NAMC

THE SMALLHOLDER MARKET ACCESS TRACKER

(SMAT)

BASELINE REPORT

A CASE OF SMALLHOLDER BROILER PRODUCERS IN SOUTH AFRICA

March 2020

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Smallholder Market Access Tracker (SMAT) is a tool that has been developed by the NAMC, with the help of a reference group, to measure the progress in the achievement of the market access goal for smallholder farmers in South Africa.

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The team would like to acknowledge the following SMAT Reference Group members that gave valuable inputs into the process of developing the SMAT tool either at concept stage or at various stages of the development of SMAT.

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LIST OF ACRONYMS

ABBREVIATION	DESCRIPTION
AMIE	Association of Meat Importers and Exporters
BATAT	Broadening Access to Agriculture Thrust
BFAP	Bureau for Food and Agricultural Policy
CASP	Comprehensive Agricultural Support Programme
DAFF	Department of Agriculture, Forestry and Fisheries
EPA	Economic Partnership Agreement
EU	European Union
EU	European Union
IDC	Industrial Development Corporation
ITAC	International Trade Administration Commission
NAMC	National Agricultural Marketing Council
RDP	Reconstruction and Development Programme
SADC	Southern African Development Community
SAPA	South African Poultry Association
SARS	South African Revenue Services
SMAT	Smallholder Market Access Tracker
SMME	Small, Medium and Micro-sized Enterprise
USA	United States of America

EXECUTIVE SUMMARY

The NAMC is leading a project to develop a dashboard tool as a measure of progress towards achievement of "market access for all participants" and in particular, market access for smallholder farmers in South Africa. The construction of the Smallholder Market Access Tracker (SMAT) tool commenced in April 2016 where the first pilot was conducted on potatoes. A second pilot was then conducted on beef (beginning April 2017). These pilots culminated in a citrus baseline in April 2018. The process was overseen by a group of representatives selected from various agricultural stakeholders in South Africa (referred to as reference group).

The SMAT tool is made of indicators sourced primarily through a survey that is specifically designed to collect primary data on smallholder market access. The indicators were identified using some key market access variables gathered from empirical research and are the heart of the SMAT tool, and could have either positive, negative or neutral effect on the smallholder farmers' likelihood to access the market. They are categorized into two groups, where the first group tracks the progress from the supply perspective (farmers' perspective) and the second group tracks the progress from the demand side (market's perspective). These indicators are meant to inform the policymakers of the situation per industry tracked thereby enabling the formation and continuation of more effective programmes or interventions towards the achievement of market access. The information is presented in the form of dashboard analysis and will be updated in a two-year interval.

This is a second in a series of baseline studies and it focuses on the smallholder broiler commodity. The report is based on the results that were generated from a survey of 64 smallholder broiler farmers from 8 provinces, excluding the North West. The sector information (broiler value chain analysis) indicates that smallholder farmers' participation in the entire value chain is limited, and these farmers participate mainly at primary production and at the end as consumers. Furthermore, although the consumption of poultry is highest relative to other meat, producers' prices are the lowest.

The baseline results indicate that a typical broiler smallholder farmer will likely be a female aged above the youth category, but having completed her matric or even tertiary education which would make it easier for her to collect and process information to make informed decisions. Although she has access to land, ownership is still a challenge which limits her ability to secure a loan from the formal financial institutions. The cost of feed is the highest cost of production.

On average, the farmers place 1300 birds per cycle and sell about 1100. They generate between R15000 and R25000 net farm income. Among the costs of production, the cost of feed is the highest, followed by the cost of labour. Farmers rely heavily on the local market, which offers a higher price relative to other markets. The spot selling provided by the local market allows farmers to negotiate the price of sale, as opposed to selling under a contract where farmers remain price takers. There is a general lack of access to slaughter and storage facilities which limits the farmers' ability to supply other marketing channels such as the institutional, retail, restaurants, and processors.

Therefore, it was recommended that the SAPA should increase its efforts on transforming the broiler value chain. In collaboration with the government, SAPA should enhance production from smallholder broiler farmers, provide production and marketing infrastructure, improve smallholder farmers' participation into the formal market and enhance strategic partnerships to encourage co-ownership in the value chain. In addition, the government should prioritize smallholder farmers in the institutional market, monitor the funding for farmers to measure the impact and establish models to operationalize the existing poultry abattoirs and provide mobile abattoirs in the interim. While farmers need advocacy in the industry forums and committee to ensure their interests are presented in these structures.

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SECTION 1:

INTRODUCTION

SECTION 1: INTRODUCTION

1.1 Background

One of the founding objectives of the NAMC, as stipulated in the Marketing of Agricultural Products Act (Act 47 of 1996), is to increase market access for all participants. In 2016/17, the NAMC initiated the creation of a SMAT tool to measure progress towards achievement of "market access for all participants", in particular, market access for smallholder farmers[1] in South Africa. The rationale for the creation of such tool stems from the general perception and, in some cases, study findings pertaining to or indicating lack of progress in addressing integration of smallholder farmers into the South Africa's mainstream economy - a majority of them black. This is on the back of very well-articulated policies from as far back 1994 when the Reconstruction and Development Programme (RDP) was published by the ruling African National Congress (ANC) in order to create a restructured agricultural sector that "spreads the ownership base, encourages small-scale agriculture, further develops the commercial sector and increases production and employment" (African National Congress, 1994). Following on the sentiments of the RDP, the White Paper on Agriculture that was published in 1995 advocated for provision of support services to enable farmers to move into commercial farming if so desired (Makhura, et al., 1996).

The then National Department of Agriculture (NDA) developed the Broadening Access to Agriculture Thrust (BATAT) in 1995 as its RDP project aimed at improving the access of small-scale farmers to agricultural services in five areas namely, financing, technology development, transfer systems, human resource development, and marketing. A component of this initiative known as the "BATAT Marketing Drive" sought to "improve small scale farmers' ability to seize marketing opportunities" (Van Renen, 1997). Over the course of the past two decades, similar policies and programmes have been developed to support development of smallholder farmers. The most prominent and largest of these is the Comprehensive Agricultural Support Programme (CASP), which was introduced in 2004 with the aim of providing support to smallholder farmers and land reform beneficiaries (NDA, 2004).

Recent findings suggest that CASP and other farmer support programs have not been effective in achieving their intended goals (Vink, et al., 2012). There is a need to measure and track the situation with regards to market access for smallholders in order to assist with policy debate and the formulation of more effective programs towards achievement of market access. It is against this background that the NAMC proposed that the Smallholder Market Access Tracker (SMAT) be developed as a measure of progress in the achievement of the market access goal for smallholders in South Africa. SMAT indicators were identified and were used as a basis for instrument design. Pilot surveys were undertaken to test the SMAT instrument on the following commodities, Potatoes (2016/17) and Beef (2017/18). The pilots culminated in a baseline on citrus smallholder producers, which was conducted in 2018/19. The purpose of this report is to present a second baseline of SMAT conducted on broiler smallholder producers. The baseline was an attempt to describe the status of smallholder broiler producers in terms of production, marketing and access to marketing services. The idea is to uncover barriers faced by these farmers to entry into the mainstream marketing channels and recommend some interventions that could enhance market access (both locally and abroad).

[1] A smallholder farmer in the context of this baseline is derived from the DAFF definition and refers to a new entrant who aspires to produce for the market and make profit

1.2 What is the Smallholder Market Access Tracker (SMAT)?

The SMAT is a tool that acts as a measure of progress in the achievement of the market access goal for smallholders in South Africa. The aim of the tool is to generate information in order to address the strategic objective of increasing market access for smallholder farmers in South Africa. The SMAT is useful for the following targeted stakeholders among others, for advisory services:

- Government
- Farmers and farmer organizations
- Fresh produce markets
- Market institutions

The SMAT is composed of indicators identified using some key market access variables gathered from empirical research. The indicators are the heart of the SMAT tool. Following a process of rigorous discussion under the oversight of the SMAT Reference Group[2], it was decided that the SMAT indicators would be sourced primarily through a survey that is specifically designed to collect primary data on smallholder market access. Additional data, when required, would be obtained from secondary sources as well as expert or key informant opinions. The indicators were selected based on the economic theoretical premise that they are hypothesized to either positively or negatively or neutrally affect the smallholder's likelihood to access the market. The indicators are further categorized into two groups, the A Indicators (indicators from the farmer's perspective) and the B Indicators (indicators from the market's perspective). Table 1 below presents the selected indicators for the SMAT with their definitions and the nature of their effect on smallholder market access.

[2] The NAMC defines the Reference Group as a group of experts in certain fields but with a degree of diversity among them (experience, demographics, regional spread, areas of specialisation, academic inclination, sector, affiliation, etc.).

Table 1: The SMAT indicators

FARMER (SUPPLY OR "PUSH") INDICATORS[3]	
Name	Definition and expected nature of relationship with market access (in parentheses)
A1. Farmer profile:	
A1.1 Gender	The gender of the farmer (NA)
A1.2 Age	Age of the farmer (NA)
A1.3 Education	Highest education level attained by the farmer (+)
A1.4 Location	Town and province where the farmer is located (NA)
A1.5 Legal entity	Type of entity that the farmer belongs to (if any) (NA)
A2. Supply:	
A2.1 Selling of produce	Whether the farmer sells any of his produce (+)
A2.2 Type of market supplied	Type of market supplied by the farmer (NA)
A2.3 Quantity supplied	Quantity (quantities) supplied by the farmer (+)
A2.4 Value supplied	Value (in Rands) supplied by the farmer (+)
A2.5 Selling arrangements	Whether farmer sells through spot selling, contract, etc. (NA)
A2.6 Selling price arrangements	Whether farmer negotiates selling price or whether he/she is a price taker (NA)
A2.7 Payment arrangements	The length of time it takes for payment to be effected (NA)
A2.8 Distance to market	Distance to the market supplied by the farmer (-)

[3] The farmer (supply or "push") indicators denote the perspective of the farmer (the supplier)

A3. Market services	
A3.1 Access to market information	Whether the farmer has access to any source of market information (+)
A3.2 Access to storage	Whether the farmer has access to any form of storage (+)
A3.3 Access to packaging facilities	Whether the farmer has access to any packaging facilities (+)
A3.4 Access to credit	Whether the farmer has access to credit facility (+)
A3.5 Access to training/extension	Whether the farmer has access to any training or extension service (+)
A3.6 Access to transport	Whether the farmer has access to any transport service (+)
A3.7 Rating of quality of market information	Farmer's rating of the quality of market information (1 = poor; 5 = excellent) (+)
A3.8 Rating of quality of storage	Farmer's rating of the quality of storage (1 = poor; 5 = excellent) (+)
A3.9 Rating of quality of packaging facilities	Farmer's rating of the quality of packaging facilities (1 = poor; 5 = excellent) (+)
A3.10 Rating of quality of credit	Farmer's rating of the quality of credit service (1 = poor; 5 = excellent) (+)
A3.11 Rating of quality of training/extension	Farmer's rating of the quality of training/extension (1 = poor; 5 = excellent) (+)
A3.12 Rating of quality of transport	Farmer's rating of the quality of transport (1 = poor; 5 = excellent) (+)
A4. Market requirements	
A4.1 Awareness of market requirement	Where applicable, whether farmer is aware of market requirements (+)
A4.2 Compliance to market requirements	Where applicable, the extent to which farmer complies with market requirement (1 = no compliance; 5 = excellent compliance) (+)

B. MARKET (DEMAND OR "PULL") PERSPECTIVE [4]	
B1. Market Profile	
B1.1 Type of market	Type of market supplied by the smallholder (NA)
B1.2 Market location	Town and province where the market is located (NA)
B1.3 Total market turnover	Where applicable, the total turnover of the market supplied by smallholder farmers (NA)
B1.4 Market turnover by commodity	Where applicable, the market's turnover on the specified commodity supplied by smallholder farmers (NA)
B1.5 Market tonnage by commodity	Total market tonnage of the specified commodity sourced from smallholder farmers (NA)
B2. Supply by smallholder farmers	
B2.1 No of smallholders supplying the market	Number of smallholders supplying the market with the specified commodity (+)
B2.2 Volumes supplied by smallholders (t)	Total tonnage of the specified commodity supplied by smallholder farmers (+)
B2.3 Value supplied by smallholders	Total value of the specified commodity supplied by the smallholder farmers (+)
B2.4 Smallholders' market share	The total smallholder farmers' market share for all commodities supplied (+)
B2.5 Smallholders' market share/commodity	The smallholder farmers' market share of a specified commodity (+)
B3. Services Provided to Smallholders	
B3.1 Market information	Whether the market provides market information services to smallholders (+)
B3.2 Storage	Whether the market provides storage services to smallholders (+)
B3.3 Packaging facilities	Whether the market provides packaging facilities to smallholders (+)
B3.4 Credit	Whether the market provides credit facilities to smallholders (+)

[4] The market (demand or "pull") indicators denote the perspective of the market (the buyer)

B3.5 Training/extension	Whether the market provides training or extension services to smallholders (+)
B3.6 Transport	Whether the market provides transport services to smallholders (+)
B4. Minimum Market Requirements	
B4.1 Business registration	Whether business registration is a minimum requirement for smallholders (NA)
B4.2 Packaging	Whether business registration is a minimum requirement for smallholders (NA)
B4.3 Product standards	Whether business registration is a minimum requirement for smallholders (NA)
B4.4 Payments arrangements	The length of time that the market takes to pay smallholders for their produce (NA)
B5. Market Performance of Smallholders	
B5.1 Rating of quality	The market's rating of the quality of produce supplied by smallholders (1=poor; 5=excellent) (+)
B5.2 Rating of quantities	The market's rating of the quantities of produce supplied by smallholders (1=poor; 5=excellent) (+)
B5.3 Rating of consistency of supply	The market's rating of the consistency of supply of produce supplied by smallholders (1=poor; 5=excellent) (+)
B5.4 Rating of farmer logistics	The market's rating of the logistics for the produce supplied by smallholders (1=poor; 5=excellent) (+)

Note: IIt is expected that the sourcing of data from both the supplier and the buyer perspectives will assist towards the counter-checking of results such that the data from the one side is checked against data from the other side in order to improve overall quality and usability, NA = Not applicable

1.3 Methodological approach to the development of SMAT

The development of the SMAT commenced in April 2016. The NAMC put together an internal research team to lead in the process of fulfilling the afore-mentioned two objectives. In addition, a group of experts representing a wide range of agricultural stakeholders (academia, government, private sector and non-governmental organizations) – the "Reference Group" - was appointed to oversee and advise on the process and its outputs. Figure 1 depicts the process of the development of the SMAT. The Reference Group is involved throughout the process. As explained earlier, there has been two pilots that were conducted to test the tool which culminated into the first baseline.

The baselines serve as outputs and provide recommendations based on the assessment of the industry. However, the relevance of the report as a measure of progress and any impact it should make in developing smallholder farmers will largely depend on the actions taken by the industry, government, farmers and other relevant stakeholders. Hence, the stage of the outcomes serves as a catalyst between the actual report and the desired broader impact.

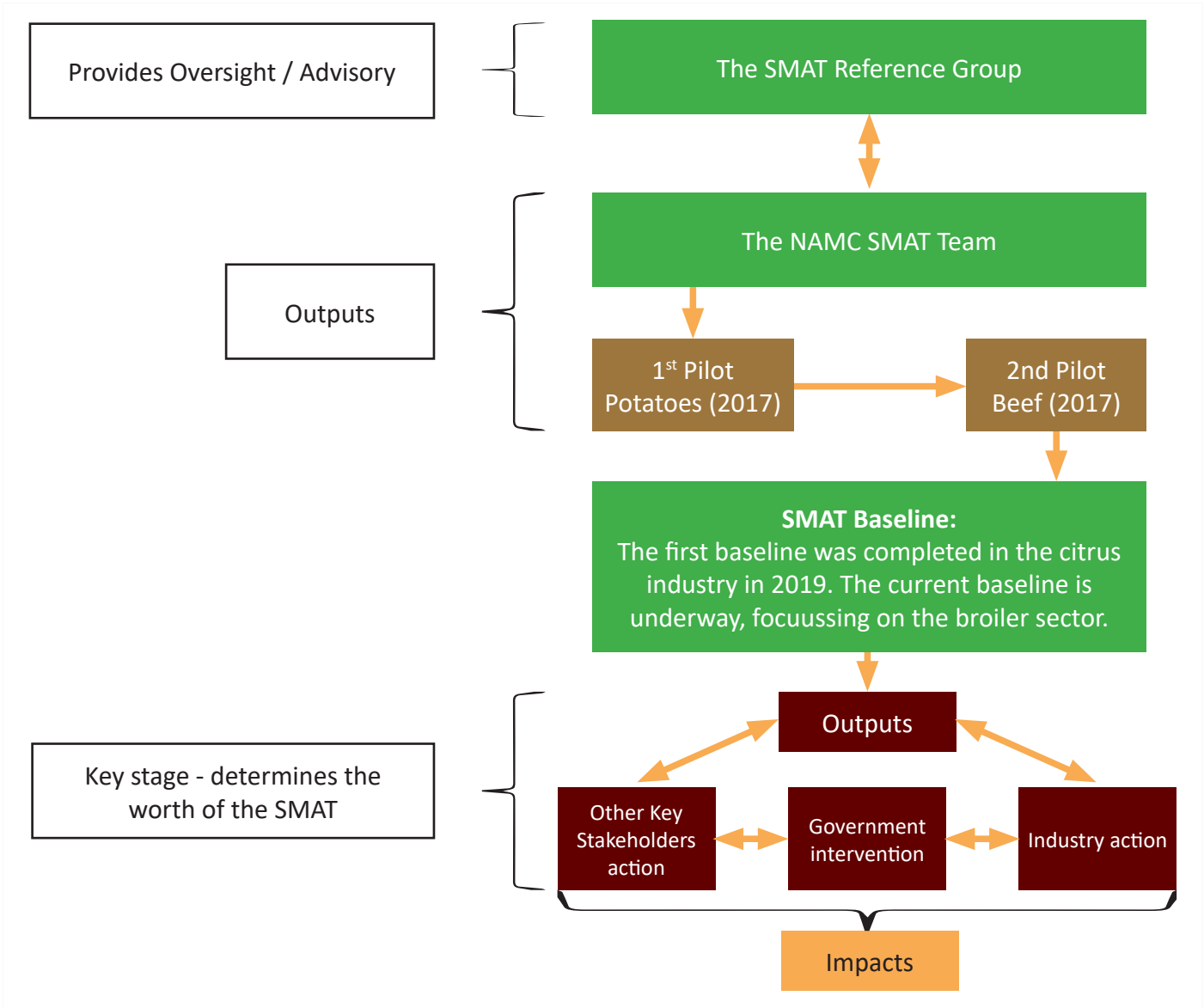

Figure 1: The SMAT process
Source: Adapted from the SMAT report (2019)

1.4 Broiler baseline: sampling procedure

A database of farmers was obtained from the South African Poultry Farmers' Association (SAPA) and it contained 618 smallholder farmers. However, due to limited resources and failed attempts to contact all the farmers by email, the NAMC team resorted to telephone interviews in which 54% of all the farmers in the database were called in various provinces resulting to 64 valid responses as presented in Table 2. Taking out the categories of the farmers that could not participate in the survey for various reasons as presented in Table 2 leaves 305 farmers which could have been interviewed. This implies that the sample of 64 responses represents 21% of the farmers who could have been interviewed. The process of data collection began in October 2019, where a questionnaire was distributed by SAPA to all farmers in the database in expectation that farmers will fill it in on their own and send it back. Several reminders were sent up until November 2019. However, this option did not yield the desired response from the farmers. The telephone interviews were therefore initiated in the last week of January 2020 to the first week of March 2020 as an alternative to emails.

Table 2: Summary of the sample

SUMMARY OF THE SMAT SURVEY							
Province	Total number of farmers in the database	Number of farmers contacted and those who replied to email	Number of farmers who did not want to participate	Number of farmers who did not answer the calls	Number of farmers who were on voicemail/ whose number does not exist	Number of farmers who are no longer producing	Number of completed surveys used for this baseline
Eastern Cape	49 (7,9%)	45 (14,8%)	1 (5,6%)	7 (10,9%)	16 (17,0%)	10 (20,4%)	10 (15,2%)
Free State	55 (9,0%)	33 (10,8%)	7 (38,9%)	5 (7,8%)	8 (8,5%)	4 (8,2%)	7 (10,6%)
Gauteng	6 (1,0%)	6 (2,0%)	0	0	0	0	4 (6,1%)
KwaZulu-Natal	109 (17,6%)	39 (12,8%)	0	8 (12,5%)	11 (11,7%)	15 (30,6%)	5 (7,6%)
Limpopo	216 (34,9%)	69 (22,6%)	4 (22,2%)	13 (20,3)	15 (16%)	8 (16,3%)	22 (34,4%)
Mpumalanga	95 (15,3)	75 (24,6%)	5 (27,8%)	22 (34,4%)	32 (34%)	7 (14,3%)	8 (12,1%)
North West	53 (8,6%)	2 (0,7%)	0	0	0	0	0
Northern Cape	26 (4,2%)	27 (8,9%)	1 (5,6%)	9 (14,1%)	7 (7,4%)	4 (8,2%)	5 (7,6%)
Western Cape	9 (1,5%)	9 (3,0%)	0	0	5 (5,3%)	1 (2%)	3 (4,5%)
Total	618 (100%)	305 (100%)	18 (100%)	64 (100%)	94 (100%)	49 (100%)	64 (100%)

NB: The percentage is the percentage of the total of the column
Source: Survey data

SECTION 2:

OVERVIEW OF THE BROILER SECTOR

SECTION 2: OVERVIEW OF THE BROILER SECTOR

2.1 Introduction

Figure 2 presents the South African broiler value chain. The structure of the value chain shows that the South African broiler sector is characterized by a dualistic nature, similar to the entire country's agriculture sector. This implies that the South African broiler farmers could be categorized into commercial and smallholder famers. One of the fundamental differences between the two categories of farmers is the combination of scale benefits and the magnitude of investment that goes into specific assets required for optimum and efficient production levels (BFAP, 2019). As such, commercial producers contribute an estimate of more than 90% of the total poultry meat production in the country, while StatsSA (2016) indicates that more than 1,1 million households are active in poultry production. The broiler industry employs about 49 887 people directly and a total of 111 822 (including indirect employment) according to the 2018 estimated figures. DAFF (2018) describes the broiler value chain as encompassing commercial production (farms, feed companies, breeders and contract growers), abattoirs (estimated at 260), markets (divided into export and domestic), and consumers. Therefore, this section adopts this description in mapping the overview of the broiler sector.

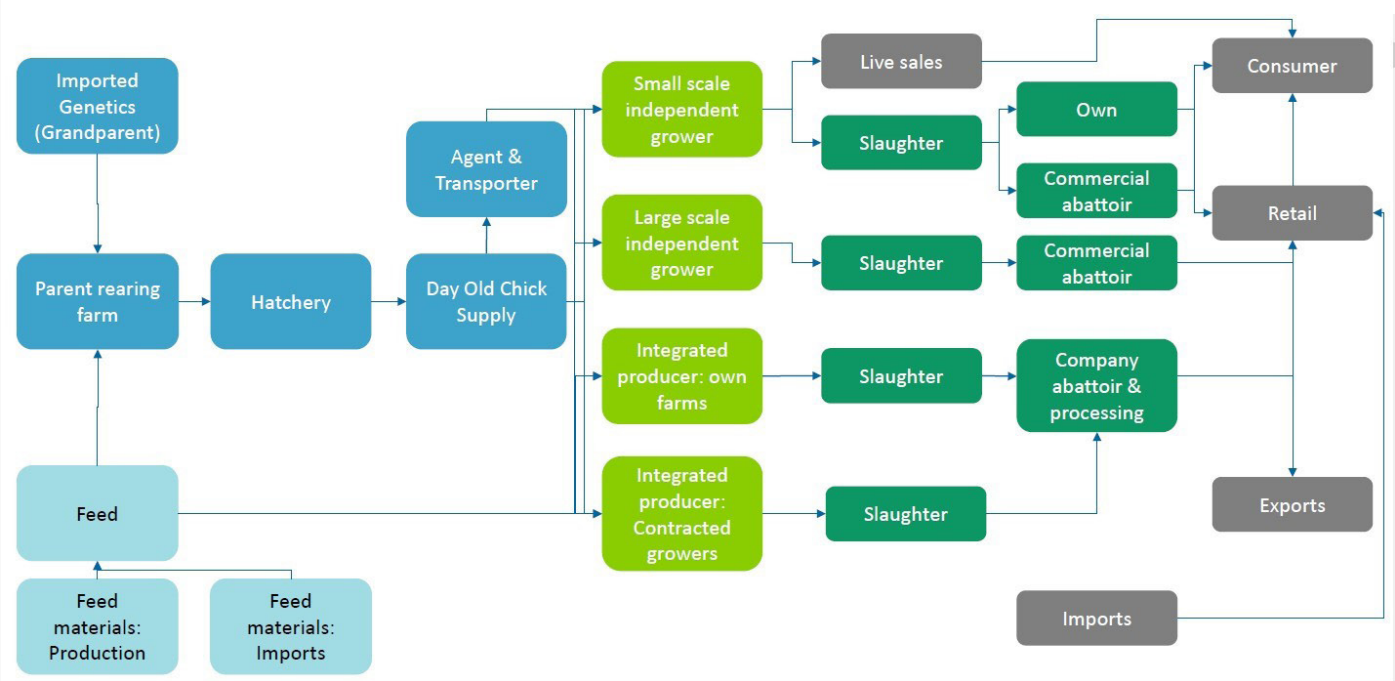

Figure 2: Diagrammatic representation of the South African broiler value chain
Source: BFAP (2019)

2.2 Farms, feed companies and breeders

BFAP (2019) highlighted the fundamental difference between commercial and smallholder poultry producers as being the combination of scale benefits and the magnitude of investment to achieve an optimum level of production and efficiency. This implies that size and access to sophisticated production technologies is a key determinant of efficiency levels that can be achieved and this requires substantial capital investment in the industry value chain (Louw, et. al., 2017).

According to DAFF (2018), there are eight (8) commercial producers responsible for over 70% of the total broiler production. Louw, et al. (2017) cited that the production of 40 000 birds per cycle is considered to be small-scale production in South Africa, and that about 75% of smallholder farmers often place about 1000 birds per cycle on average. The 30% of broiler production falls under this category, often characterized by constituting those farmers who largely rely on indigenous fowls for home consumption and profit generation from the surplus. This is one of key challenges associated with poor efficiencies as size is a key determinant of efficiency levels that can be achieved (Louw et al., 2017). In addition, the limited ability to procure inputs in bulk due to the limited size of the operation tends to increase input costs relative to other industry players. Therefore, integrated operations with economies of scale are likely to dominate in such an environment.

Serving both broiler and egg production, the feed companies include Meadow feeds, Epol and Afgri commanding a joint market share of 75% while the rest is for independent millers. There are 37 breeders involved in broiler production. The breeding companies are responsible for the distribution of the parent birds to the breeders who rear them until they are ready to start producing fertilised eggs. These fertile eggs are then transferred to hatcheries where they are hatched to produce day-old broiler chicks, which are sold to broiler growers. The smallholder participation in this stage of the value chain is minimal at farm level and absent in breeding and feed production.

2.3 Contract growers and hatcheries

Contract farming is a binding oral or written agreement between the contractor and the farmer with well-defined obligations and remuneration for tasks done, often with specification on production and product properties such as quantity, risk sharing, price discovery, transaction attributes, quality of the product and timing of delivery (Catelo & Costales, 2008; Da Silva, 2005). Depending on the type or model of contract farming, contract growers often receive the production inputs such as feed, veterinary health services, vaccines, day-old chicks, etc. In return, they manage the production cycle in terms of feeding, monitoring mortality rates, feed conversion ratios, weight etc. and supply the final product as required in the contract. There is some evidence suggesting that there are smallholder farmers participating in broiler contract farming. For instance, in 2013 the NAMC's investigation of contract farming found approximately 42 farmers involved in broiler contract farming in Limpopo and North West provinces. Currently, there are 50 fully-fledged commercial black contract growers and about 450 total contract growers. Figure 2 below shows the number of broiler chicks that are hatched per annum.

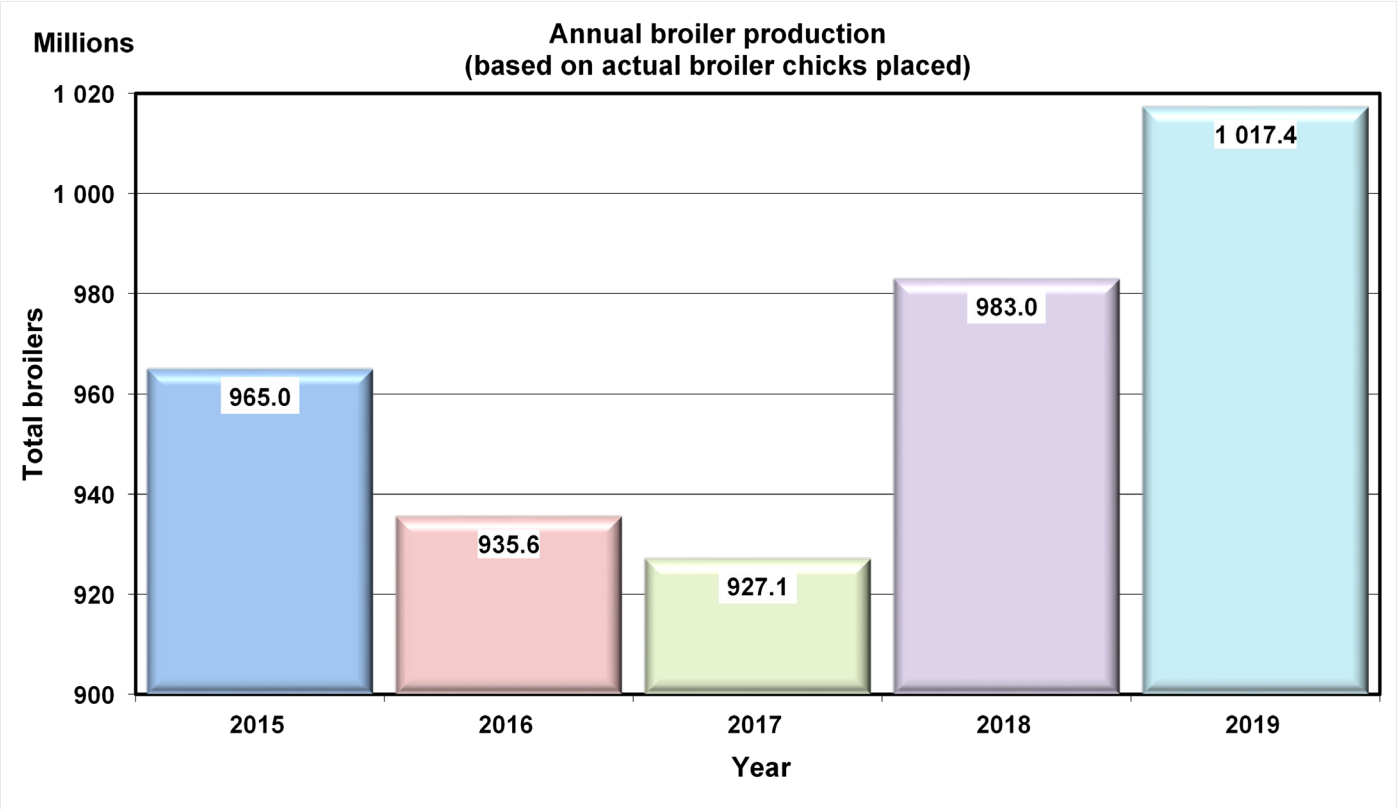

Figure 3: Annual broiler production
Source: SAPA (2019)

The hatcheries subsector is dominated by three companies (Nulaid, Eggbert and Highveld Co-op). These produce eggs in various sizes and grade them. According to DAFF (2018), the commercial layers have a production lifespan of approximately one year after which they are culled and sold as spent hens mainly in the rural areas where the demand is high through informal traders. The previous and current stages require inputs such as day-old chicks, feed - contributing about 70% to poultry production (NAMC, 2007), vaccines, housing infrastructure, water, cost of labour and electricity. Collectively, these inputs have increased significantly over the past years and thereby affecting the profit margins due to the impact of climate changes and international price fluctuations. In many instances, the smallholder farmers participate as buyers in input markets (hatcheries, feed and veterinary health). Apart from this, it is very rare to find a smallholder farmer owning a hatchery or a feed company.

2.4 Abattoirs

On the broiler side, the abattoirs slaughter live birds to produce broiler meat carcasses which are sold as fresh chicken, frozen and other wide range of products to wholesalers, retailers, export and other markets. The annual broiler production and slaughtering is presented in Figure 4, which shows that annual broiler production and slaughtering has been increasing from 2007, with the highest figures recorded in 2015, and as the years were proceeding both the production and slaughtering were showing a downward movement. This could be attributed to drought, among other factors, given that maize and soya are the main inputs in broiler feed and that their production is subject to conducive climatic conditions.

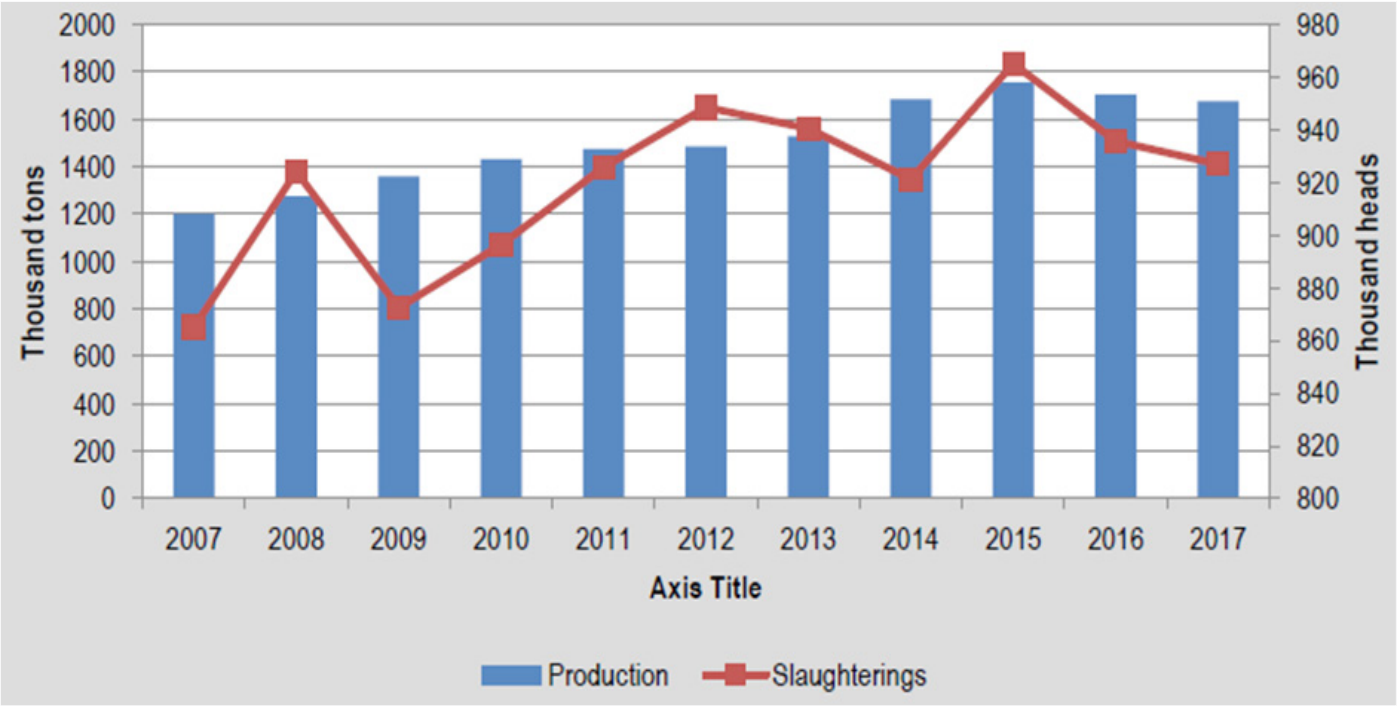

Figure 4: Annual production and slaughtering of broilers
Source: DAFF (2018)

2.5 Domestic markets

The market for both egg and broiler outputs is divided into domestic and international markets. Figure 5 presents the domestic market share of broiler, but the available data does not allow for the presentation of the trend over the years as it only shows quarter 4 of 2019. The wholesalers took the largest share (38,6%), followed by retailers (38,5%) and the food service markets (19,4%). The 3 markets, combined, took up 96,5% of the domestic market share for broiler outputs, while the export, institutional and other markets took up the remainder (less than 4%).

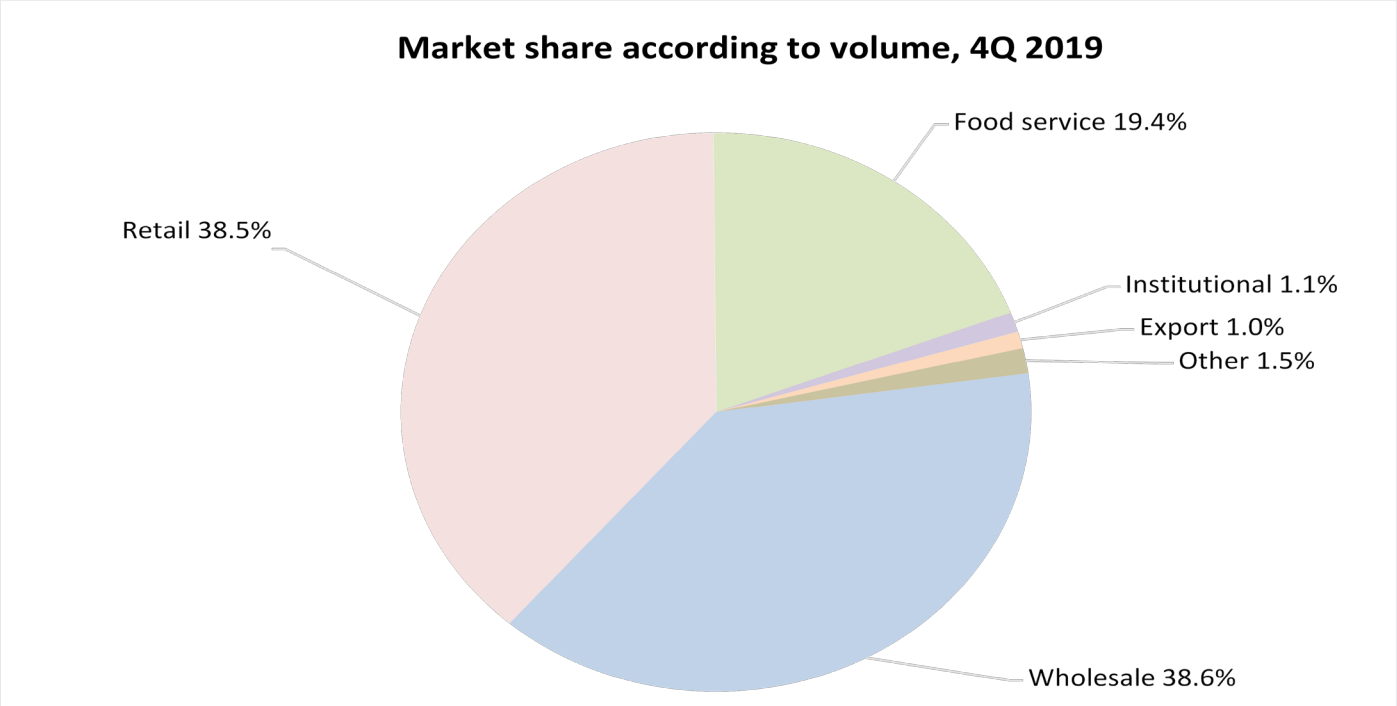

Figure 5: Domestic markets share of broiler according to volume (Q4 2019)
Source: SAPA (2020)

Figure 6 presents the broiler product mix that goes into the market. The data is presented for the 4th quarter of 2019. The individually quick-frozen, frozen cuts and frozen sundries and bones took up a 75,2% share. While the fresh whole and frozen whole products took up a combined share of 7,2%.

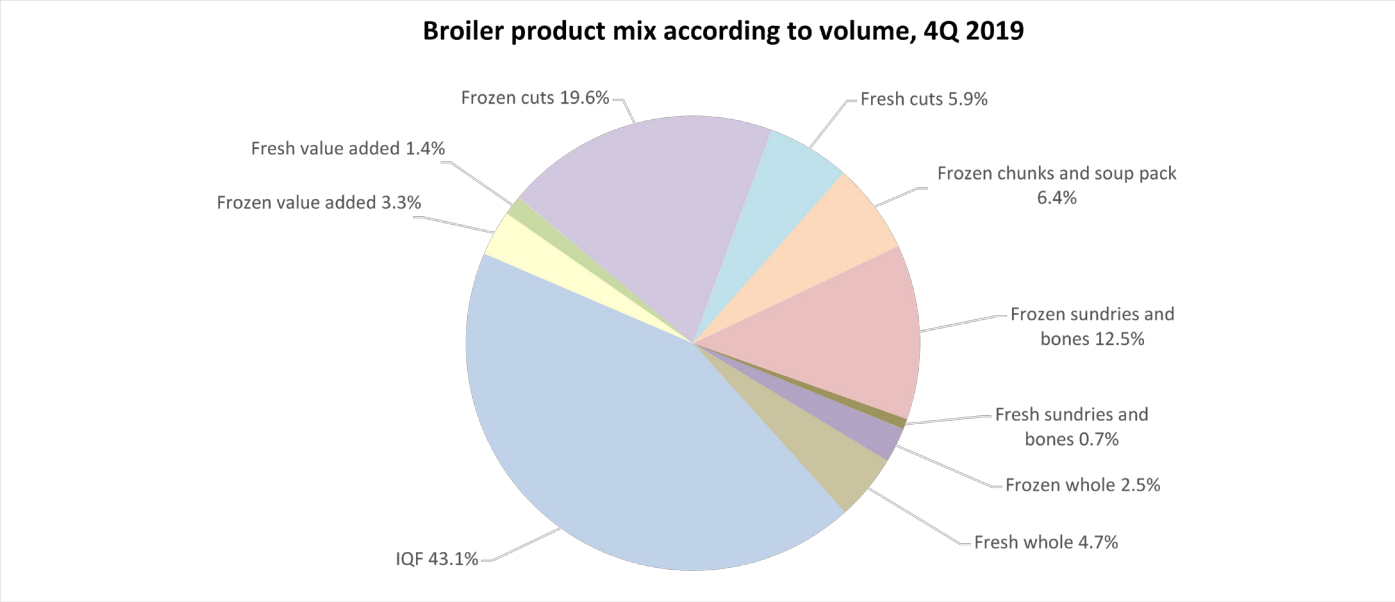

Figure 6: Broiler product mix according to volume (Q4 2019)
Source: SAPA (2020)

2.6 Import and export markets

Figure 7 presents the level of imports over a period of seven years from 2014 to 2020. The trend shows that broiler imports have grown from about 368 thousand in 2014 to 511 thousand in 2019. Whereas local broiler production increased from 1,55 million to 1, 67 million over the same period. It is worth to note that the imports increased at a higher rate at 38% compared to local production which increased by 7% between 2014 and 2019. The latter is exacerbated by the fact that a bulk of imports comes from the European Union, Brazil and the United States of America and these imports are almost a dumping of low-priced meat portions which put pressure on the demand for locally produced broiler products (SAPA, 2018). More details on this will be provided in subsection 2.8 when discussing the import protection measures.

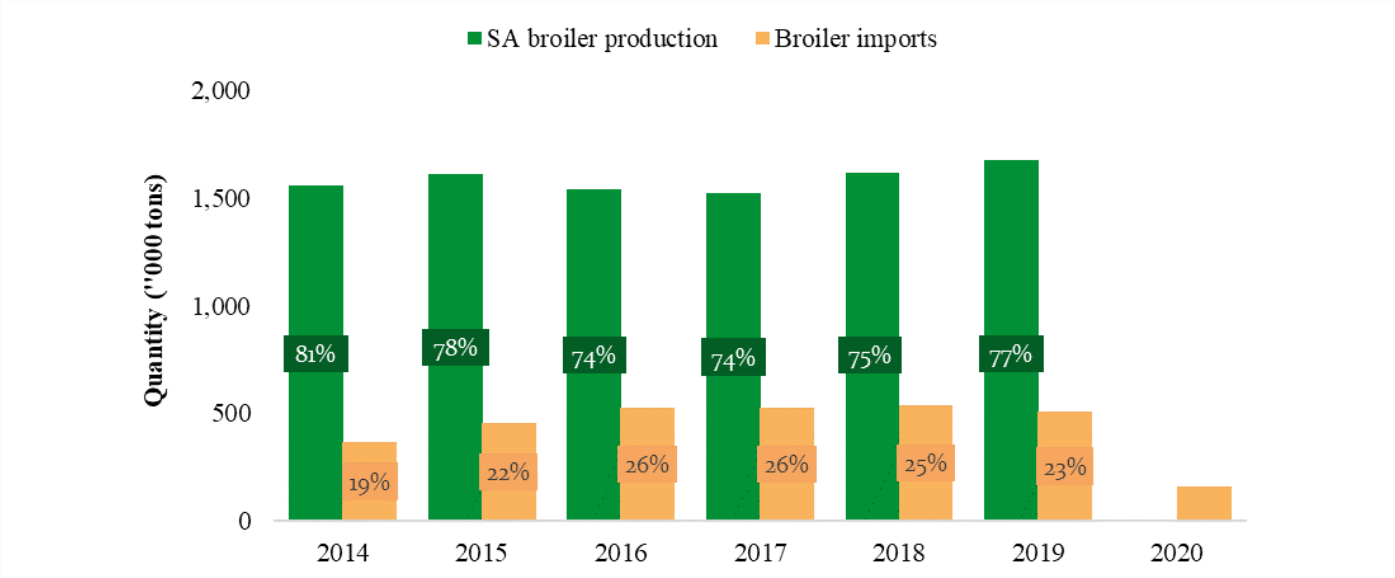

Figure 7: Broiler imports compared to local production
Source: SAPA (2018)

The broiler meat industry is also an earner of foreign exchange through the export of broiler meat. Figure 8 presents the quantity of meat exported and the value of exports between 2008 and 2017. Although there is some variation over this period, but there has been a general increase of exports from below 10 000 tons in 2008 to about 63 000 tons in 2017. The value of export also follows a similar trend. A bulk of South African poultry meat export goes into the Southern African Development Community (SADC) region, where South Africa contributes more than 70% to the total regional poultry meat production (SAPA, 2018).

Figure 8: Annual quantity and value of the broiler meat exports
Source: DAFF (2018)

2.7 Consumption of broiler meat

The poultry industry uses about 76% of birds for meat production, while the rest are used in the egg industry (SAPA, 2018). Figure 9 presents the annual per capita consumption of poultry meat in comparison with other animal protein sources (excluding milk), from 2008 to 2018. The per capita poultry meat consumption is the highest, ranging between 36 and 40 kg/annum over this period. Beef and pork consumption follow in second and third. However, the poultry industry still produces less meat than consumed locally. The industry produces about 73% of the total consumption. Hence the country remains a net importer of poultry meat.

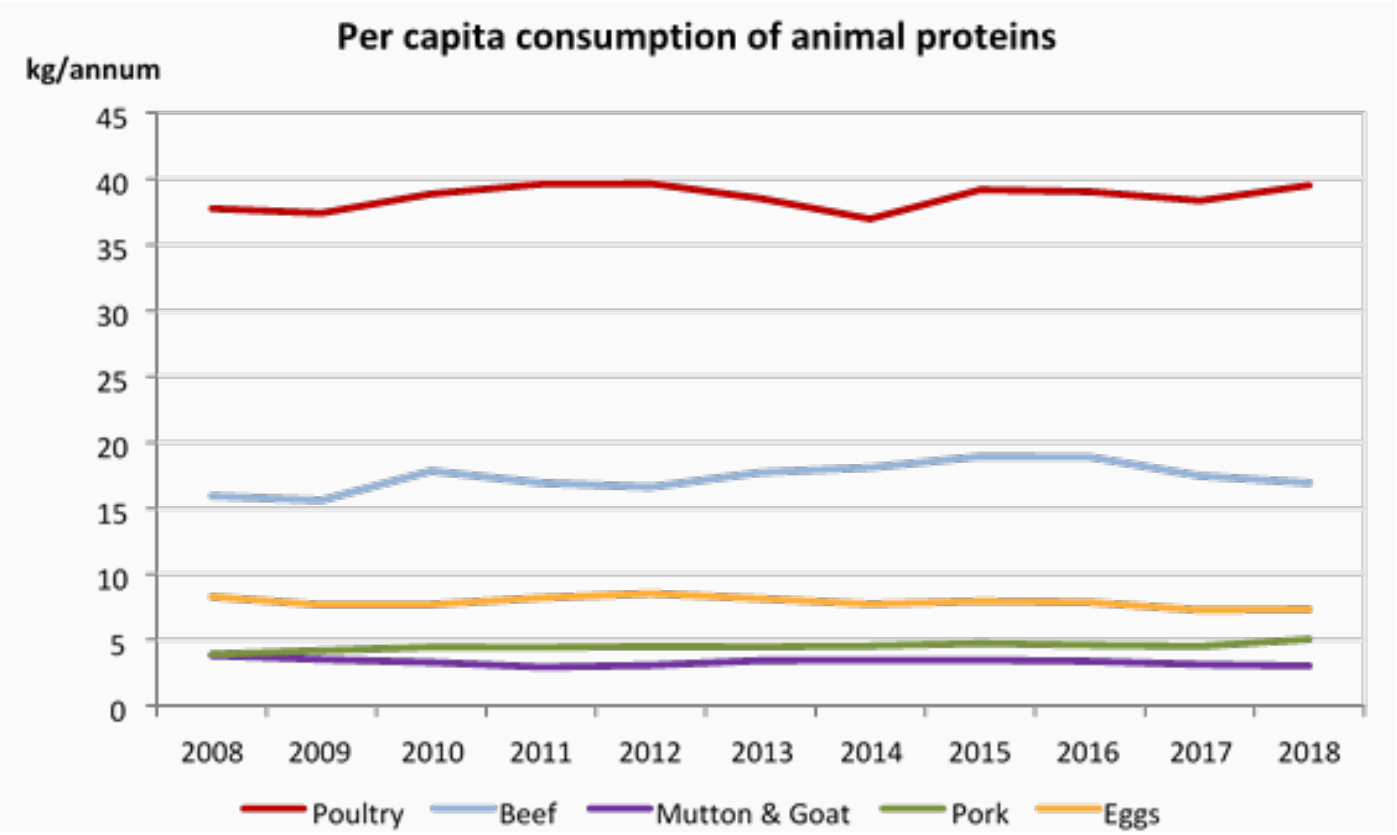

Figure 9: Per capita consumption of animal proteins
Source: SAPA (2019)

Figure 10 presents a producer price comparison for various animal protein sources (excluding milk). The producer prices have been rising steadily over the period between 2014 and 2018 for all the various protein sources presented. However, the trend presented here is almost an inverse of the trend presented in Figure 10. In other words, although the per capita consumption of poultry meat is the highest, the producer price is the second lowest in 2018. To some extent, this indicates the impact of cheap imports (which will be discussed later). The average beef producer price at the abattoir (carcass price, excluding the fifth quarter) for class A2/A3 was R46,79 per kg in 2018, while the abattoir selling price for Class C2/C3 beef was R41,65 per kg. The average price for pork (all classes) was R24,47 per kg. The total realisation producer price for broilers (less all discounts, rebates and secondary distribution) was R22,44 per kg in 2018. Eggs realised higher prices in 2017 because of avian influenza-related shortages. The average producer price of eggs in 2018 was R23,84 per kg.

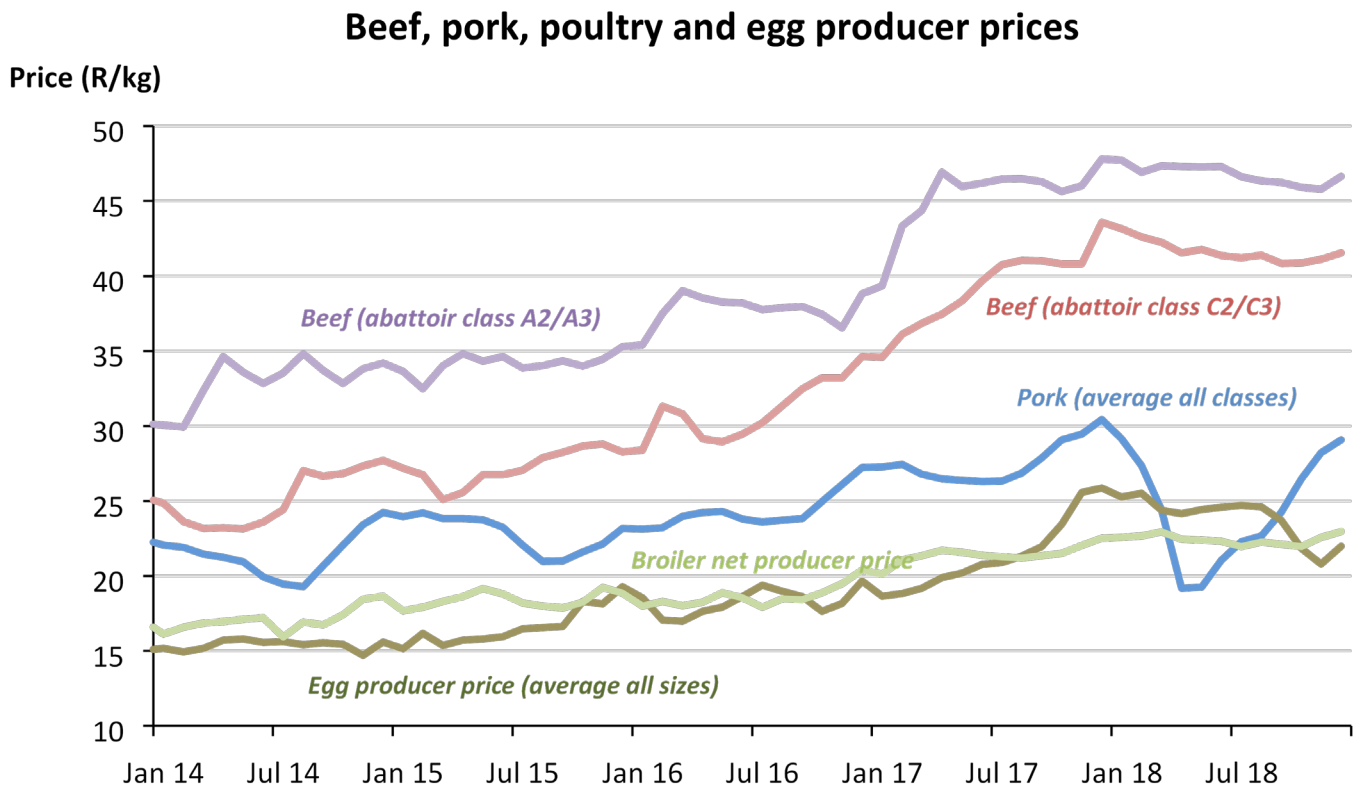

Figure 10: Prices of various animal protein
Source: SAPA (2019)

Figure 11 shows the annual producer price for total broiler sales realization. The results show that producer prices have increased from R18,43/kg in 2015 to R23,57/kg so far in 2020.

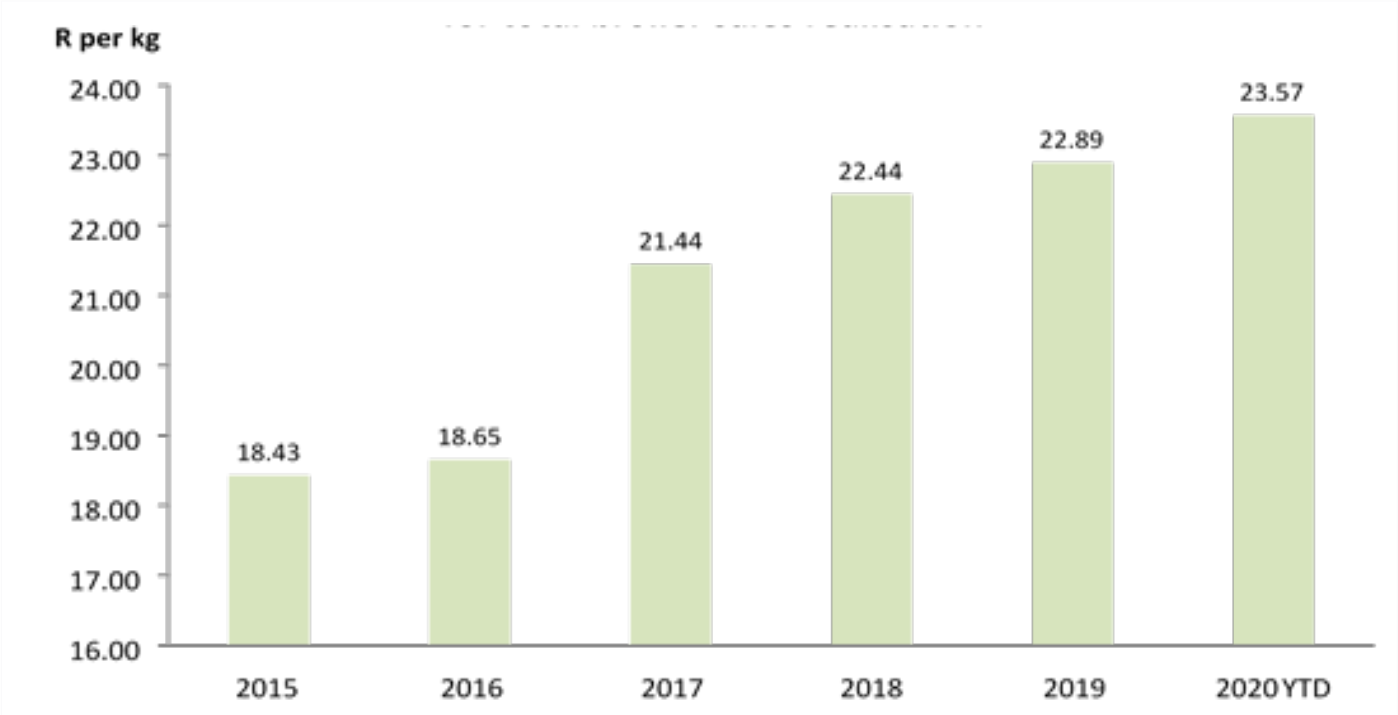

Figure 11: Annual producer price realization
Source: SAPA (2020a)

2.8 Import protection measures

The South African poultry industry has been and still is under pressure from cheap imports of poultry meat (SAPA, 2018). As indicated earlier, local consumption has shown an increasing trend over the past ten years. Production has followed this trend too. However, the concern is that the quantity of imports has been increasing at a faster rate than local production, which implies suppression of local production. According to SAPA, the EU uses its economic partnership agreements (EPA) to dump subsidised poultry meat in the country, with devastating consequences in the local industry production. SAPA further argues that the government, meat importers and the EU continue to claim that local producers are inefficient, despite the available evidence from a couple of studies that prove this claim otherwise. Despite the opposing views, the local poultry industry firmly believes that it is subjected to unfair competition from imports and has thus requested for protection in terms of strengthening tariff measures.

Broiler imports into South Africa comprise mostly frozen bone-in portions and frozen mechanically deboned meat (SAPA, 2020). Whole frozen birds now have an 82% tariff applicable, frozen boneless chicken portions have a 42% tariff applicable, while the bone-in portions have a 62% tariff applicable (except for SADC) (SAPA, 2020). The exception has been that the EU has zero tariffs against its whole frozen birds and frozen boneless chicken portions, however it faces an EPA safe guard tariff of 30% for bone-in portions coming into South Africa. But, SAPA notes that South Africa is somewhat protected from dumping from Brazil and USA relative to its exposure to dumping of EU bone-in portions, which have led to the EU contributing over 40% of total imports between 2012 and 2018 (in 2018, the EU accounted for 53% of the total imports of bone-in portions). Data from SARS (2020) also shows that poultry imports were 4.7% lower in 2019 (539 567 tons) than 2018 (566 210 tons). In April 2020, the data also shows that poultry imports were 23.6% lower than the same month in the previous year. EU poultry tonnages were down by 45.3% on a year-on-year basis in April 2020.

The current tariff rates come as a product of SAPA (in 2016) applying for a 13,9% tariff to be imposed on EU bone-in portions, which was approved by the International Trade Administration Commission (ITAC) and further raised to 35,3% by the Minister of Trade and Industry in 2018 (SAPA, 2018). SAPA still raised a concern that the tariff of 35,3% is low to have the desired impact. This culminated to further engagements with ITAC, which led to a recommendation of 62% ad valorem duty being put forward for consideration by ITAC. This move has received its fair amount of criticism from the Association for Meat Importers and Exporters (AMIE), where the industry is accused of having structural issues that affect its efficiency and competitiveness (SAPA, 2018).

An impact analysis by the NAMC (2019) showed that an increase in tariffs would lead to an increase in local production and import substitution, however this would not solve all of the challenges the industry is facing. Moreover, consumers would eventually face higher prices for poultry. Therefore, a more structural reform would be necessary, where investment in the industry is prioritized and new entrants supported through transformation of the industry. The latest development on this is the approval of new tariff lines (highlighted above) as from March 2020 and the completion of the draft master plan on a strategic and operational aspects of the industry, which aims to address transformation of the industry and enable growth of production in the industry.

The next section presents the baseline results from a survey of broiler smallholder producers

SECTION 3:

BROILER BASELINE SURVEY RESULTS

SECTION 3: BROILER BASELINE SURVEY RESULTS

This section provides the results of the key SMAT indicators that relate to farmers' profile, production, marketing and insurance aspects. As mentioned in section 1, a sample of 64 farmers (18,71% of the farmers) from eight provinces (excluding the North West) was used. Table 3 presents the distribution of the 64 farmers. Noteworthy, tables and figures used in this section present the results with deeper insights into the disparities between provinces and, in some cases, even compare between the farmers that operate as primary cooperatives and otherwise.

Table 3: Summary of the data used for the analysis

Province	Valid responses	Percentages
Eastern Cape	10	15,2%
Free State	7	10,6%
KwaZulu-Natal	5	7,6%
Limpopo	22	34,4%
Western Cape	3	4,5%
Northern Cape	5	7,6%
Gauteng	4	6,1%
Mpumalanga	8	12,1%
Total	64	100%

Source: Survey data

3.1 Demographic information

Table 4 presents the demographic information of smallholder broiler farmers by province. The results indicate that a typical smallholder broiler farmer is a black female. About 75% of the farmers have obtained a high school certificate and higher. The results also show that a typical smallholder broiler farmer relies heavily on agriculture as a main source of livelihood, while in rare cases she/he could rely on other sources and use agriculture as a supplementary source. This is indicated by the majority of farmers (77%) alluding that agriculture is the main source of livelihood, with social grants and remittances coming at the bottom of the list. The reason for a minimal dependence on social grants could be attributed to the fact that the majority of the farmers fall below the qualifying age to receive the grants. A majority of farmers (50%) farm as individuals and 43% farm as primary co-operatives.

Table 4: Summary of demographic characteristics presented in percentages

Variable	Category	EC (n=10)	WC (n=3)	NC (n=5)	FS (n=7)	KZN (n=5)	MP (n=8)	GP (n=4)	LP (n=22)	Total %
Gender	Male	50	0	80	43	20	12,5	50	50	38
	Female	50	100	20	57	80	87,5	50	50	62
Education	Primary	50	0	0	0	40	50	0	4	18
	Secondary	0	0	0	0	20	0	0	14	4
	High school	20	100	100	57	0	50	25	41	49
	Tertiary	30	0	0	43	20	0	75	41	26
	Other	0	0	0	0	20	0	0	0	3
Race	Black	100	33	100	100	100	100	100	100	92
	Coloured	0	67	0	0	0	0	0	0	8
Main source of Livelihood	Agriculture	100	100	100	29	60	100	50	77	77
	Social grant	0	0	0	0	0	0	25	5	4
	Remittances	0	0	0	0	40	0	0	0	5
	Business	0	0	0	71	0	0	25	0	12
	Other	0	0	0	0	0	0	0	18	2
Legal status	Primary co-op	70	67	20	29	40	63	0	50	43
	Secondary co-op	0	0	0	0	0	0	0	0	0
	Tertiary co-op[5]	0	0	0	0	0	0	0	0	0
	Individual	30	33	80	57	40	37	75	50	50
	Other	0	0	0	14	20	0	25	0	7

Source: Survey data

[5] Farmers gave an indication that working as co-operatives poses several challenges. One of them is that people start as a certain number, but many withdraw (but do not completely pull-out) along the way when there are challenges and want to re-surface again when the situation improves, if it does. They highlighted that intervention is required to strengthen co-operatives to reduce the tendency of farmers exploiting one another. This lack of co-operation for some members was deemed as a stumbling block to the growth of business initiatives

3.2 Farming profile

Table 5 presents a summary of production variables. The results are compared for farmers that operate as non-co-ops (this category includes farmers that operate as either secondary and tertiary cooperatives or other forms of legal entities) and those that operate as individuals. It is worth noting that some farmers may register a primary cooperative, but end up with one farmer running the cooperative when others give up on the endeavour along the way. Hence, a registered title of the business was used to differentiate between the two categories (primary cooperative or otherwise) as opposed to the current management structure. The results are presented in mean values and the standard deviation indicates the spread of values from the mean. The higher the standard deviation the more values are spread out from the mean and the low standard deviation indicates that values are closer to the mean.

The results show, on one hand, that a typical smallholder broiler farmer who is not part of a primary cooperative is aged 51 years, with an average of 13 years of broiler farming experience. The Free State province has the youngest sampled farmers compared to the rest of the provinces, while the Western Cape had the oldest farmers on average. This is further indicated by a low standard deviation, which shows the spread of the age from the mean for the two provinces at almost the extreme ends. The farmer uses 15 hectares of land and employs 4 people on average. The broiler stock of the farmer averages 1361 birds and 1120 birds are sold per cycle, generating a net farm income of R25 880. However, the standard deviation for the net farm income is the highest, indicating that the net income values are spread far higher of far lower than the mean. The cost of feed is the highest R10 428, followed by the cost of labour at R6 369. The higher standard deviations indicate the variation of the costs from the mean values.

On the other hand, a farmer who is part of a primary cooperative is two years older with two years extra of broiler farming experience. The farmer's land is 12 hectares less, although the same number of employees is used. The broiler stock and the number of birds sold per cycle on average is below half of the other farmer, generating about R8 000 less in net farm income. The cost of feed is almost similar to the other farmer at above R10 000. This can be attributed to the selling age. This farmer takes a little longer to sell his/her stock. However, the farmer's cost of labour is lower by over R4 000. The rest of the costs are almost similar.

Table 5: A summary of smallholder broiler production

Key variables categorized by whether the farm is a primary co-operative or not		Province																	
		EC (n = 10)		FS (n = 7)		GP (n = 4)		KZN (n = 5)		LP (n = 22)		MP (n = 8)		NC (n =5)		WC (n = 3)		Total	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Non-primary co-op (n = 35)	Age of the farmer (Years)	49	17	38	3	51	14	56	2	58	12	48	1	40	8	56	-	51	12
	Farm experience (Years)	12	9	7	1	9	7	13	7	17	10	10	8	8	4	17	-	13	8
	Current stock (Birds)	4400	7448	78	72	1415	1232	2067	2572	1525	1452	567	379	238	160	1250	-	1361	826
	Farm size (Hectares)	3	4	4	4	88	142	17	25	5	7	4	5	3	3	1	-	15	51
	Labour used	4	5	2	1	5	2	7	10	3	4	3	2	4	3	1	-	4	4
	Cost of labour (R)	6333	5965	1140	1021	8500	5972	5167	7687	9917	25315	833	473	5500	6658	3700	-	6369	15225
	Cost of electricity (R)	1300	1480	1350	863	3625	4235	2900	4419	1410	1315	1067	808	950	705	4000	-	1765	2114
	Cost of coal/gas (R)	233	404	400	894	-	-	-	-	333	1155	-	-	150	300	-	-	209	754
	Cost of feed (R)	6650	7390	2396	1678	24600	33878	20516	32812	10833	11096	11950	8594	4168	4000	4000	-	10811	16218
	Cost of medication (R)	700	436	430	599	1075	699	600	695	1000	859	333	319	1052	1632	400	-	799	826
	Duration of production (Weeks)	5	1	5	1	6	-	6	-	6	1	5	1	6	1	6	-	6	1
	Selling age (Days)	35	13	30	8	42	-	41	1	39	6	37	8	45	5	42	-	38	7
	Total quantity sold per cycle (Birds)	1689	2873	831	1800	1663	920	1150	1604	1533	1334	200	260	98	36	500	-	1120	1420
	Total net farm income (R)	10333	12741	8620	6432	28750	16601	15400	12549	46042	61292	4667	3055	17250	18733	35000	-	25880	39561

Key variables categorized by whether the farm is a primary co-operative or not		Province																	
		EC (n = 10)		FS (n = 7)		GP (n = 4)		KZN (n = 5)		LP (n = 22)		MP (n = 8)		NC (n =5)		WC (n = 3)		Total	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Primary co-op (n = 29)	Age of the farmer (Years)	63	10	41	4	-	-	48	4	48	11	60	11	35	-	53	4	53	12
	Farm experience (Years)	24	23	12	2	-	-	9	6	9	3	18	22	14	-	14	8	15	15
	Current stock (Birds)	200	163	148	180	-	-	58	60	1150	992	830	507	60	-	1090	226	679	541
	Farm size (Hectares)	2	2	7	4	-	-	2	1	5	7	1	1	1	-	1	0,2	3	5
	Labour used	3	2	5	1	-	-	7	10	5	4	-	-	-	-	3	1	4	4
	Cost of labour (R)	536	684	4500	707	-	-	10000	141442	1782	1509	-	-	-	-	4400	990	2047	3856
	Cost of electricity (R)	2080	4379	1500	707	-	-	600	566	940	878	2050	1040	1600	-	5000	2121	1724	2415
	Cost of coal/gas (R)	327	746	500	707	-	-	-	-	50	158	-	-	-	-	-	-	131	416
	Cost of feed (R)	9813	9694	3100	565	-	-	8000	9899	8547	5580	9603	6430	2030	-	38000	2828	10428	10120
	Cost of medication (R)	393	249	208	-	-	-	250	71	870	699	639	561	300	-	500	707	581	542
	Duration of production (Weeks)	6	-	5	1	-	-	6	-	6	-	5	1	6	-	6	1	6	1
	Selling age (Days)	41	3	29	13	-	-	40	3	40	4	39	5	42	-	36	11	39	5
	Total quantity sold per cycle (Birds)	63	70	300	283	-	-	325	399	1073	929	166	148	50	-	675	460	505	704
	Total net farm income (R)	1857	1314	26000	1414	-	-	12500	10607	21490	25400	13500	15556	17000	-	42500	31820	16359	20063

Note: n = Sample size; SD = Standard deviation
Source: Survey data

3.2.1 Access to land and land ownership

Land is one of the fundamental resources in broiler production. Figure 12 presents land ownership status. The results show that 55% of the sampled respondents own the land privately, which implies greater likelihood of continuity in farming, all other factors held constant. However, during data collection some farmers were seemingly comfortable with the permission to occupy arrangement, which to them represents full ownership of the land they have access to. Therefore, the information presented in Figure 12, may not be a true reflection of private land ownership versus access to land through the permission to occupy arrangement.

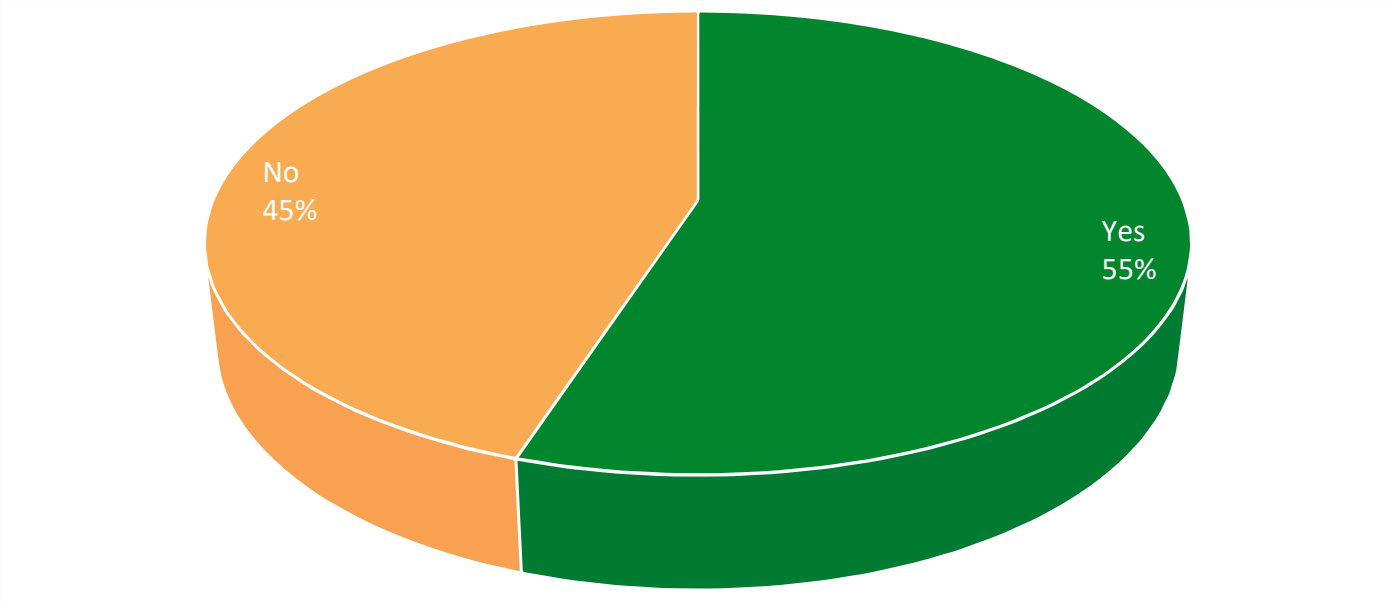

Figure 12: Summary of land ownership status (n = 64)
Source: Survey data

3.2.2 Access to credit

There is some correlation between land ownership and access to credit in the sense that own land could be used as collateral to access credit, particularly from the commercial banks. For instance, farmers whose access to land is backed by strong tenure security (such as title deed), are more likely to get credit because the banks can easily use their land as collateral. Figure 13 presents the percentage of farmers who have borrowed money for their farming activities. The results indicate that only 22% of farmers have borrowed money for farming purposes.

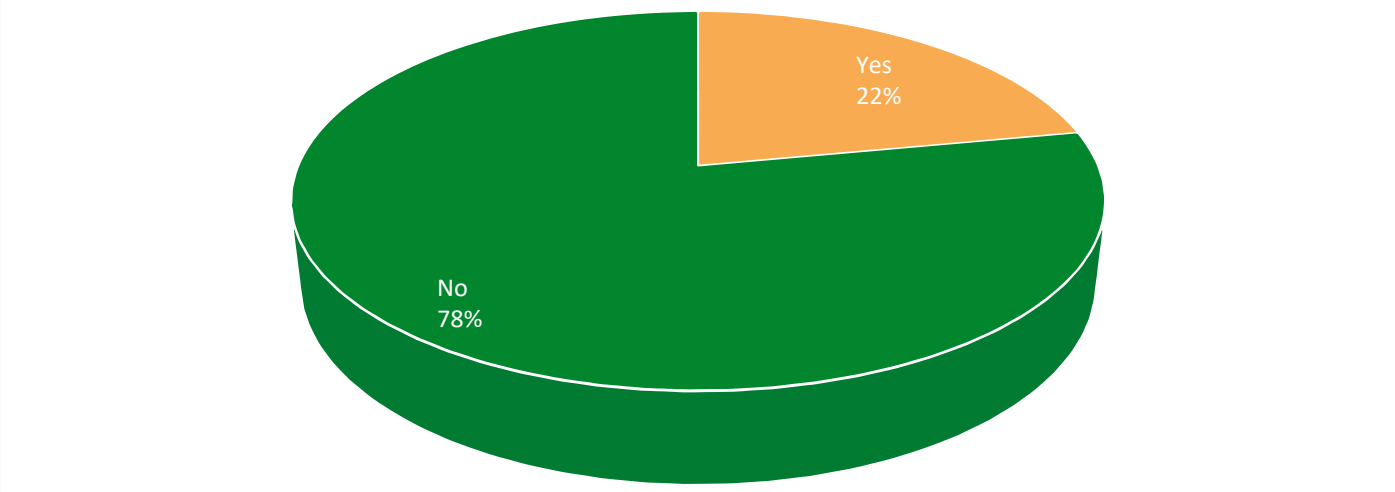

Figure 13: Status of access to credit (n = 64)
Source: Survey data

Figure 14 goes a step further by presenting the sources of credit which have been used by 22% of farmers who indicated that they have borrowed money. The options were limited to borrowing from farmers (e.g. farmers or farming households within the borrower's network), Land Bank, other commercial banks and other sources (such as stokvels, family members and so on). The results show that a majority (91%) of these farmers borrowed from other commercial banks. The remaining 9% borrowed from farmers or the Land Bank or other sources. However, there is a strong possibility that farmers did not understand the question and, therefore, assumed that personal loans could be the information that was required. The reason is that the information that has been analyzed so far does not indicate that it is realistic for 20 (91%) of the 22 farmers, who indicated that they have borrowed money for their poultry production business, that they could have been able to secure loans from the commercial banks. This variable will be monitored closely in the follow-up study to this baseline.

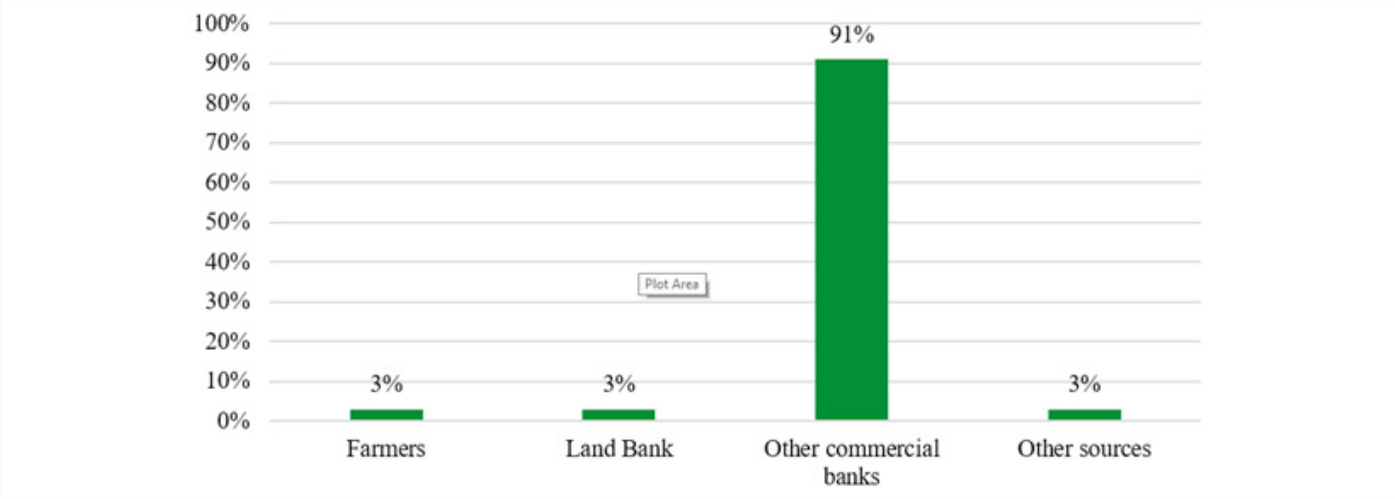

Figure 14: Status of access to credit (n = 64)
Source: Survey data

3.3 Market access

Table 6 presents the types of marketing channels used and quantity supplied, by province. The results are compared between farmers in primary cooperatives and those that are in other forms of registered entities. The quantity shown here indicates the number of birds sold per cycle. The results show that Limpopo is leading in terms of the quantity of birds sold. Although Gauteng has the second-least number of farmers sampled, it sells the third largest number of birds per cycle. This provides some indication of the scale of production between the provinces. On average, the largest quantity of sales goes through the local market for both categories of farmers. However, the former has less than double the quantity sold by the latter. The third largest quantity of sales for the latter goes through abattoirs, while it is the least quantity of sales for the former that goes through this marketing channel. Overall, the farmers are supplying various marketing channels but mainly the informal market and abattoirs, with only a few that extend to the institutional market and retail markets. It is important to note that farmers from the Limpopo province show a tendency of diversifying their marketing channels relative to other provinces.

It is important to explain the marketing channels (particularly the ones that we use less popular names to refer to them) presented in Table 6 in the context of this baseline. These are the local and institutional markets.

The local market refers to the informal market or a less formalized market such as households, communities, hawkers, pensioners and groups of individuals during certain public events. Although it is often viewed as a less lucrative market, the informal market is important for smallholder farmers in South Africa.

The institutional market refers to the government market such as schools, hospitals, prisons and so on. In South Africa, government spends well over R8 billion in buying food for such institutions. Therefore, this (ideally) should be a very important market for smallholder farmers given that these farmers have a general problem of market access. It is however very bureaucratic and a slow payer for suppliers.

Table 6: Marketing channels used and quantity supplied (number of birds) by province

Key variables categorized by whether the farm is a primary co-operative or not		Province																	
		EC (n = 10)		FS (n = 7)		GP (n = 4)		KZN (n = 5)		LP (n = 22)		MP (n = 8)		NC (n =5)		WC (n = 3)		Total	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Non-primary co-op (n = 35)	Quantity supplied to the local market	22	24	21	18	1663	920	1150	1604	1517	1352	200	260	98	36	500	-	856	1155
	Quantity supplied to the institutional market	-	-	810	1783	-	-	-	-	4	14	-	-	-	-	-	-	117	676
	Quantity supplied to the retail market	-	-	-	-	-	-	-	-	4	14	-	-	-	-	-	-	1	9
	Quantity supplied to the restaurants	-	-	-	-	-	-	-	-	4	14	-	-	-	-	-	-	1	8
	Quantity supplied to the abattoirs	1667	2887	-	-	-	-	-	-	4	14	-	-	-	-	-	-	144	845
Primary co-op (n = 29)	Quantity supplied to the local market	54	66	250	354	-	-	325	399	903	874	166	148	50	-	175	248	406	634
	Quantity supplied to the institutional market	1	2	50	71	-	-	-	-	100	316	-	-	-	-	-	-	38	186
	Quantity supplied to the retail market	9	23	-	-	-	-	-	-	10	32	-	-	-	-	500	707	40	186
	Quantity supplied to the restaurants	-	-	-	-	-	-	-	-	50	158	-	-	-	-	-	-	17	93
	Quantity supplied to the abattoirs	-	-	-	-	-	-	-	-	10	32	-	-	-	-	-	-	3	19

Source: Survey data

3.3.1. Marketing arrangements

Table 7 shows the selling and contract arrangement used by smallholder broiler farmers by marketing channels. The results show a larger proportion of the farmers using the local marketing channel "sell on the spot"[6] market followed by those that sell under contractual agreements. A majority of those farmers that sell on the spot market are concentrated in the local market while those farmers selling under contract are concentrated in the abattoir, institutional and retail markets. On the other hand, a larger proportion of the farmers either negotiate the price or become price takers, while the rest (which are the majority when looking at each separately) are price takers. The local market has the highest contribution in all aspects. Sellers in the local market become price takers or negotiate the price in cases where they are selling in crowded places where there are many of them competing. Otherwise, they are usually price setters based on the individual farmer's cost of production. Whereas, prices are mainly set by the market forces.

Table 7: Selling and payment arrangements

	Contract	Spot selling	Other
Abattoir	1 (7,7%)	0	0
Institutional	2 (15,4%)	0	0
Local	8 (61,5%)	53 (100%)	5 (83,3%)
Retail	2 (15,4%)	0	1 (16,7%
Grand Total	13 (100%)	53 (100%)	6 (100%)
	Price taker	Negotiate	Both
Abattoir	1 (3,45%)	0	0
Institutional	0	4 (19,0%)	1 (6,3%)
Local	27 (93,1%)	17 (81,0%)	15 (93,7%)
Retail	1 (3,45%)	0	0
Grand Total	29 (100%)	21 (100%)	16 (100%)

Source: Survey data

[6] Spot selling in this context means selling at the farm gate, putting up a stand in town or in places where people gather in numbers for social events and activities such as during grant payment days, and even going door to door in the neighbourhoods. One of the findings regarding this market was that the sales move faster during the pay days of wages, salaries and grants and it becomes important for the sellers to have a stand in town. This contributes to the long distance travelled to reach the local market as it will be indicated later

3.3.2. Price

Table 8 presents prices for each marketing channel. The results show that, overall, the institutional market offers relatively higher prices, followed by the local market. When looking at the price offered by the local market at a provincial level, the Eastern Cape offers the highest price. KwaZulu-Natal and the Northern Cape offer the second and third highest price in the local market, while the Western Cape offers the lowest price. The institutional market offers the highest price in the Free State. It seems evident that the retail, restaurant and abattoir markets offer lower prices. However, this is not conclusive given the number of observations.

Table 8: Price per marketing channel supplied

	Average local market price/ bird (R)	Average institutional market price/ bird (R)	Average retail price/bird (R)	Average restaurant price/bird (R)	Average abattoir price/ bird (R)
Eastern Cape	82	58	58	0	45
Free State	59	90	0	0	0
Gauteng	56	0	0	0	0
KwaZulu-Natal	75	0	0	0	0
Limpopo	68	55	55	55	55
Mpumalanga	61	0	0	0	0
Northern Cape	74	0	0	0	0
Western Cape	40	0	50	0	0
Grand Total	64	68	54	55	50

Source: Survey data

3.3.3. Distance to the market

Table 9 shows the distance to marketing channels used by the smallholder broiler farmers. From the study, it seems that the local market could have the longest distance compared to other marketing channels. The reason for such an observation is that smallholder farmers tend to get access the "local market" in this context by travelling to places where their market is concentrated. The distance could be somewhat justified if one considers how sparsely populated other provinces may be in some areas. In the Limpopo province, farmers seem to travel longer distances to the local market, followed by retail, restaurants and abattoirs which offer lower prices compared to the local market. One argument for this trend could be the scale of production and the quantities that move in these markets at a given time compared to the local market. The considers the fact that the more farmers keep their birds the more they incur the costs of feed, labour, electricity and medication. So, one would think that the sales have to move as quickly as possible to reduce the cost and to ensure an uninterrupted cycle. Hence farmers seemingly prefer to travel to areas where the market is concentrated to push the sales. Overall, farmers travel the longest distance to reach the local market, followed by the retail – the Western Cape being an outlier on the latter.

Table 9: Distance to marketing channels supplied

	Average distance to local markets (km)	Average distance to institutional markets (km)	Average distance to retail markets (km)	Average distance to restaurants (km)	Average distance to abattoirs (km)
Eastern Cape	15	0	0	0	5
Free State	4	4	0	0	0
Gauteng	24	0	0	0	0
KwaZulu-Natal	72	0	0	0	0
Limpopo	9	2	6	5	5
Mpumalanga	9	0	0	0	0
Northern Cape	43	0	0	0	0
Western Cape	66	0	40	0	0
Grand Total	30	3	23	5	5

Source: Survey data

3.3.4. Perception towards marketing channels

The results of the ratings are presented in Annexure A. The rating was based on the scale of 1 – 4, where 1 = Very poor, 2 = Poor, 3 = Good and 4 = Excellent. The local market was rated good, except farmers in the Free State, Gauteng and KwaZulu-Natal that rated the channel as poor. Free State farmers were not happy about the fairness , accessibility and safety of this market. Gauteng farmers were concerned about almost all the aspects except fairness, while KwaZulu-Natal farmers were not happy with all the aspects except accessibility and flexibility . Except for these concerns from the specified provinces, it seems that the local market is fair, accessible, safe, convenient and flexible.

The institutional market was rated poor by all the provinces except for the Eastern Cape and some farmers within the Free State and Limpopo. The Eastern Cape farmers had the highest rating (excellent) for the institutional market in four (4) aspects, with the exception of safety. Free State farmers had a lower rating for safety (almost similar to the Eastern Cape), while Limpopo farmers had a lower rating for fairness, safety and flexibility. The Western Cape and Gauteng provinces had the lowest rating (very poor) for this market, followed by the Northern Cape with a rating of poor in all aspects. There were no ratings from two provinces. Overall, the institutional market had a poor rating.

Similar to the institutional market, the Eastern Cape farmers had the highest (excellent) rating for the retail market except the safety aspect, which was rated as 'good'. There are incomplete ratings from Free State and Gauteng, with those that recorded being the lowest ratings for accessibility and flexibility. The Limpopo farmers rated this market as 'good' in all aspects, while the Western Cape farmers rated it as 'good' in all aspects except fairness. Northern Cape farmers rated it 'poor' in all aspects. However, the overall rating indicates that the retail market is 'good', but accessibility is a concern for farmers.

The restaurant market was the least used market. As such, many provinces either have incomplete ratings or did not rate the market at all. Only two provinces, Limpopo and Northern Cape had complete ratings. The former had rated the market as 'good' in all aspects, while the latter rated the as 'poor' in all aspects. Gauteng (with incomplete ratings) indicated had a lowest rating ('very poor') for accessibility and flexibility of this market. Overall, the restaurant market is 'good' except concerns regarding accessibility, safety and flexibility.

The Eastern Cape farmers rated the abattoir market as 'good' for fairness and 'poor' for flexibility. The Limpopo farmers rated it as 'good' in all aspects, while the Northern Cape farmer rated it as 'poor' in all aspects. The one rating from the Free Sate indicated a concern with accessibility, rating this aspect as 'very poor', while Gauteng farmers had a different view – rating it as 'good'. Overall, accessibility and flexibility seem to be an issue.

The processing market was rated by two provinces. The Limpopo farmers rated it as 'good' (almost 'excellent'), while the Northern Cape farmers rated it as 'poor' in all aspects. The overall rating was, therefore, 'good' except for the aspect of accessibility.

[7] Fairness refers to the transparency of the market, particularly with regards to grading and standards followed by the price received by the producer. In some cases, during the course of data collection, some farmers indicated that some buyers try to push the prices down as much as possible and do not consider the fact that farmers also need to cover their costs

[8] Accessibility means ease of participation into the market and is based on barriers to entry that often hinder smallholder farmers to participate in high value markets. Some of the barriers considered in the context of this baseline include the stringent market requirements such as certification, good farm practices and so on

[9] Safety refers to the conditions in which the produce is moved and the incidents of robbery or theft. It takes into account the suitability of the modes of transport and the extent of security of the produce as it moves from the producer to the buyer

[10] Flexibility means the extent to which the market is flexible to unforeseen circumstances such as extreme weather events, fires, deaths of chicks, logistics disruption and so on that may lead to deviations in terms of the expected timing and quality of the produce during the transaction

[11] Convenience means an extent to which farmers are able to get their produce into the market on time. This takes into account issues such as transport, distance, roads, etc. and so on

3.4 Access to marketing services and facilities

Table 10 provides an indication of facilities and services that farmers may have access to now or in the past, which may enhance their ability to access markets for their produce. The results indicate that a majority of farmers in all the provinces do not have access to hatcheries for the production of chicks. They also do not have access to slaughter facilities and cold storage. This means that in many cases, they have to sell live birds. Some farmers highlighted this as a reason for lack of access to the other markets beyond the informal market. The majority of farmers have SAPA membership. Also, a majority indicated that they have received government support at some stage in their business. In many cases, the support came in the form of the broiler infrastructure. Lack of own transport for some farmers is a main issue, particularly those that have to travel to towns to reach the market. What is also encouraging is that all the farmers were aware that there are market requirements that they need to comply to. These include hygiene management, biosecurity, and humane treatment of birds among others.

Table 10: A summary of farmers' access to marketing service and facilities

Province	Hatchery (%)	Slaughter facility (%)	Cold storage (%)	Government support (%)	SAPA membership (%)	Own transport (%)	Access road (%)
EC (n = 10)	10	10	0	60	0	40	90
FS (n = 7)	57	29	29	43	71	86	0
GP (n = 4)	25	50	0	50	75	0	75
KZN (n = 5)	0	20	20	40	40	60	60
LP (n = 22)							
MP (n = 8)	0	25	25	38	88	25	0
NC (n = 5)	0	60	40	0	20	60	0
WC (n = 3)	67	0	33	67	0	67	0

NB: The total percentage of a province is a percentage of the grand total. The percentage within a province is the percentage of the total of a province.

Source: Survey data

3.5 Access to insurance

TThe aspect of insurance was included in the SMAT tool for the purpose of this baseline and going forward. Table 11 indicates access to insurance and some reasons underlying the lack of access. A majority of farmers (above 75%) indicated that they think it is important for them to have insurance for their broiler farming operations. Some farmers shared their stories that gave rise to the loss of stock and opened the farmers' minds to the idea of agriculture insurance. Many of these stories were mostly about fire that burnt the broiler houses and the stock inside. The other unique one and was about a disease. The story was shared by the Hitsakile primary co-op. Apparently, in 2004, there was an outbreak of a disease known as "newcastle" which cost the co-op 4 000 birds, some died and the rest were culled. However, the co-op did not receive compensation because the disease outbreak was not declared as a disaster. This is when the farmers began to understand the importance of insurance.

Fewer farmers (below 30%) from the Free State, KwaZulu-Natal and Limpopo provinces indicated that they have insurance for their infrastructure that they use on the farm, including the broiler housing structures and the implements that is used in broiler production. About 9% farmer from the Limpopo province only indicated that they have insurance for their broiler stock. It was interesting to determine the reasons farmers mentioned not to have insurance given that they view it as being important in their farming businesses. A majority of farmer who do not have insurance claimed that the reason is high premiums, whereas the rest indicated that they do not need it and some saying they do not know where and how to access it or their business are too small for the insurance cover.

Table 11: Access to agriculture insurance

Province	Insurance is important in farming (%)	Have insurance for infrastructure (%)	Have insurance for broiler stock (%)	Insurance is expensive (%)	Do not need insurance (%)	Have other reasons for not having insurance (%)
EC (n = 10)	100	-	-	60	-	40
FS (n = 7)	85	29	-	71	40	17
GP (n = 4)	100	-	-	100	-	50
KZN (n = 5)	100	25	-	60	-	20
LP (n = 22)	77	9	9	82	41	27
MP (n = 8)	100	-	-	100	-	60
NC (n = 5)	100	-	-	60	20	-
WC (n = 3)	100	-	-	100	33	33

Source: Survey data

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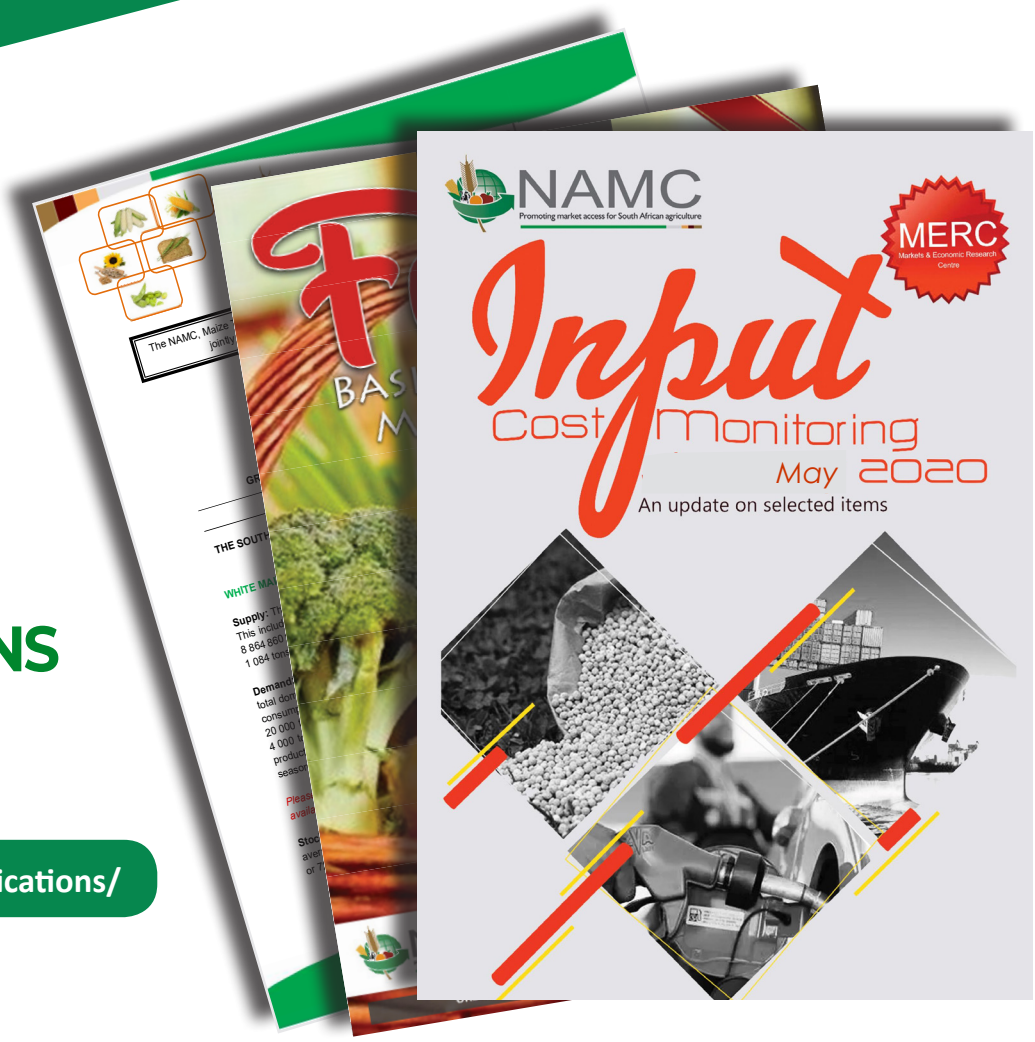

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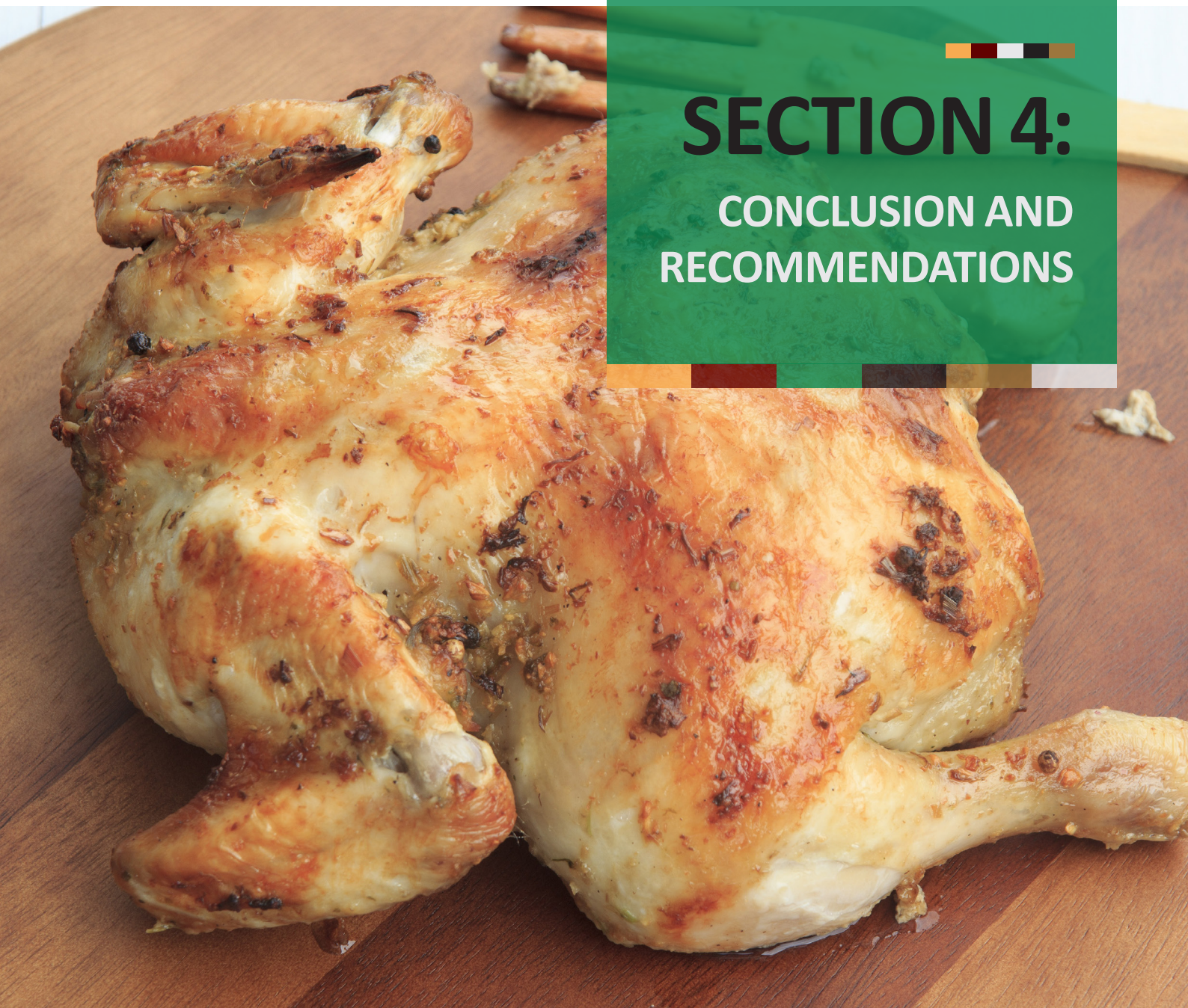

SECTION 4:

CONCLUSION AND RECOMMENDATIONS

SECTION 4: CONCLUSION & RECOMMENDATIONS

4.1 Conclusions

It was discovered that a typical smallholder broiler farmer is likely to be a female who is aged around 52 years, has obtained a tertiary qualification and relying heavily on agriculture as a source of livelihood.

The broiler value chain indicates that limited access to infrastructure could limit the options for accessing a wider range of marketing channels. As a result, only those smallholder broiler farmers who have access to commercial abattoirs have the potential to sell beyond the local market. This industry analysis was consistent with the results of this baseline which show that smallholder broiler farmers rely heavily on the local market, while fewer farmers sell to institutional, retail and abattoir markets. This is mainly due to lack of access to marketing infrastructure such as slaughter facilities. As a result, these farmers sell a larger proportion of their produce in the local market as live birds.

The industry profile further shows that the wholesale, retail and food service markets take more than 90% of the domestic market share for broiler output, while fresh whole constitutes just below 5% market share of the broiler product mix in the domestic market. This emphasizes the limitation to market access that could be attributed to lack of access to slaughter facilities.

It is encouraging though that the local market offers the second highest price at R64,00, while the retail, abattoir and restaurant markets offer a price range of R50,00 to R54,00. In addition, the informal market allows for producers to negotiate the price, while they tend to be price takers in other market. But the local market does not provide off-take agreements as is the case in other markets. As a result, producers tend to find themselves in a situation where they keep their birds for a longer time than necessary and this comes at a cost.

Surprisingly, farmers, on average, travel a longer distance to access the local market, compared to the rest of the markets. While, the less-guaranteed demand in the local market could imply that farmers sometimes have to turn back with some of the stock which they could not sell on a given day at their temporal selling stations. This increase transaction costs associated with the local market.

Nevertheless, farmers rated all the markets above average in terms of the overall ratings although some farmers indicated dissatisfaction with certain markets at a provincial level.

Noteworthy that the standard deviation of the variables presented in this baseline results are generally high, implying that there is large variation between farmers in terms of the scale of production. For example, some farmers had a stock of 150 birds, while others had a stock of more than 2000 birds. Furthermore, there are variations where farmers from different provinces are affected differently by each of the variables. This further implies that interventions based on the recommendations of this report cannot be uniform for all provinces.

It was further discovered that farmers who are part of a primary co-operative do relatively poor to those that are not. This could be attributed to the claim by the farmers that working as co-operatives pose several challenges. One of them being many people may join the co-operative, but not all of them may really want to farm. As such, many will seem disinterested when things do not go relatively well and want to re-surface again when the situation improves, if it does. The results revealed that farmers who are not part of a primary co-operative are likely to place a larger stock size and sell many birds on average per cycle. As a result, they tend to generate more net farm income than their counterparts. Noteworthy that both categories of farmers create equal employment opportunities, but those that a not part of the co-operative incur a higher cost of labour. Farmers who are part of a primary co-operative take longer to sell their stock. As a result, the cost of feed (highest cost among all the production costs) is almost equal for farmers in both categories. One of the major concerns regarding the stock size of the smallholder broiler farmers is the mortality rate of 16%, which is high compared to the 8% in the broiler sector, with a target of 5%.

Although farmers recognize the importance of having agriculture insurance, they are still without insurance. However, it was beyond the scope of this baseline to uncover the interest of insurers to work with smallholder broiler farmers and under what conditions.

4.2 Recommendations

The recommendations are categorized based on the key findings and directed to the relevant bodies based on their roles in the sector.

4.2.1. Recommendations to the South African Poultry Association

Smallholder farmers' participation in the formal market is limited. Stock management is relatively poor compared to industry standards as these farmers rely on informal risk management strategies. Furthermore, the sector is dominated by fewer feed and breeder companies and this could be a barrier to new entrants into the sector. Therefore, SAPA should drive transformation in the broiler sector. One way of driving transformation would be to collect a levy from broiler producers and other stakeholders – part of such a levy would be used for transformation activities as per levy guidelines. The focus of transformation should be to enhance production of smallholder farmers, reduce their mortality rate and enhance their participation in formal markets. This could be achieved by:

- Providing mentorship and training to smallholder broiler farmers and their workers (where applicable) regarding stock management, risk management strategies (including biosecurity) and strategic partnerships to open up access to formal markets and acquire take-off agreements. Part of the training could also focus on strengthening the co-operative model, where farmers are trained in the aspects of good governance, leadership and ways to organize themselves better.
- Collaboration with government to supply infrastructure (e.g. production infrastructure and slaughter facilities)
- Ensure smallholder farmers' representation into industry forums and committees

4.2.2. Recommendations to government

Smallholder broiler farmers have limited ability to diversify markets and get surety of market access. As a result, their ability to expand production and improve efficiencies may also be limited. Therefore, government should assist to activate production and provide access to slaughter facility in farmers' localities. This may imply that the government should re-look at the poultry abattoirs that are not operational in rural localities. These facilities will enable farmers' access to other markets beyond the informal market. Although the informal market seems lucrative in terms of the price it offers per bird, it is not structured. As a result, some farmers end up feeding their birds unnecessarily longer than required thereby increasing costs and disrupting the cycle and cash flow.

The government market, which should be the important market for smallholder farmers, is still not accessible to these farmers. Government must prioritize smallholder farmers in the institutional market. However, a better procurement system would be required as opposed to the current bureaucratic system, which may hinder the farmer's cash flow. Otherwise, smallholder farmers should register as food operators and have access to abattoir facilities.

Furthermore, government should re-energize the commercialization strategy for smallholder farmers. Among other things, this could enhance farmers' positioning in terms of competitiveness, better access to markets and inputs (such as chicks, feed and medication).

These three recommendations require that government works closely with the industry to have a maximum and effective intervention.

Farmers are concerned about the co-operative model. Having a registered entity in a form of a co-operative should put farmers in a more advantageous position to leverage funding from the government. However, some farmers seem who have real interest and potential in farming tend to be exposed to exploitation by farmers who join co-operatives for quick gains. One way of managing this from the government side would be to introduce a strict mechanism to monitor government funding provided to a co-operative. In addition, there could be a way to manage active membership for co-operatives that have been supported. This is also to ensure that farmers who have been supported grow to a level where they can stand on their own and not rely on constant support. Perhaps, there is a need to re-visit the concept of the co-operative model by government officials and farmers to understand the purpose of co-operatives.

4.2.3. Recommendation to farmers

There are a couple of recommendations to farmers.

First, farmers should organize themselves so they can represent themselves effectively in various market structures, including formalizing the informal market to work for themselves.

Second, farmers need to understand that the co-operative model should be used as vehicle to acquire inputs (e.g. chicks, feeds and medicines) and to reduce transaction costs. In order to guard themselves against exploitation, farmers could also play a role by having strict laws under which they operate in a co-operative.

These recommendations imply that farmers should drive the effectiveness of the co-operative model by exhibiting good governance and strong leadership to attract and provide a conducive environment and atmosphere and positive energy for the interventions by government and SAPA as per the recommendations directed towards them.

4.3 Further study

Further studies highlight the role of the NAMC, as part of the recommendations proposed to other stakeholders.

The NAMC will do a follow-up study from this baseline to track if there has been progress in terms of market access or not. The proposition was that the follow-up studies will be done after a 2-year interval, but this could be adjusted based on the action plans put by the relevant stakeholders as per the recommendations of this baseline. Before the follow-up study is undertaken, the NAMC will also be involved in various platforms and direct stakeholder engagements regarding market access issues and interventions as per the recommendations of this baseline and/or as may be required by the mandate of the NAMC.

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APPENDIX A: ADDITIONAL ANALYSIS

Table 12: Average rating of the local market

Row Labels	Fairness	Accessibility	Safety	Convenience	Flexibility
Eastern Cape	3,2	3,6	2,9	3,4	3,3
Free State	1,8	2,4	2,4	2,6	2,6
Gauteng	2,5	2,25	1,75	2	2,3
KwaZulu-Natal	2	2,6	2	2	2,6
Limpopo	2,6	2,8	2,6	2,7	2,78
Mpumalanga	3	3,5	2,5	3,4	3,3
Northern Cape	3	2,6	2,6	2,6	2,6
Western Cape	2,7	3	3	3	3
Grand Total	2,7	2,9	2,5	2,8	2,9

Table 13: Average rating of the institutional market

Row Labels	Fairness	Accessibility	Safety	Convenience	Flexibility
Eastern Cape	4	4	3	4	4
Free State	3	2,5	2,3	3	3
Gauteng	1	1	1	1	1
KwaZulu-Natal					
Limpopo	2,3	2,5	2,3	2,5	2,3
Mpumalanga					
Northern Cape	2	2	2	2	2
Western Cape	1	1	1	1	1
Grand Total	2,3	2,3	2,1	2,4	2,3

Table 14: Average rating of the retail market

Row Labels	Fairness	Accessibility	Safety	Convenience	Flexibility
Eastern Cape	4	4	3	4	4
Free State		1			
Gauteng		1			1
KwaZulu-Natal					
Limpopo	3	3	3	3	3
Mpumalanga					
Northern Cape	2	2	2	2	2
Western Cape	2	3	3	3	3
Grand Total	2,8	2,4	2,8	3	2,7

Table 15: Average rating of the restaurant market

Row Labels	Fairness	Accessibility	Safety	Convenience	Flexibility
Eastern Cape					
Free State			1		
Gauteng		1			1
KwaZulu-Natal					
Limpopo	3	3	3	3	3
Mpumalanga					
Northern Cape	2	2	2	2	2
Western Cape					
Grand Total	2,7	2,3	2,3	2,7	2,3

Table 16: Average rating of the abattoir market

Row Labels	Fairness	Accessibility	Safety	Convenience	Flexibility
Eastern Cape	2	3	3	3	2
Free State		1			
Gauteng		3			
KwaZulu-Natal					
Limpopo	2,8	2,5	3	3	2,7
Mpumalanga					
Northern Cape	2	2	2	2	2
Western Cape					
Grand Total	2,5	2,4	2,8	2,8	2,4

Table 17: Average rating of the processing market

Row Labels	Fairness	Accessibility	Safety	Convenience	Flexibility
Eastern Cape					
Free State		1			
Gauteng					
KwaZulu-Natal					
Limpopo	3,5	3	3,5	3,5	3,5
Mpumalanga					
Northern Cape	2	2	2	2	2
Western Cape					
Grand Total	3	2,3	3	3	3

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