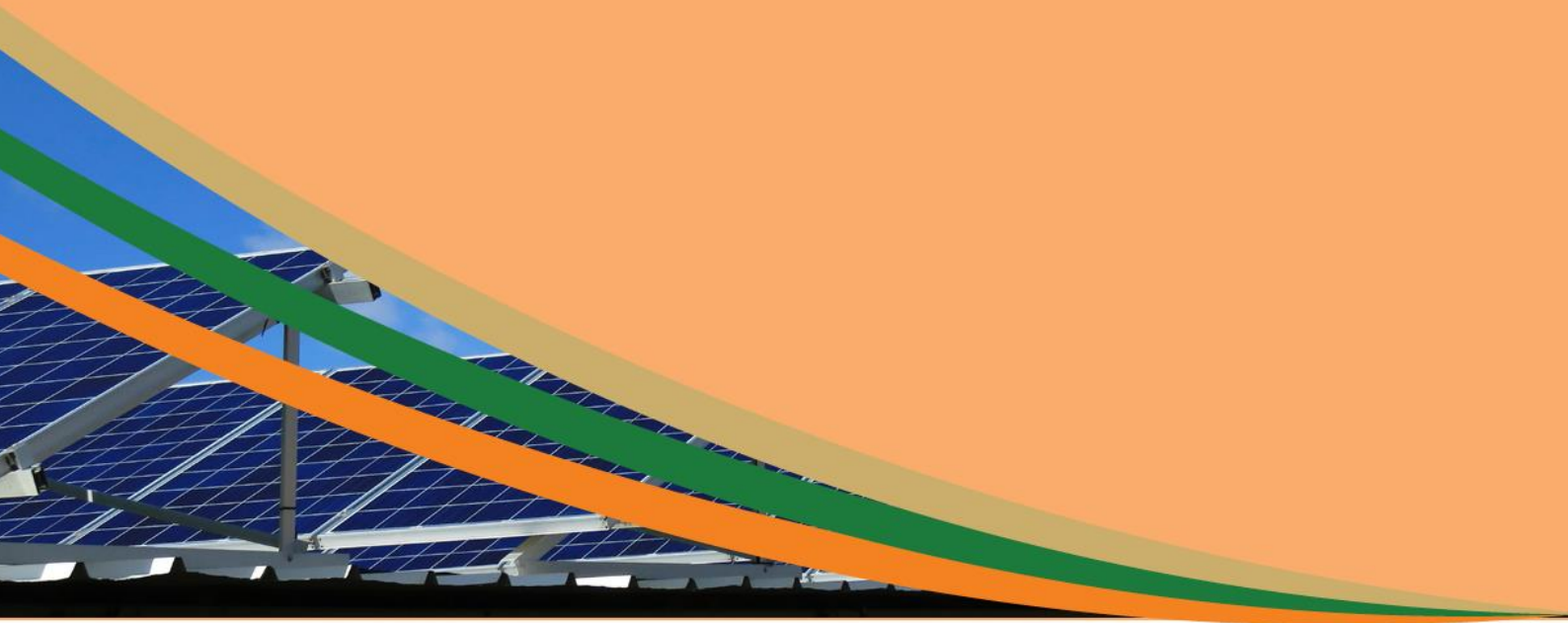


Opinion Piece:

Evaluating the Poultry Feed Industry and Alternatives for the Future

Produced by the Chief Directorate: Growth Path & Decent Work 1

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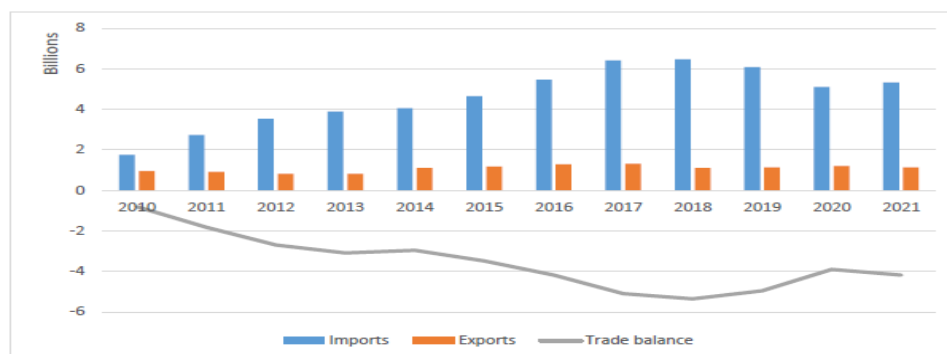
Evaluating the Poultry Feed Industry and Alternatives for the Future

Background of the Industry

The poultry industry is an important subsector within the broader agriculture landscape. It is the single largest contributor to total gross agricultural production value and has significant up and downstream multiplier effects through its long, integrated value chain especially in the production of maize and soybeans for animal feed, which are key inputs in the poultry production process. In addition, it provides the most affordable source of animal protein to the South African consumer, which makes it critical to national food security objectives. In the recent past, the industry has struggled to recover costs in the midst of rising feed costs and, since 2010, a growing share of growth in chicken consumption has been met by increased imports rather than domestic production.

As shown in the below figure, poultry imports peaked in 2018 with an estimated value of R6.5 billion. In 2021, South Africa's total chicken imports were valued at R5.3 billion. Poultry exports were estimated at R1.1 billion in 2021 and at their peak in 2017, more than R1.3 billion of poultry meat was exported by South Africa. South Africa has a negative trade balance for poultry meat products and this negative trade balance was widening until 2018 however, since then it has narrowed partly due to the anti-dumping policies instituted by the Department of Trade, Industry and Competition (**the dtic**).

Figure 1



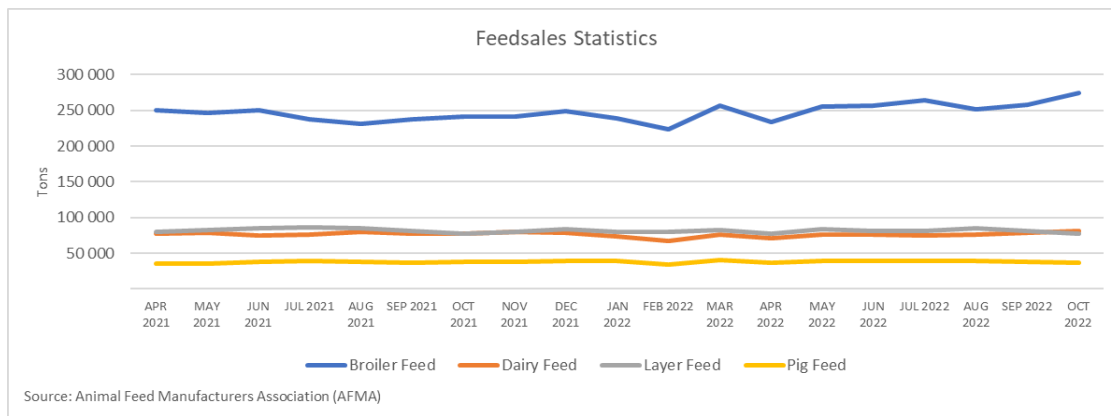
Source: Own calculations based on Quantec Research data.

The **Poultry Sector Masterplan** has identified a number of challenges associated with the sector one of them being the recent discourse surrounding imports and the dilemma faced by the industry on the issue of competitiveness and production efficiencies against rising commodity prices associated with feed. While the importance of the poultry industry within the South African agricultural sector context cannot be ignored, its inability to enter into the global export market and to compete against surplus products sold within the global market raises concerns regarding its long-term sustainability. This has strengthened government and stakeholders' resolve to implement measures to increase exports and respond to unfair trade competition, mindful of the impact this may have on poor consumers

The Poultry Feed Industry

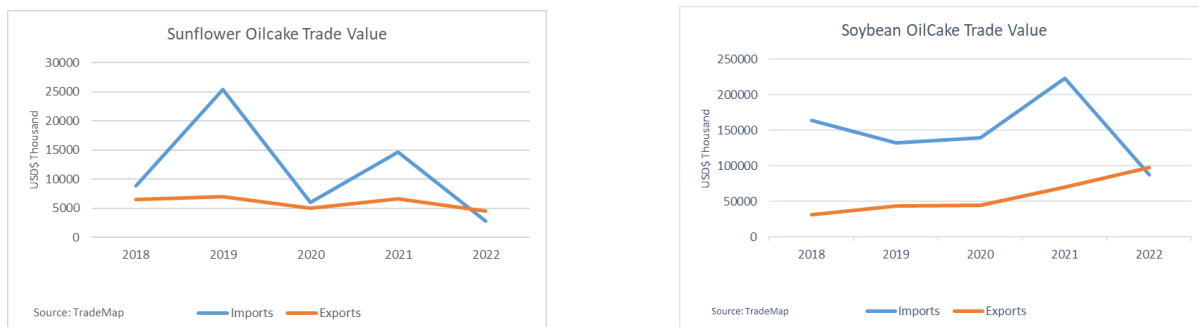
Animal feed is a key component in poultry production, as it constitutes 60 to 65% of the costs of producing a chicken. As shown by the figure below local poultry (broiler) feed accounts for largest share in the overall animal feed sales, which can be related to the rapid and constant rise in the demand for primary poultry products (meat and eggs).

Figure 2



The poultry industry is a primary consumer of animal feed derived from yellow maize, sunflower seeds and soybeans. Yellow maize, other than its energy value, is important for its high carotene levels, which are responsible for the yellow coloration of egg yolks, feet, shanks and skin. Similarly, soybean meal is the most widely used oilseed by-product because of its ability to provide indispensable amino acids, which complement most cereal-based diets, are highly digestible and are low in undesirable substances. Historically, South Africa tends to be a surplus producer of yellow maize, the single largest ingredient in broiler feed rations. It is only under severe drought conditions as observed in 2015 and 2016 that South Africa imported maize. However, South Africa remains a net importer of soybean oilcake, resulting in protein meal prices trading at import parity levels. For instance, South Africa’s trade surplus for soybean oilcake and sunflower oilcake in 2022 was US\$10,6 million and US\$1,7 million respectively which is an improvement for both commodities which has observed recurring trade deficits in the previous four (4) years.

Figure 3

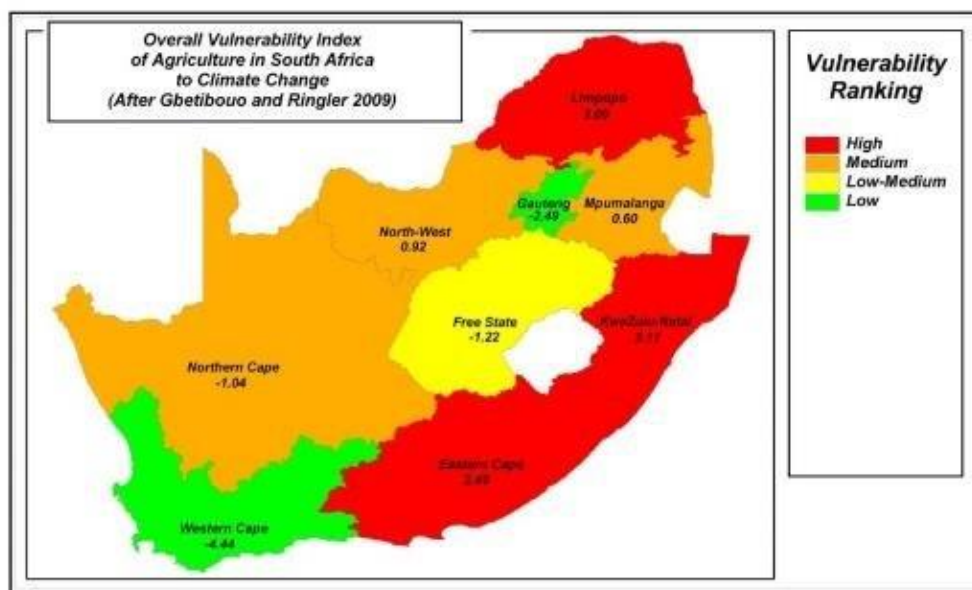


Whilst remarkable strides have been made in recent times in terms of expanding the planting areas under soybean production from 311 450 hectares in 2009/10 to 925 300 in 2021/22 over a span of 10 years the implications of increased domestic soybeans production on prices will remain marginal. This is due to the fact that South Africa is a small player in the global soybean market, accounting for a mere 0,5% of global soybean production. The South African soybean prices are primarily influenced by market and price developments in significant soybean-producing and consuming countries such as Brazil, the United States, Argentina, India and Paraguay and in sum the gains in the increase in domestic soybean production, at least in the near term, won’t translate into lower price changes for buyers such as poultry producers. This infers that the prices for soybean feed will likely remain elevated for the foreseeable future.

Alternatives for the Industry

In academic circles, sorghum and millet have been punted as possible alternatives for poultry feed due to its high protein content, which can be further supplemented by other products. Sorghum for example is mainly produced in Mpumalanga, Limpopo, the Free State and North-West province with about 95% of the total domestic commercial sorghum being used for human consumption and only 5% of the total commercial processing volume being used for animal feeds. The challenge associated with domestic sorghum production is attributed to a combination of high input costs and relatively poor yields, resulting in sorghum being higher priced than its maize equivalent. Whilst the poultry industry might not be overly eager to embark on the substitution of oilcakes with sorghum or millet which are drought resistant there might be a compelling argument for the sector to consider the product from a sustainability point of view since South Africa is quickly running out of grain producing areas and access to water for irrigation as shown in the below figure. Also there is value in pursuing sorghum and millet as possible sources for animal feed in the long run from a transformational and spatial redistribution lens supported by the allocation of public resources and value chain development since both commodities are suitably primed for creating primary agriculture employment and social impact in dry and semi- arid rural areas.

Figure 4



Conclusion

In future, feed will remain the major input cost for the poultry industry while yellow maize and soybean meal will remain the energy and protein yielding ingredients of choice, in all poultry diets, thereby perpetuating dominance of these commodities in producing regions of the world. However, for purposes of domestic sustainability of the industry both economically and socially, the integration of other possible non-conventional feed resources such as sorghum and millet is warranted since any negative changes in either pricing or production of poultry meat will negatively affect real incomes and access to food and nutritional security for many average South Africans in urban and peri-urban areas.