Market development for regional industrialisation and sustainability: the case of the soybean to poultry value chain

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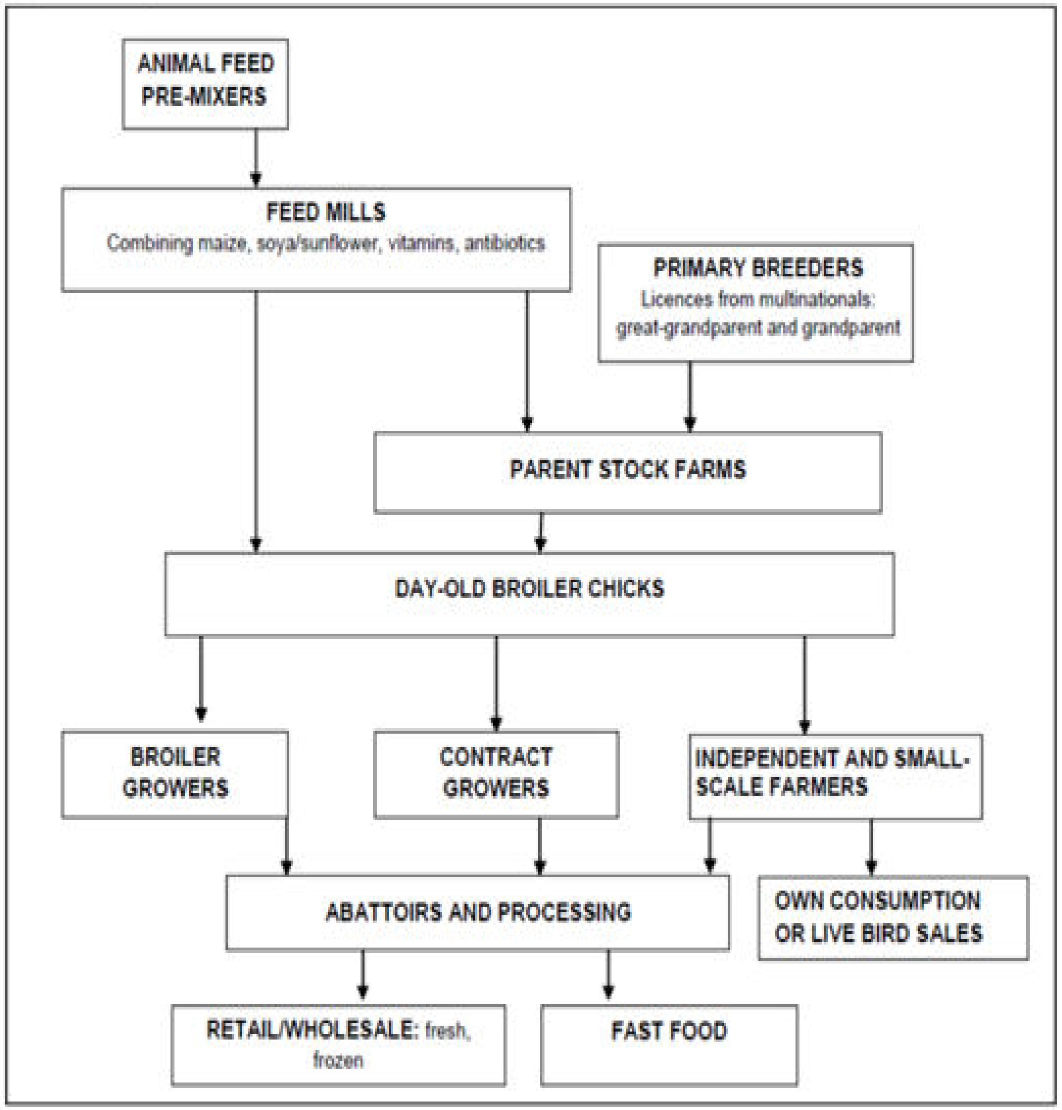
Industrial Policy in an era of global structural change: Implications for Southern Africa

Introduction

- Agri food systems are vulnerable to climate change
- Southern Africa is a climate change hotspot – greater average increases in temperature and declining rainfall
- North of the region, best areas to expand production, have good rainfall on average, arable land - Zambia and south-west of Tanzania
- But potential for trade from areas with good harvest to areas with shortfalls is not seized – regional trade not working.
- Research shows African regional food markets are broken
- Outcome of regional markets not working well is high prices in African cities

Soybean to Poultry Value Chain



- Value chain overview
- High levels of concentration & vertical integration (animal feed, breeding stock, processing) Control access to key inputs
  - 5 large producers 75% of animal feed produced by members of AFMA in SA
  - In Malawi 2 firms produce 80% of poultry feed while in Zambia 3 largest producers are the largest manufacturers of poultry feed.
- Concentration affects participation by SMEs in the PVC
- Smallholder farmers have limited access to key inputs, routes to markets & financing
- Both soybean and maize feed into poultry – 30% soybean, maize 60% by volume.
- Soymeal is key input to feed – 30% of feed by volume, 50 – 60% by value
- Animal feed biggest cost to poultry production – about 70%

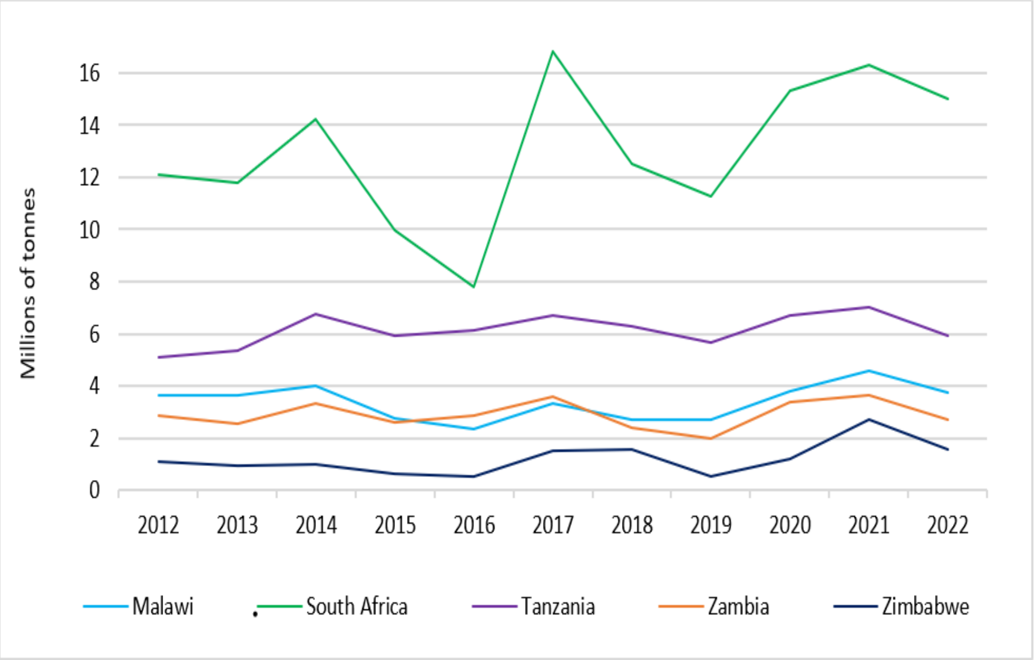
Impact of climate change on food systems

- Agricultural production is the key input to agroprocessing which serves as a vehicle for structural transformation and change.
- This holds true especially for Africa which largely remains on agriculture
    - Agricultural production accounts for between 30 to 40% for decades in Africa of the GPD, compared to Southeast Asia's which dropped from 30-35% in the 70s to 10-15% in 2019.
- Agri and agroprocessing development therefore holds great potential for transformation
- With all these opportunities – risks associated with climate change continue to threaten agri transformation. Ex El Nino 2015/16, later in the year.
- The transformation agenda needs to address climate change adaptation challenges, while also moving food systems to a sustainable carbon footprint

Implications of climate change on the regional soybean to PVC

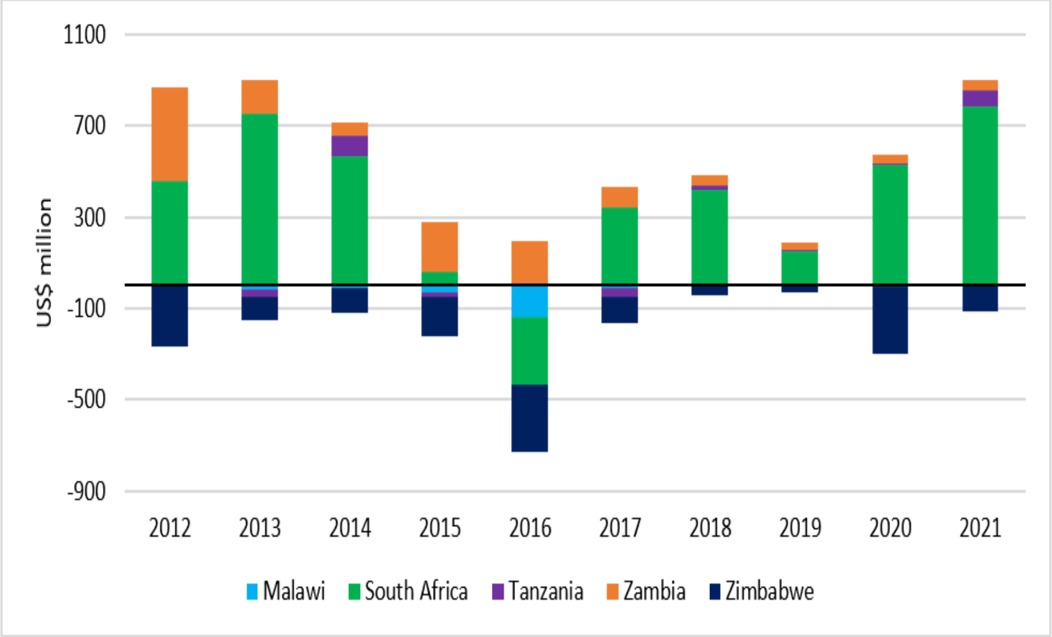
Regional maize production and trade balance

Figure 1: Regional maize production



Source: FAOSTAT

Figure 2: Regional maize trade balance

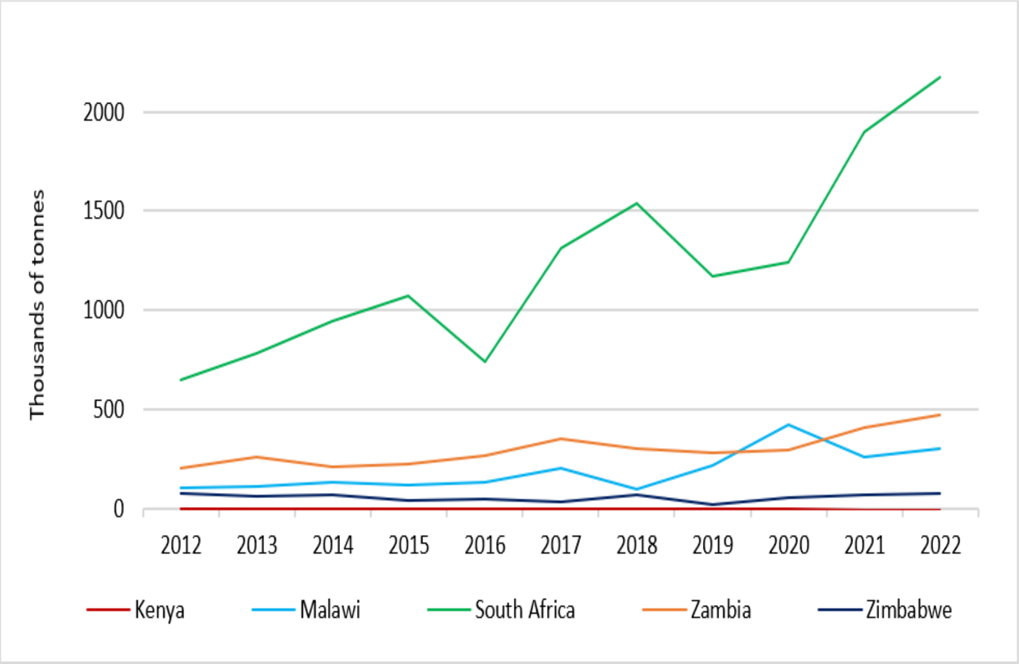


Source: FAOSTAT

Implications of climate change on the regional soybean to PVC

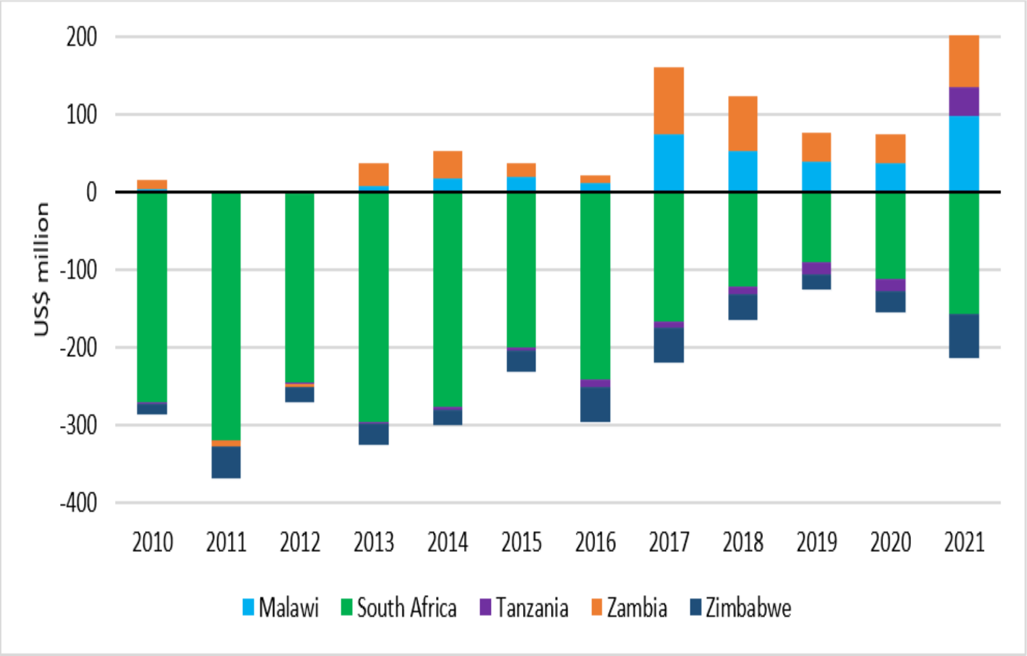
Regional Soybean production and trade balance

Figure 3: Regional soybean production



Source: FAOSTAT

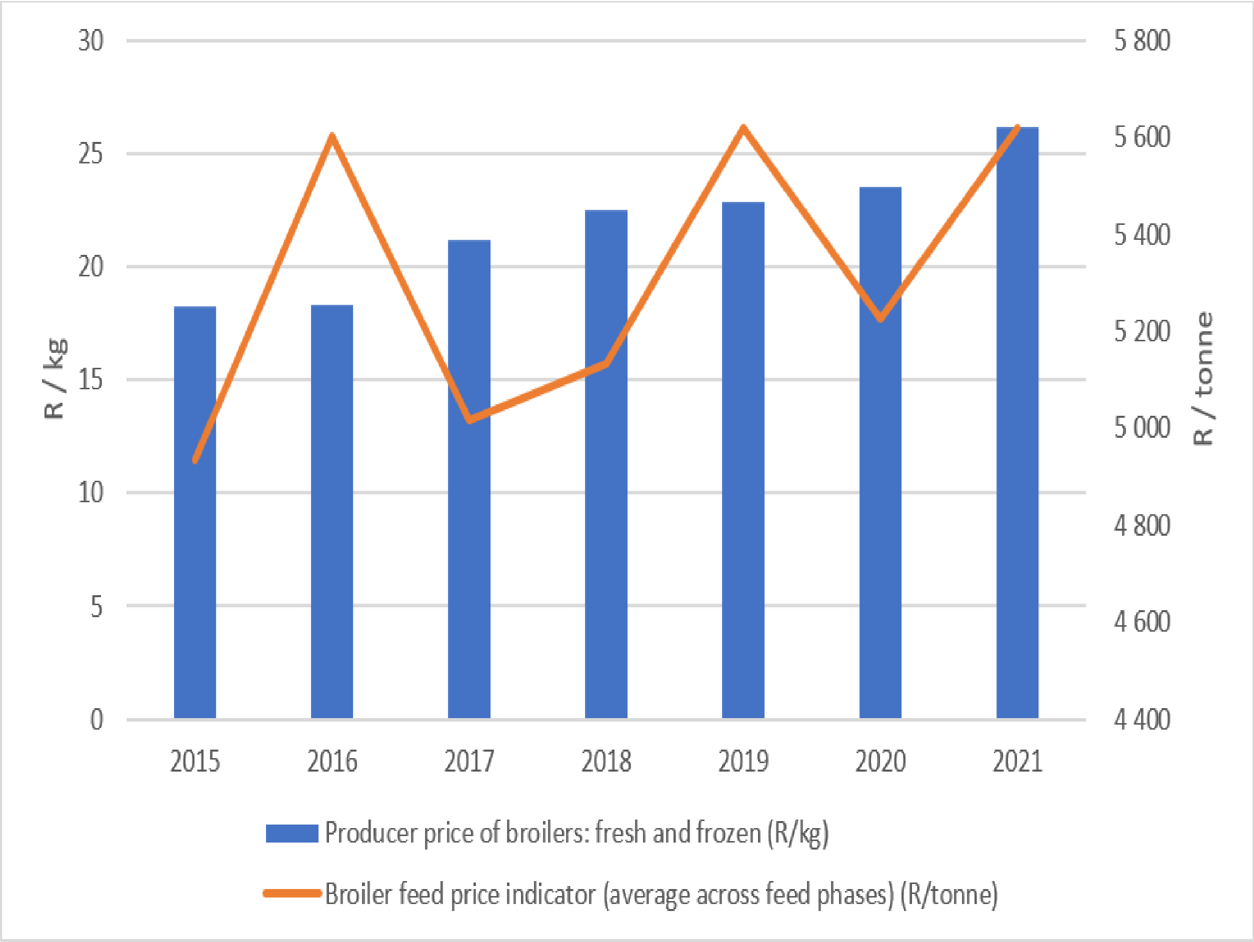
Figure 4: Regional soybean and oilcake trade balance



Source: Trade Map

Climate change effect on input costs

Figure 5: Producer price of broilers: fresh and frozen (R/kg) and broiler feed price (R/tonne)

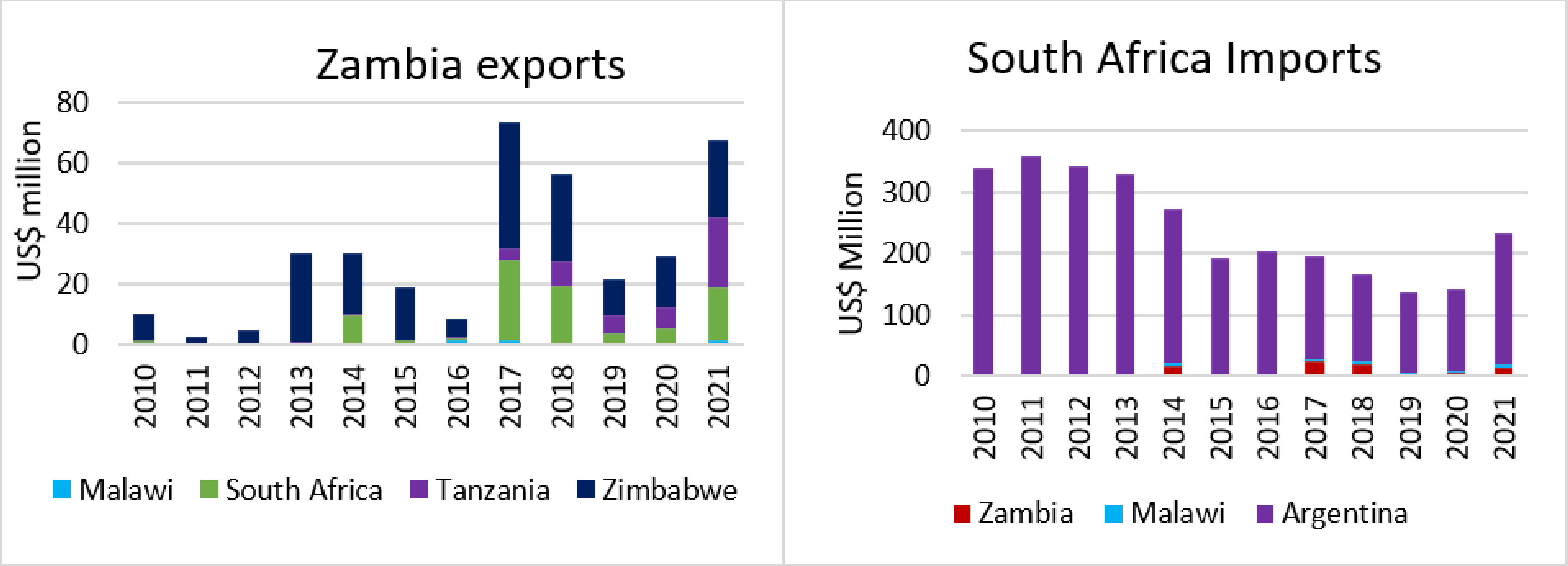


Source: Bosiu and Nontenja (2023)

- Main input to animal feed – 60% maize, and 30% soybean
- 2015/16 Southern Africa - crop production declined by approximately 66%
    - Feed prices in 2016 increased by over 100% from prev years reaching R5600 per tonne.
- Late rains in 2017/18 also resulted in drop in maize production and rise in feed prices.
- Southern Africa cyclones in 2019 – Cyclone Idai and Cyclone Kenneth that affected close to 2.2m people in the region, adversely affected crop production.

Case for regional integration and trade

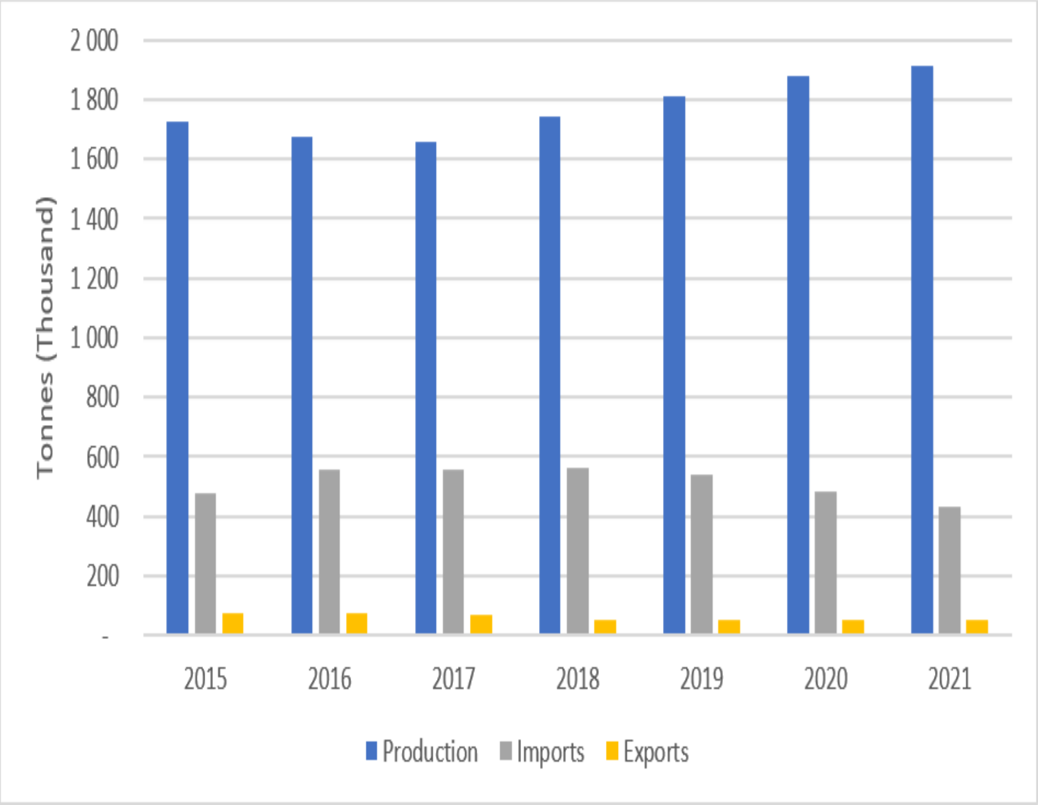
Figure 6: Zambia exports and South Africa imports of soybean and oilcake



Source: based on AMO price tracker data from multiple sources

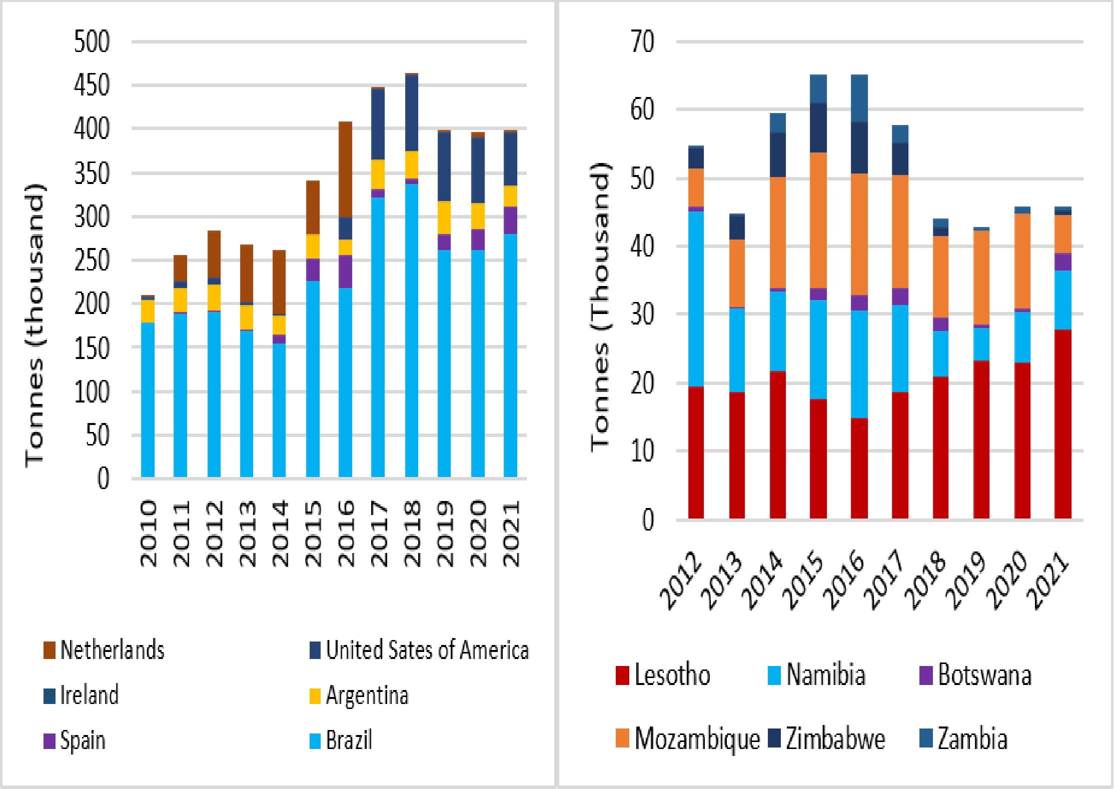
SA poultry imports and exports

Figure 7: Broiler production, imports, and exports



Source: FAO (2022); SAPA (2022); DALRRD (2019); Trademap

Figure 8: South African poultry imports (left) and exports (right)



Source: Trade map

Conclusion and recommendations

- A competitive feed industry and capabilities and investment in breeding operations – strengthen the regional PVC. This is not true for Southern Africa yet
  - Due to poor regional trade and integration; markets not working well for smallholder and med scale farmers; anticompetitive behaviour by big firms and various levels of the VC. Worsened by climate change.
- There needs to be policies that address not only structural issues within individual country's poultry industries; but policies that also address recognise the importance of an RVC, especially in the climate change context.
  - SA could trade with countries such as Zambia, Malawi and Tanzania as key partners for sourcing inputs into poultry production – and in turn export final poultry products to these countries under existing trade agreements (AfCFTA).
- There is an urgent need for government policies that support smaller producers – reducing some of the barriers they face; access to routes to markets, financing, skills development.
- For regional markets to work well they need
  - Monitoring markets in real time; AMO monitoring prices identifying excess margins and harm to smaller producers
  - Competition authorities need to play an active role combatting anti-competitive behaviour in domestic and regional markets

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