Outlook for the African poultry industry

A strategic view on investments in Covid-19 times

Nan-Dirk Mulder, September 2021
African investment story: Attractive growth in a USD 25 billion market, but Covid related delay

<table>
<thead>
<tr>
<th>Strong fundamentals</th>
<th>Sizeable industry, but spread over many countries</th>
<th>Attractive long term investment story</th>
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<tbody>
<tr>
<td>- Growing urban population</td>
<td>- Eggs USD 8 billion CAGR 5-6%</td>
<td>- Fast growing market, growth for next decade: +1.4 million tonnes eggs (+33%) +4.4 million tonnes poultry (+53%)</td>
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<tr>
<td>- Expanding middle class</td>
<td>- Poultry meat USD 17 billion CAGR 6-7%</td>
<td>- From global to local -- food security</td>
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<td>- From vegetable to animal protein</td>
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<td>- Value chain investment</td>
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<tr>
<td>- Expanding modern distribution</td>
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<td>- Poultry farming</td>
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<td>- Under developed value chains</td>
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<td>- Feed mills</td>
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<td>- Breeding</td>
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<td>- Processing</td>
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<td>- Grains and oilseeds</td>
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<td>- Farm inputs</td>
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Covid-19 impact and input price rally delays some investments
2021 investment flows via bumpy road
Investing in Covid-19 times – fine tuning of changing conditions

Source: Rabobank, 2021
Covid-19: Covid-19 cases are rising again worldwide and in Africa

Covid-19 cases per region (as of 26 August/2021)

Covid-19 cases per capita (as of 26 August/2021)
Africa’s low vaccination rates leads to rising no. of lockdowns

Covid-19 vaccine doses per 100 people (Aug 25, 2021)

Lockdowns around the world (Aug 9, 2021)
Covid-19’s big Economic impact, but economies will gradually be recovering

GDP growth in Sub Saharan Africa

Source: Rabobank, IMF Economic Outlook, April 2021

GDP growth by country 2020-2022

- Sub-Saharan Africa
- World

2020
2021e
2022f

Senegal +5.2% +8.0%
Nigeria +6.0% +6.5%
Angola +6.0% +5.0%
Ethiopia +2.3% +3.3%
Cote d’Ivoire +3.4% +4.3%
Ghana +4.9% +2.3%
Cameroon -0.2% +2.1%
Uganda +6.3% +5.0%
DRC -2.1% +1.3%
Rwanda +2.1% +2.7%
Nigeria +1.8% +3.2%
Tanzania +3.3% +3.5%
Madagascar +2.3% +4.7%
Zimbabwe -0.5% +2.0%
South Africa -2.0% +4.7%
Namibia +2.3% +5.0%
Zimbabwe +2.3% +5.0%
Mozambique +3.2% +5.0%
Kenya +6.1% +2.0%
Kenya +6.7% +3.7%
Uganda +6.1% +2.0%
Tanzania +4.7% +7.6%
Angola +6.0% +5.0%
Ethiopia +2.3% +3.3%
Cote d’Ivoire +3.4% +4.3%
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Kenya +6.1% +2.0%
Kenya +6.7% +3.7%
Uganda +6.1% +2.0%
Tanzania +4.7% +7.6%
Commodity dependent economies to benefit from higher commodity prices

Commodity price index 2000-2021

Africa dependence on commodity trade
Covid-19: big impact on African distribution channels

Food distribution change in selected African countries in 2020 vs 2019

- Drop in retail demand
- Sharp drop in food service especially full service and hotels
- Booming home delivery

YOY change

- Grocery retail
- Food Service
- On-Line

Nigeria ○ South Africa □ Kenya □
Africa’s operational challenges are rising: high feed costs and less hatching eggs

**Historic high feed prices**

**AI has led to disruption breeding value chain**

- EU/UK: Export restrictions
- RU: Rising domestic prices, breeding stock shortage
- JP/SK: Rising domestic prices
- MEA: Supply disruptions
Covid-19: lower African meat consumption, but regional differences

2020 Covid-19 meat market impact for South Africa, Nigeria and rest of Africa

- South Africa: Poultry masterplan
- Nigeria: disrupted value chain
- Rest of Africa: Lower consumption

YOY change:

South Africa:
- Poultry
- Beef
- Pork

Nigeria:
- Poultry
- Beef
- Pork

Rest of Africa:
- Poultry
- Beef
- Pork
Covid-19 new reality 2021-2030: Capturing the long term African investment opportunity

- More modern distribution: more fresh and processed poultry
- Food and input security, more local
- Expansion of more modern commercial value chains
- Upstream investments in feed inputs and genetics
- Rising international investors throughout the value chain
- Accelerated African market growth
- Accelerated global growth in African poultry demand
- Investments into a more modern local poultry industry
- Food and poultry value chains to internationalize

Source: Rabobank analysis, 2020
Africa’s increasing animal protein demand: Poultry and egg are fastest growing markets

Africa animal protein consumption 1990-2019, 2030f

Animal protein demand growth: +12.3 m tons

Source: Rabobank projection based on USDA, FAO, OECD, 2020
Africa: Population growth, urbanisation and rising middle class

1. **Population growth 2-3% per year**

2. **Urbanisation: the rise of big cities**

3. **Higher incomes: the rise of middle class**

![Map of Africa showing population growth and urbanisation](image)

- **Population growth**: 2-3% per year
- **Urbanisation**: The rise of big cities
- **Higher incomes**: The rise of middle class

![Graph showing projected population growth and urbanisation](image)

- **Projected population 2020**
- **Source**: UN

- **Nigeria**: Ethiopia, DRC, Tanzania, Kenya, Uganda, Angola, South Africa, Niger, Mozambique, Madagascar, Ghana, Côte d’Ivoire, Cameroon

- **Below poverty line**: GDP/capita above poverty line and below 5,000
- **Middle and upper class**: GDP above 5,000
- **Above poverty line**: GDP/capita between 5,000 and poverty line

- **2020**
- **2050**
Food price inflation: The need to develop affordable food for Africa

**FAO food price index**

- **Short term**
  - Affordability
  - Availability
  - Potential social unrest, high prices

- **Long term**
  - Develop a stronger local food industry
  - Economic development
  - Exploit local resources
  - Employment

*Source: Rabobank analysis, 2021*
South Africa: Higher self sufficiency and expansion due to poultry masterplan

**Africa poultry market: South Africa is largest**

- Sub Saharan Africa: 36%
- North Africa: 37%
- South Africa: 27%

**South Africa chicken supply balance sheet 2013-2020**

- Production: CAGR: +2.6%
- Consumption: CAGR: +3.6%
- Imports: CAGR: +0.7%
- Exports: CAGR: +1.5%

Poultry masterplan - Increased self sufficiency

- Source: Rabobank analysis based on FAO, USDA, SAPA and regional statistics, 2021
From global to local: gradual shift to higher self sufficiency

Self sufficiency in sub Saharan Africa

South Africa: Poultry masterplan
Nigeria: Import ban, strict smuggle control
Potential: Ghana, Angola, Namibia

Source: Rabobank analysis based on FAO, USDA and local statistics, 2021
Sub Saharan African poultry production: A decade of growth creates scale

Sub Saharan African poultry production: small but fast growing

Production growth CAGR | Country
---|---
Very fast growth CAGR: >6% | Kenya, Senegal, Ghana, Cote d’Ivoire, Mozambique
Fast growth CAGR 3-5% | Cameroon, Uganda, Nigeria, Ethiopia
Moderate growth CAGR 1-3% | Madagascar, Tanzania, Zambia
Slow growth CAGR: <1% |

Source: Rabobank estimates based on USDA, FAO and local statistics, 2021
Africa’s economic growth is impacting poultry demand significantly

- **ECONOMIC TAKE-OFF**
  - Food as a need
  - Income: < $5,000
    - Traditional markets
    - High share live markets
    - High share backyard prod

- **ECONOMIC DEVELOPMENT**
  - Food as a social occasion
  - Income: $5,000 - $15,000
    - Fast growing poultry consumption
    - Booming retail and food service
    - Increase modern poultry farming

- **ECONOMIC REINVENTION**
  - Food as stimulation
  - Income: > $40,000
    - Mature markets
    - Social concerns
    - Free range, slow growing, cage free,

- **ECONOMIC CONSOLIDATION**
  - Food as nutrition/well-being
  - Income: $15,000 - $40,000
    - More health concerns
    - More convenience products
    - Slower growth consumption

Source: Rabobank analysis, 2021
Africa’s changing distribution will impact supply chains, online is booming

**Poultry distribution in Africa:**

*home delivery growth will lead growth*

<table>
<thead>
<tr>
<th>Poultry supply chain</th>
<th>Growth 2019-2025</th>
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<tbody>
<tr>
<td>Traditional</td>
<td>+</td>
</tr>
<tr>
<td>Modern retail</td>
<td>++</td>
</tr>
<tr>
<td>Food service</td>
<td>+++</td>
</tr>
<tr>
<td>Online</td>
<td>+++++</td>
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</tbody>
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**E-Commerce Food and drink sales is growing fast**

Fast-growing online food distribution platforms in Africa

<table>
<thead>
<tr>
<th>International platforms</th>
<th>Foodservice home delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jumia Food</td>
<td>Domino’s Pizza</td>
</tr>
<tr>
<td>Uber Eats</td>
<td>Pizza Hut</td>
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<td>hellofood</td>
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<td>Regional African-owned platforms</td>
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<td>AiDelivery</td>
<td>HomesChow</td>
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<td>nairas</td>
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Markets are gradually changing: from live birds to cuts and from cuts to value added

The African poultry value added pyramid

Expanding modern distribution in Africa

Source: Rabobank analysis, 2021
How to set up a successful business model in Africa: the value chain

Source: Rabobank analysis 2021

- **Grain and oilseeds**
- **Feed**
- **Breeding**
- **Farming**
- **Processing**
- **Customer**

**Secure high quality, low priced feed ingredients**

**Enter high quality meat market**
- Secure quality
- Improve efficiency
- Early adapter margin potential

**Basis for all Africa poultry investment:**
- Solid position in feed and breeding

**Governmental ambitions for food security and self sufficiency**
- Weak infrastructure
- Access to finance

**Limited available and low quality resources**

**Fast growing demand**

**Bigger middle class**

**Expanding retailers and QSRs**

**Wet market sales**

Source: Rabobank analysis 2021
Upgrade the local feed supply chain: Big upside in grain and oilseed yields

**Corn: Ongoing yield gap with global peers**

- South Africa: 2.00 tons/hectare (2007-2017)
- Zambia: 2.00 tons/hectare (2007-2017)
- Uganda: 2.00 tons/hectare (2007-2017)
- Namibia: 2.00 tons/hectare (2007-2017)
- Ghana: 2.00 tons/hectare (2007-2017)
- Nigeria: 2.00 tons/hectare (2007-2017)
- Tanzania: 2.00 tons/hectare (2007-2017)
- Angola: 2.00 tons/hectare (2007-2017)
- Sub-Saharan Africa: 2.00 tons/hectare (2007-2017)
- United States: 1.00 tons/hectare (2007-2017)

**Soybeans: Big improvement in Southern Africa**

- South Africa: 1.00 tons/hectare (2007-2017)

**Source:** Rabobank analysis based on USDA and FAO, 2021
African poultry: ongoing investments with increasing international interest

African poultry investment case: buy and build opportunities

Pan African investors in the poultry industry

- Source: Rabobank analysis, 2021
## Conclusions

### Short term challenges
- Supply demand disruptions, price inflation
- Pressured consumption, especially in food service
- Booming online distribution

### Strong long term fundamentals
- Population growth 2-3% per year
- Rising middle class
- Urbanisation

### Long term market impact
- Poultry is the preferred protein with fastest growth
- Regional differences
- Modern distribution to grow fast
- Rising demand value added
- Price driven remains biggest category
- Expect ongoing volatility

### Investment perspective
- Breeding and feed as base
- From native to multipurpose breeding for smallholders
- Rising share of modern breeds
- Downstream investments in processing and cold chain
- Upstream investments to improve feed efficiency
- Focus on knowhow and skill development
- Rising international investments
- Expect the unexpected, investments should be long term focused
Questions?
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Senior Global Specialist Animal Protein

Thanks for your attention