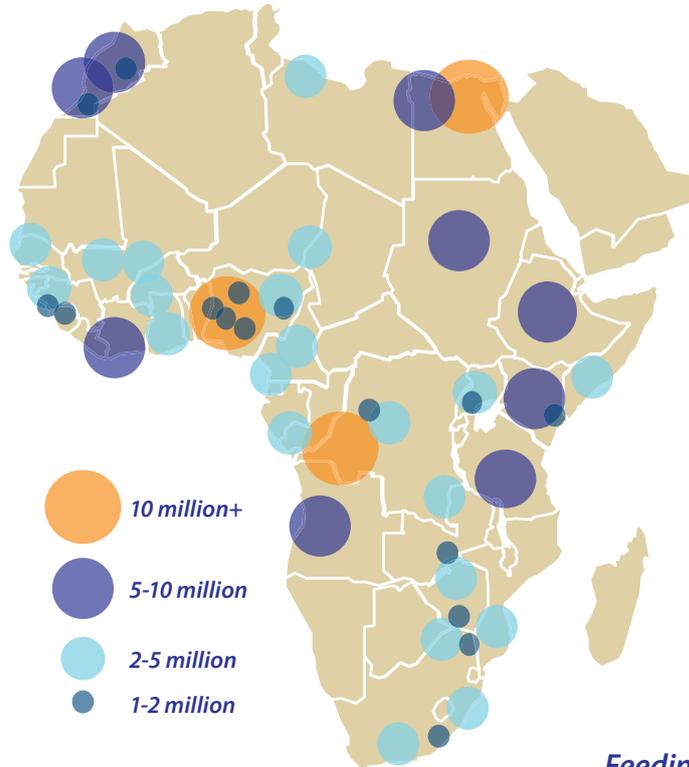


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Macro-economic factors

Population in Sub-Saharan Africa will double by 2050

Most people (62%) will live in big cities: currently only 40% live in cities



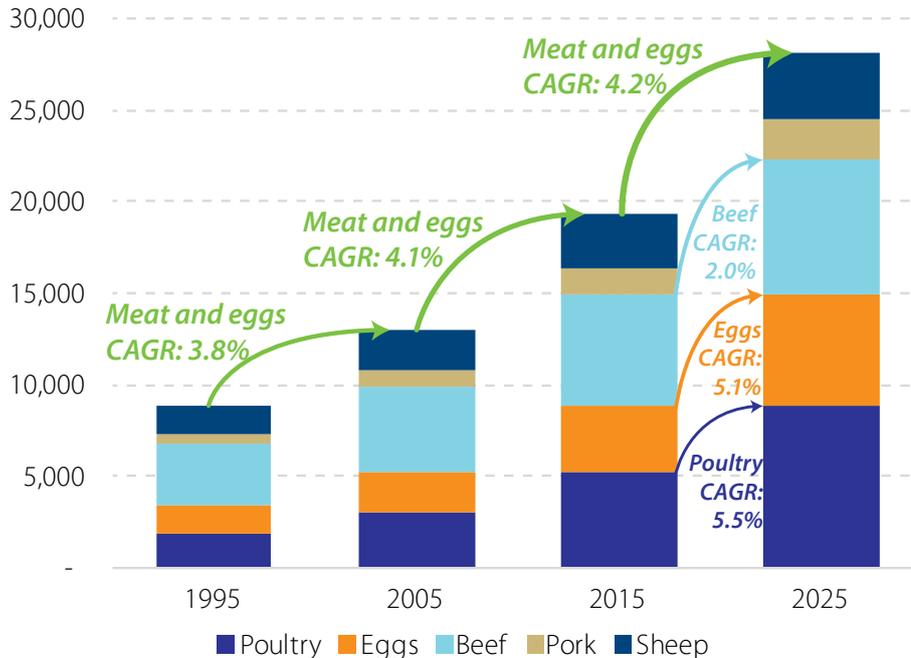
Economic factors

15 years of economic growth has increased average daily income from USD 0.9/day to USD 1.3/day

More than 40% of the African population has more than USD 2/day to spend and moves into the middle class

Poultry and egg industry—the key sector to benefit from growth

Africa meat and egg market: Poultry and eggs to grow fast



1. Population growth

Sub-Saharan Africa: 2.2% per year—
from less than 1 billion now to 2.2
billion in 2050

2. Bigger middle class

Rising incomes push preferences
from vegetable to animal protein

3. Preference

Poultry and eggs as best positioned
proteins:

- Price
- Taste
- Availability

Source: Rabobank projections based on Food and Agriculture Organization of the United Nations, OECD, USDA and local data, 2017

Many small, but fast growing, markets in Sub Saharan Africa



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Poultry demand and trade in Africa in 1,000 tonnes



Countries with expected growth of 6-10% year-on-year between 2015 and 2025

- Nigeria
- Uganda
- Côte d'Ivoire
- Kenya
- Ghana
- Tanzania
- Ethiopia
- Mozambique

Focus moves increasingly from Southern to West and East Africa

Most markets in Sub-Saharan Africa are still small, at 50-100,000 tonnes in volume

Global poultry trade into Africa:

1.3 million tonnes, 80% from non-African countries

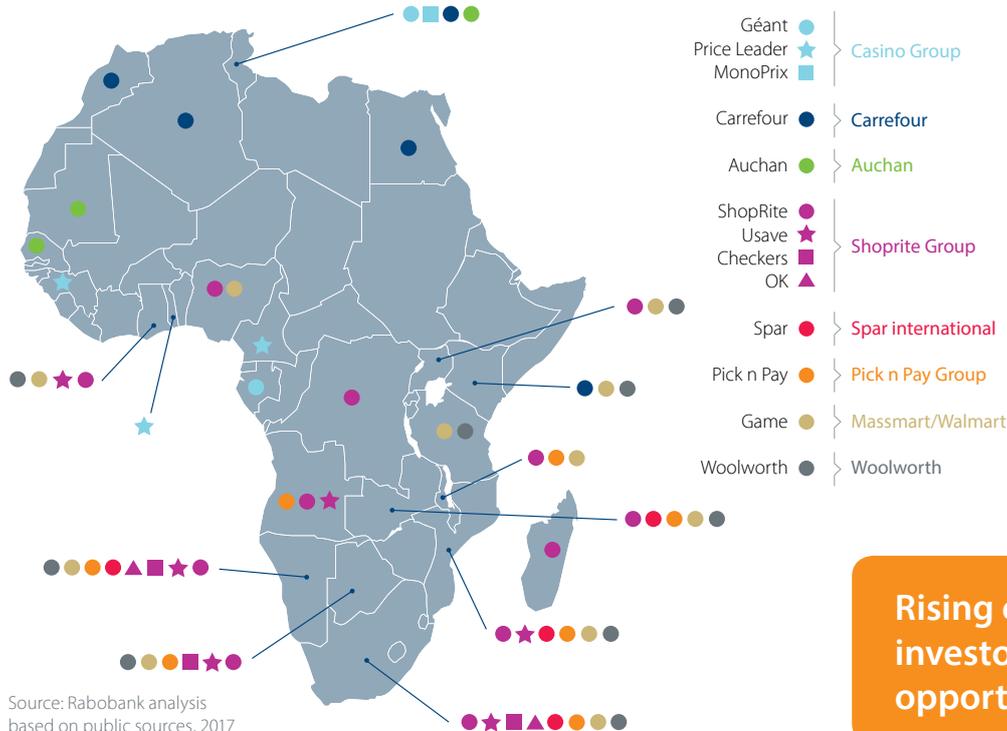
Source: Rabobank projections based on Food and Agriculture Organisation of the United Nations, OECD, USDA and local data, 2017

Supermarket and restaurant chains are spreading across the continent



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International supermarket expansion in Africa



Source: Rabobank analysis based on public sources, 2017

“Walmart to open more stores in Africa via Massmart”

Financial Times, 2015

“Famous brands continue expansion in Africa”

CNBC Africa, 2015

“KFC to expand in Africa but it lacks only one thing: Chickens”

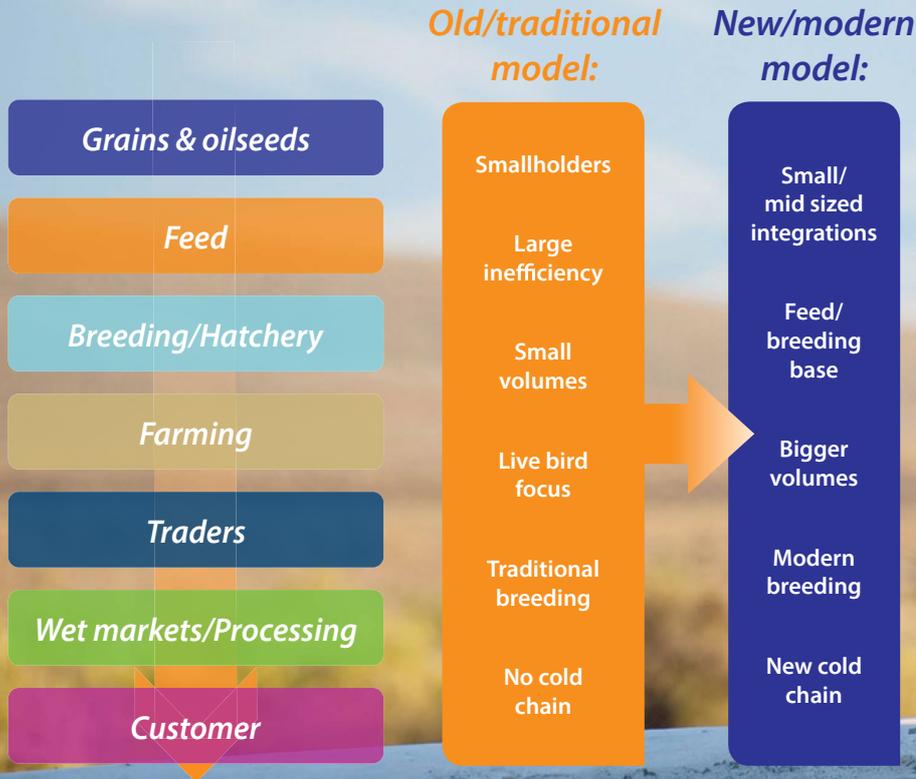
Financial Times, 2016

Rising opportunities for poultry investors to tap into this market opportunity

Current value chain model needs an upgrade



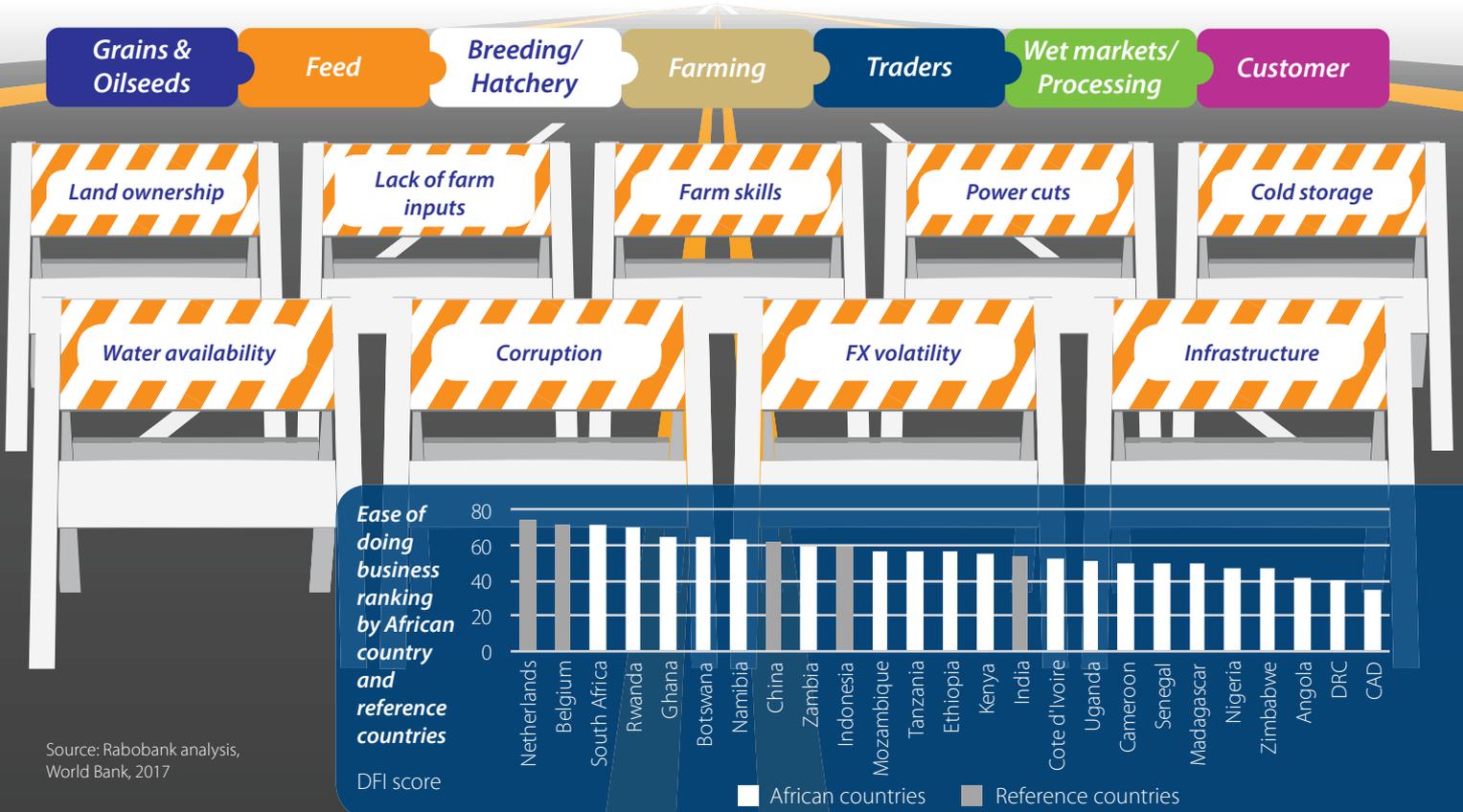
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Source: Rabobank, 2017

The challenges in Africa are significant, but rewards can be big

A pioneering spirit plus a well prepared business analysis and plan is essential



Source: Rabobank analysis, World Bank, 2017

Feed grains: still dependence on imports but big upside



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Sub-Saharan Africa wheat self-sufficiency still low:

- **Wheat:** 24%
- **Corn:** 94%
- **Soybeans:** 95%

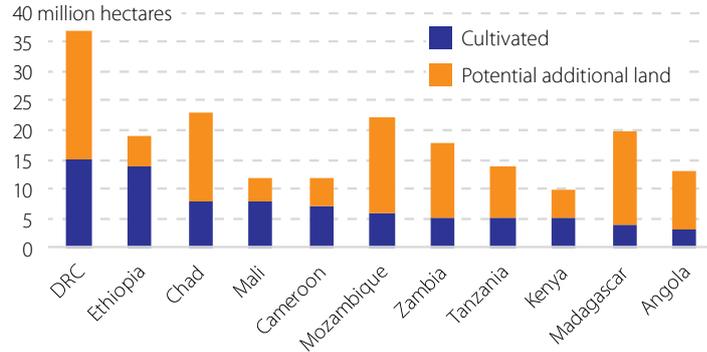
Investing in feed mills and feed grain supply:

- Highly dependent on local agricultural policy?
- Is it a staple food ?
- Is the country landlocked ?
- Are adequate farm inputs available?

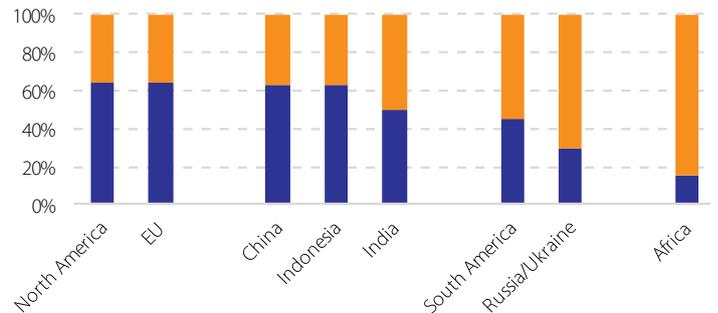
Strong grains to feed supply chain upside:

- More stable and homogenous quality/supply
- More efficient supply: better prices
- Take away middlemen margins

Africa's potential to expand farmland



Africa yield gap



Source: Rabobank, Food and Agriculture Organization of the United Nations, 2017

Breeding: fast shift to modern breeds, but how to create scale?

Modernising the breeding value chain in Africa



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Source: Rabobank, 2017



- Shift from importing hatching eggs and DOC to parent stocks
- Establishing more PS and GPS farms, but scale is required

- Need to identify the most appropriate hubs for production
- Lack of skills: need for training and education

Poultry processing: Up-scaling and investments in cold chains



Market: small, but fast-growing

- Most Sub-Saharan processed poultry product range from 0 to 20,000 tonnes or 10-20% of the market
- Growing importance of modern distribution to enable fast growth

Cold chain investments needed

- Expansion of processed poultry product markets will require significant investments in cold chains
- Several investors are tapping into this market opportunity

Southern Africa in lead, but shifting

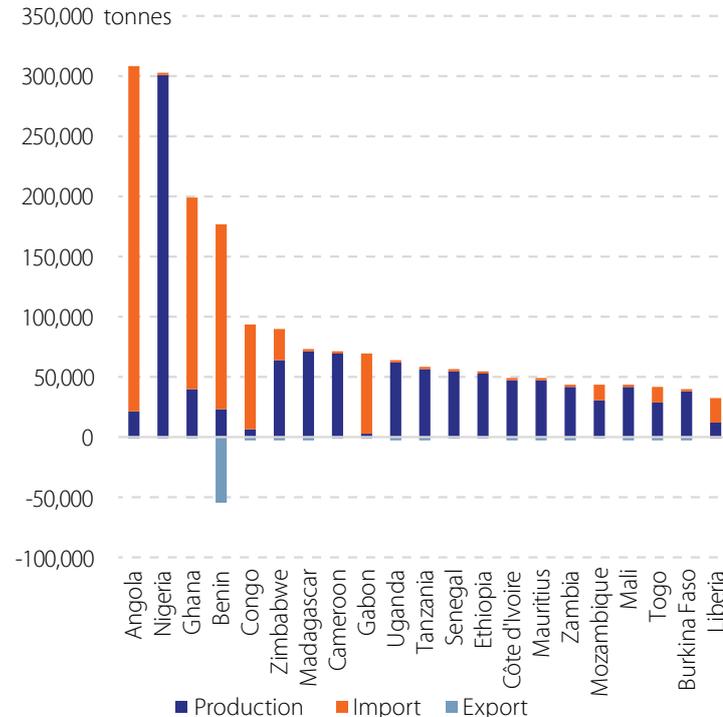
- Relatively higher incomes and South African influence has put Southern Africa in lead, with relatively modern industry
- Focus to shift to East and West Africa with significant investments in the pipeline

Equipment still relatively basic

- Equipment demand moves gradually from simple hand labour and manual slaughter lines to mid-sized processing ranges of up to 2 - 6,000 birds per hour

The future of trade

Imports: Mainly west coast, but changing focus



Source: Rabobank, Food and Agriculture Organization of the United Nations, USDA, national statistics, 2017

Intra-African trade streams: Limited but growing

Limited intra-African trade

- Relatively limited intra-African trade of 250,000 tonnes (<5% of the market) compared to 1.3 million tonnes of imports from non-African countries

Why is trade so limited?

- Tariff and non-trade barriers
- Lack of a cold chain, focus on live bird markets
- Weak infrastructure

Potential trade hubs

- Southern Africa: Zambia and Angola
- Eastern Africa: Kenya and Uganda
- West Africa: Ghana and Benin

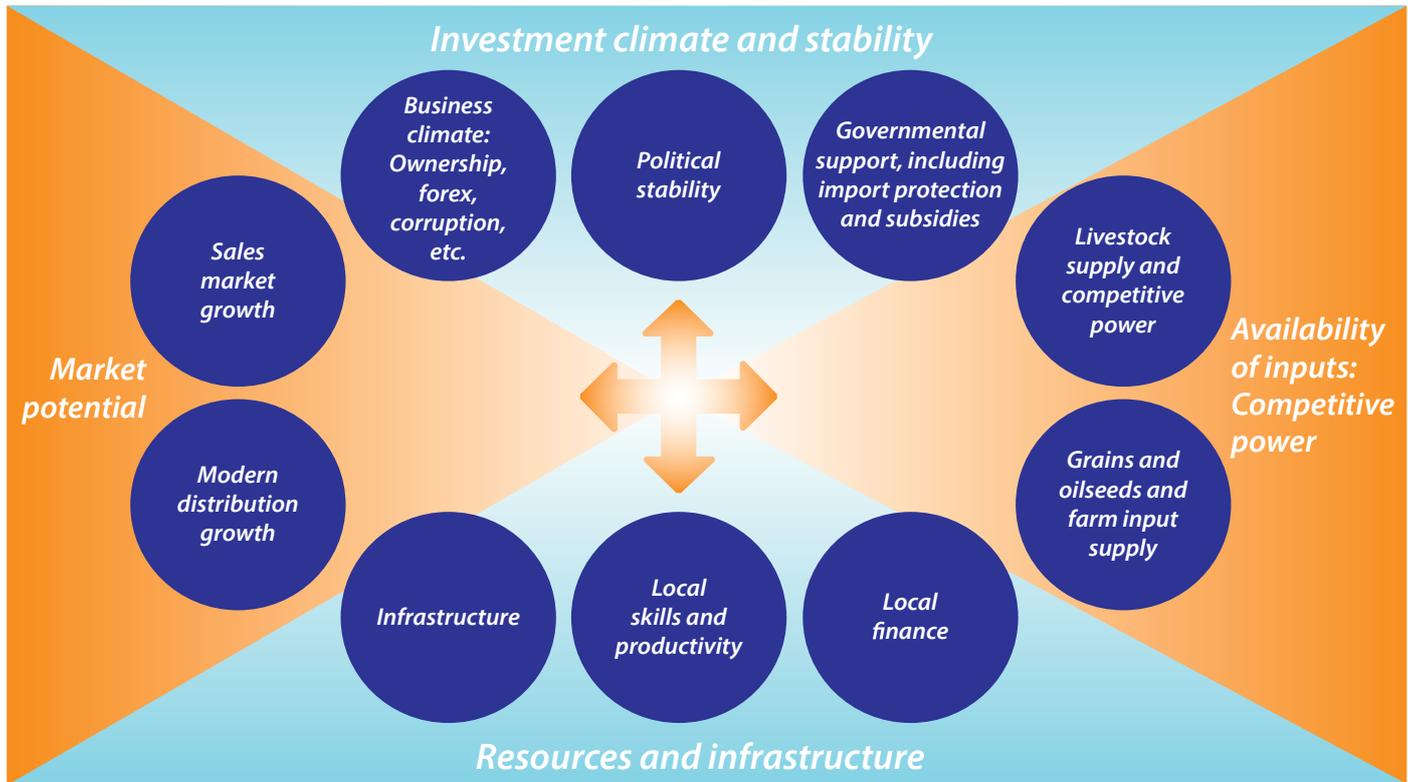
Imports: More protection, but how sustainable?

- 2015: Benin bans poultry imports
- 2015: Nigeria improves border control for imports
- 2015: Angola introduces quota system for food production, including eggs
- 2016: Ghana regulates imports

Capturing the African opportunity: The Rabobank investment model



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How to set up a successful business model in Africa: the value chain

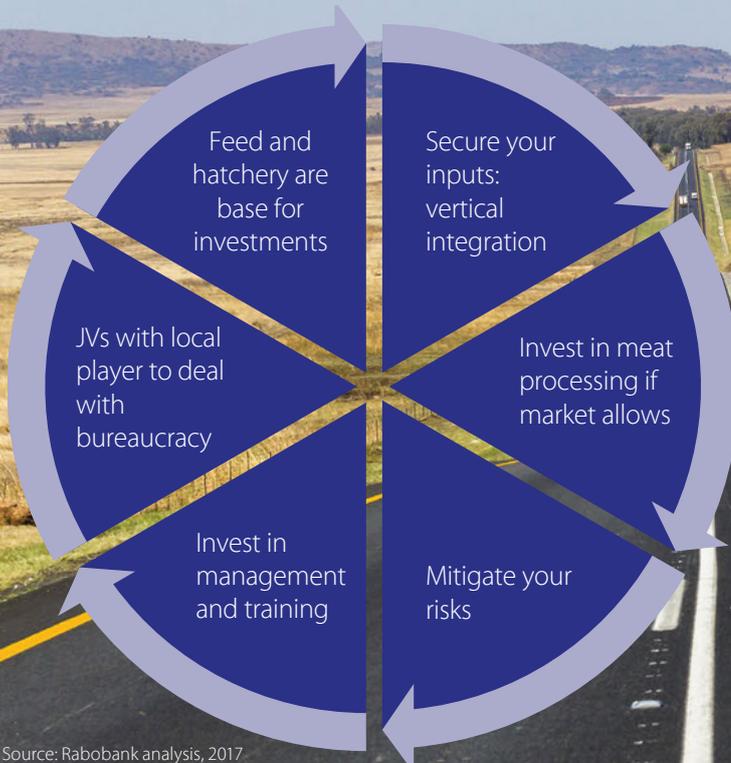


How to invest in Africa: Lessons to be learned



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Lessons for successful investors in Africa



Gradual approach is necessary

Most successful investments in Africa start with a feed mill and/or a hatchery and build a successful business from this base

Depending on local market conditions, the next step could be to invest in the supply of feed grains (farm land) and genetics (breeding farms) or to invest downstream in processing and farming to supply retailers

Adjusting to the local market conditions is essential and JVs are often a good approach. Developing local skills throughout the value chain is key

Capturing the African investment opportunity: Conclusions

Sub-Saharan Africa offers exciting business opportunities for companies with a pioneering spirit.

The poultry industry is in a fast growth mode and evolving from a traditional to a more modern business structure, which offers investment opportunities for companies in several areas:

- **Meat processing:** Developing a modern poultry value chain
- **Breeding:** Establishing a modern breeding supply chain
- **Equipment:** To supply the right equipment for the growing, more modern, industry
- **Animal nutrition:** Set up feed mills to supply more modern compound feed, distribute premixes and additives

The modern distribution growth offers a great entrance platform, but business models should not depend too heavily on a narrow business segment. Optimal market, business and risk assessment is key when investing in Sub-Saharan Africa as risks can be significant.

Rabobank has built up strong knowhow and a good track record when it comes to this type of investment decision. The bank is willing to sharing its knowledge and network with companies who want to benefit or develop business in Africa, along with offering the most appropriate financial products to support company growth.



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Rabobank's footprint in Africa

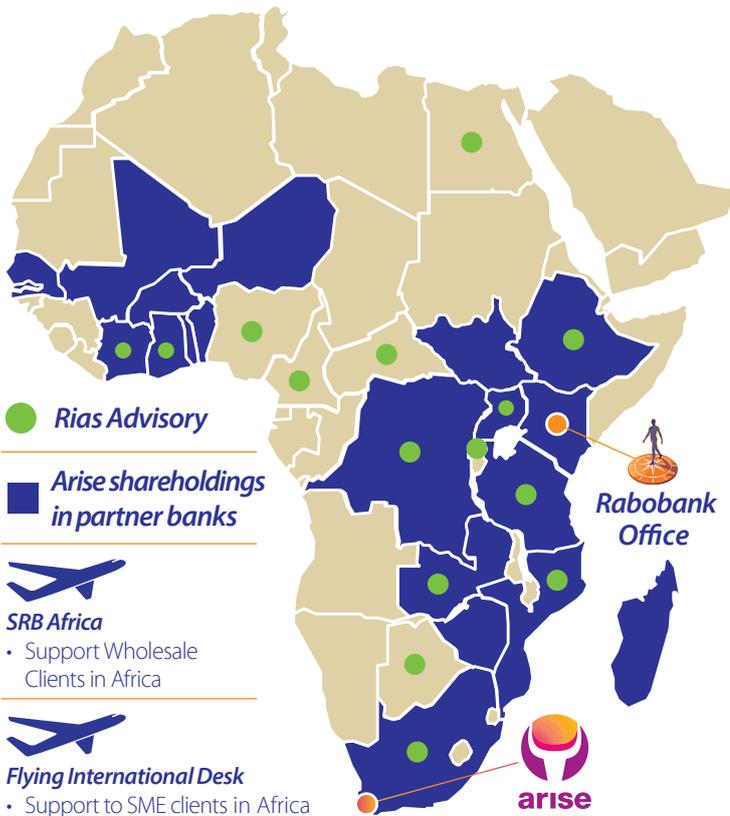
Norfund, FMO and Rabobank are establishing **Arise**: a new investment and development company under joint ownership



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Arise will take and manage strategic minority stakes in Financial Service Providers (FSPs) in Sub Saharan Africa with the goal to develop these institutions into strong, operationally stable FSPs serving the strategic goals of Arise

Shareholdings in partner banks in East and Southern Africa	FTEs	Branches	Balance Sheet
Bank of Africa Group ~10%, listed Retail, SME and Corporate clients in Mali, Niger, Senegal, Burkina Faso, Côte d'Ivoire, Ghana, Togo, Djibouti, Ethiopia, Uganda, Kenya, Burundi, Tanzania, Madagascar, DRC	5,800	500	328.6m
Banque Populaire de Rwanda 38%, private Retail, SME and Corporate clients	1,407	192	159.6m
National Microfinance Bank, Tanzania 35%, listed Retail, SME and Corporate clients	3,163	175	1.1bn
BTM, Mozambique 52%, private Retail and SME clients	184	9	47.4m
DFCU, Uganda 55%, listed - Retail and SME clients	727	45	247.5m
Equity Bank, Kenya 12%, listed Retail, SME and Corporate clients in Kenya, Tanzania, Uganda, Rwanda, South Sudan and DRC	8,043	226	4.2bn
Zanaco, Zambia 46%, listed Retail, SME and Corporate clients	1,361	66	333m
Socremo Microfinance Bank, Mozambique 36%, private - Retail and SME clients	359	14	1.4bn
NMBZ, Zimbabwe 18%, listed Retail, SME and Corporate clients	346	21	333m
Real People, South Africa 16%, private Retail and SME clients in South Africa, Kenya, Tanzania and Uganda	1,600	22	265.4m



Export finance



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- Financing of imports and exports of capital goods, mainly under Export Credit Agency ('ECA') cover;
- Servicing of clients of Rabobank member banks, Dutch wholesale clients, international food & agri clients and trade & commodity clients worldwide;
- Usually structured on a corporate basis or recourse basis;
- Maturities up to 12 years post construction in combination with favourable financing terms and conditions;
- Dedicated Africa team of 2 FTE.



Africa Credentials

Enviroflor
(Zambia)

EUR 1 million
Supplier Credit

Atradius
Tolsma

Etlin
(South Africa)

EUR 5 million APG

Petersen Matex
Euler Hermes
BRF

KenAfric Bakeries
(Kenya)

EUR 5 million
Supplier Credit

Atradius
Werner & Pfleiderer Toast

2016

2017



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Our 80 analysts are specialists with solid, in-depth knowledge in their individual sector—ranging from grains and oilseeds to dairy, vegetables, fruit and floriculture, coffee and cocoa, and global F&A supply chains.



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Banking for Food

Banking for Food is Rabobank's vision on global food security and the role of the bank. As a consequence of a growing and wealthier global population, the demand for food is expected to rise considerably. The food and agri value chains have to produce more with fewer natural resources. As a leading international food and agri bank, Rabobank aims to support and facilitate in meeting this challenge—by providing access to finance, knowledge, and networks to clients and their communities.

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