

SHEFS

POLICY BRIEF 4

Food Safety:

**Who's doing what, where and when?
Risks from fragmented governance**

WHAT IS SHEFS?

SHEFS (Sustainable and Healthy Food Systems) is an international research programme using novel methods to generate and synthesise evidence, and to help decision makers create policies that deliver nutritious and healthy diets in an environmentally sustainable and socially equitable manner. The programme is funded by the Wellcome Trust.



ABOUT THIS SERIES

This series of five policy briefs draws on research conducted by South African and United Kingdom-based researchers within the SHEFS consortium. The series seeks to encourage policy makers working on the commercial broiler chicken system in South Africa to adopt a broad systems-based perspective in their work. This brief highlights the risks from the fragmented nature of food safety governance.

BRIEFING 2

Highlights the systemic inequalities which are created by policies that favour large-scale commercial producers, and which, in turn, generate price-driven nutritional inequalities for consumers

BRIEFING 3

Explores the potential nutrition and health implications of policies aimed at increasing per capita consumption of broiler chicken meat

BRIEFING 1

Provides a broad overview of the challenges associated with current broiler industry policy in South Africa

BRIEFING 4

Highlights the fragmented nature of food safety governance within the context of the broiler chicken system and the potential risk of foodborne disease in South Africa

BRIEFING 5

Explores the hidden impact of the commercial broiler chicken system on the environment and the broiler system's climate change vulnerability

A food safety lens on the broiler chicken system

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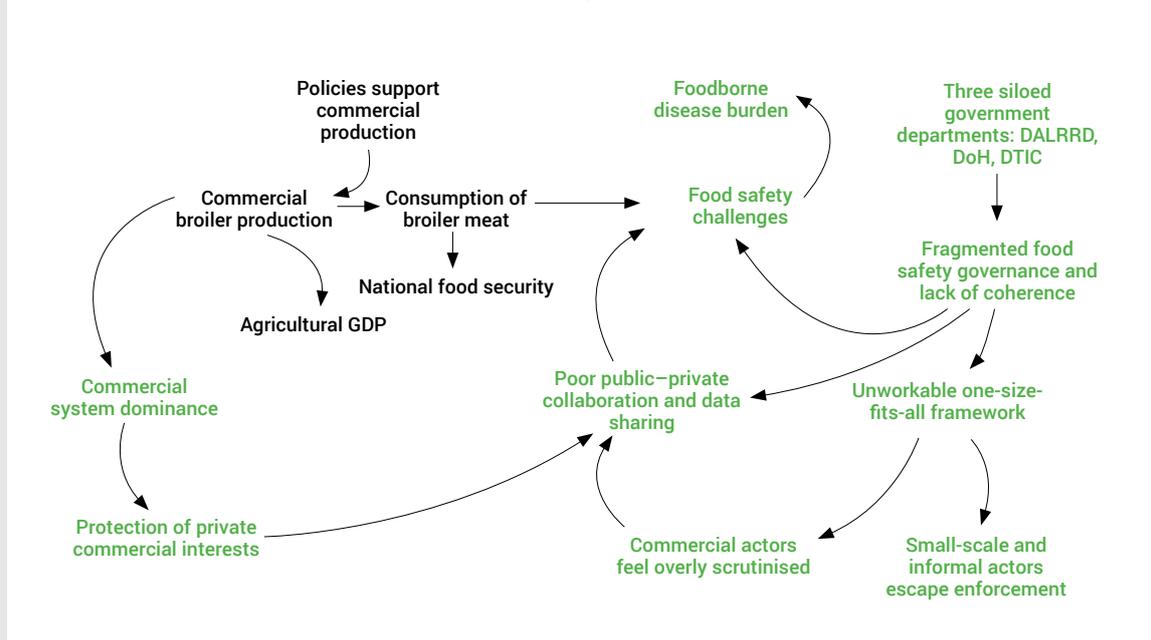
SUMMARY

This policy brief highlights the fragmented nature of food safety governance within the context of the broiler chicken system and the potential risk of foodborne disease in South Africa.

Provision of safe food is a fundamental objective of food systems, yet several weaknesses are present in the broiler chicken system in South Africa. The commercial system, and the formal market it supplies, provide the bulk of broiler meat products to consumers, and therefore are important actors with regard to food safety. Food safety governance sits in three separate government departments, leading to fragmented policies with limited integration and coherence. Private and public food safety surveillance systems lack incentives for co-operation and data sharing. Large-scale commercial actors feel they are over-scrutinised and that smaller informal actors escape enforcement. Perceptions of hostility and mistrust hinder collaborative progress. A dedicated cross-sectoral food safety agency that incorporates private and public stakeholders would provide the potential to rebuild public–private trust, and a foundation for developing more coherent and integrated food safety policies.

FIGURE 1

- Current focus of commercial broiler policies and their intended outcomes
- Wider unintended consequences revealed with a food systems approach



RECOMMENDATIONS

Establish a dedicated cross-sectoral food safety agency built on public–private partnerships, to develop integrated and coherent policies with realistic regulations and adequate enforcement capacity.

Invest in food safety awareness, education and training for consumers, and for smaller-scale and informal actors within the broiler system.

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Introduction

One of the key functions of a food system is to produce food that is safe for human consumption. Despite this, the global burden of foodborne disease is estimated to be at a level comparable with the major infectious diseases of HIV/AIDS, malaria and tuberculosis (TB)¹. National estimates of foodborne disease typically under-represent the burden: poor surveillance capacity leads to missed cases, and the non-specific nature of symptoms such as diarrhoea means cases are under-reported². The highest levels of foodborne disease are found in Africa, with over 40% of the cases affecting children under five years of age³. Drivers of this include poverty, poor access to safe water, inadequate storage capacity, tropical climates, and inadequate food safety standards together with poor capacity to enforce them^{1,3}. Consumption of animal-sourced foods (i.e. milk, meat, eggs or seafood), and fresh fruit and vegetables, is the source of most cases of foodborne disease, mainly through their contamination with microbial pathogens⁴. Across Africa, poultry meat is associated with over 50% of foodborne campylobacteriosis cases and 30% of foodborne salmonellosis cases⁵. Food safety is of particular concern in South Africa, where a significant proportion of the population is vulnerable because they live in poverty, suffer from malnutrition, or live with HIV/AIDS or TB⁶.

The challenges and impacts of foodborne disease were recently highlighted for South Africans through the listeriosis outbreak in 2017–18, which was the largest outbreak in the world to date. It took 15 months to identify the source, during which time it had spread to all provinces, causing 1,034 confirmed cases, with 29% being fatal⁷. Although listeriosis is caused by a bacterium commonly found in soil, vegetation and water, this outbreak was associated with a food processing factory that produced polony, which is made with mechanically deboned meat, typically of pig and broiler carcass origin⁶. While most food safety concerns in low- and middle-income countries are associated with informal supply chains⁴, South Africa's listeriosis outbreak underlined that food safety within formal food systems cannot be taken for granted.

Broiler meat consumption in South Africa has almost doubled in the past two decades, while beef consumption has remained relatively stable. South

Africans currently consume 17.4 kg of beef per capita per year compared to 39 kg of broiler meat (see **Figure 2**), making broiler the most commonly consumed meat⁸. This is driven by urbanisation, the increased affordability and supply of broiler meat, and the spread of formal large-scale retailers into rural areas⁹. The supply, affordability and distribution of broiler meat is dependent primarily on the commercial system, which is supplemented with imports and a small amount of small-scale production⁸. The commercial broiler system therefore plays a key role in meat-consumption-related food safety in South Africa.

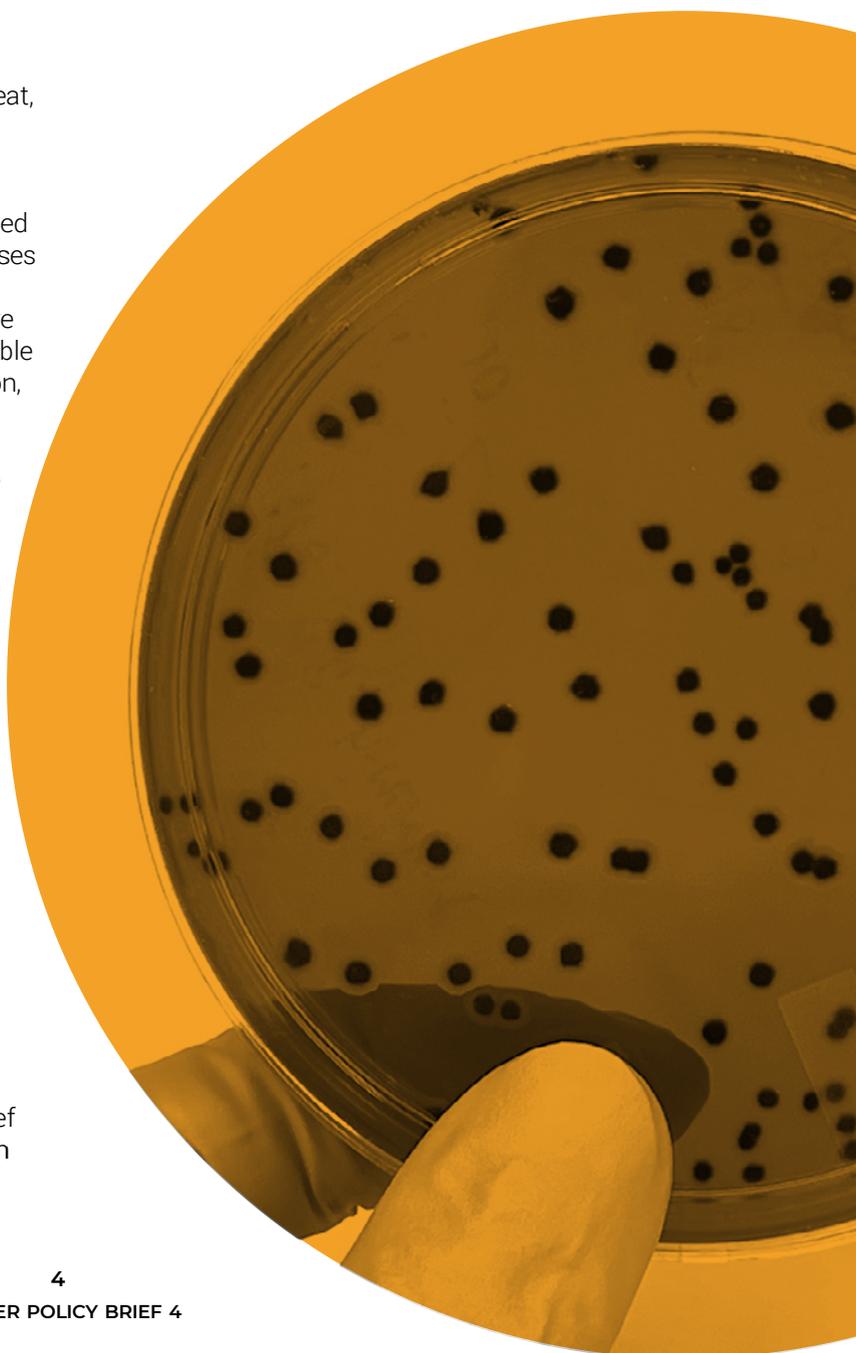
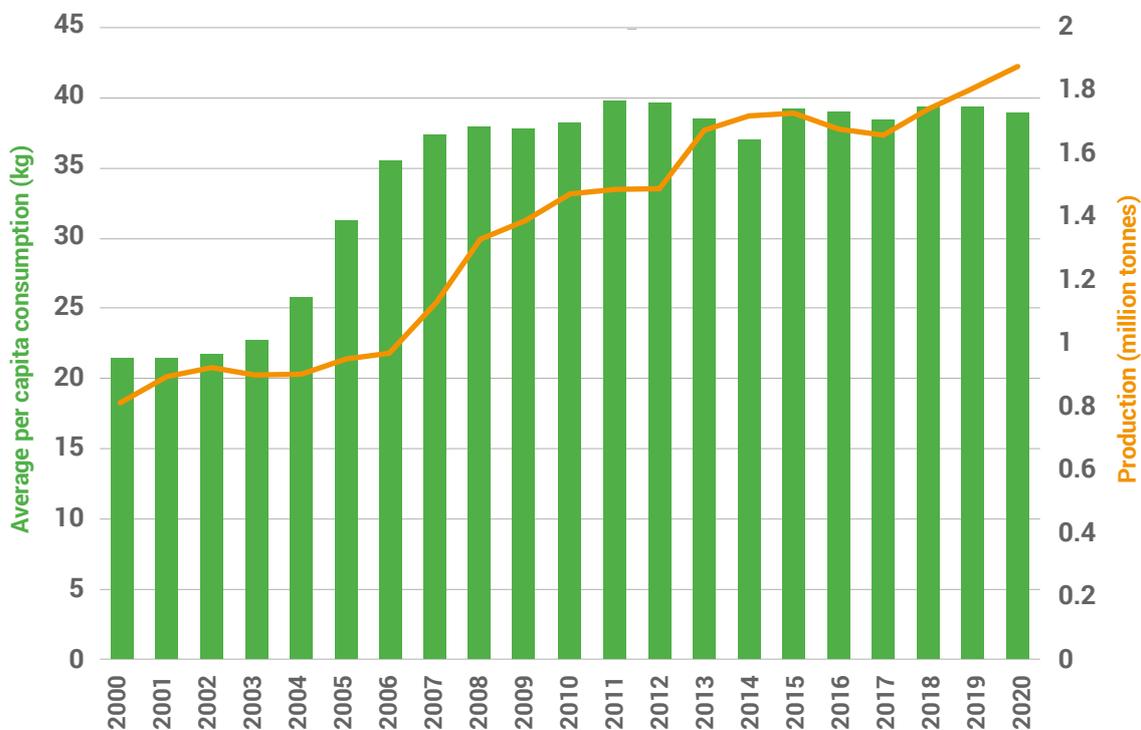




FIGURE 2

TREND OF BROILER MEAT AVERAGE PRODUCTION AND PER CAPITA CONSUMPTION PER YEAR ^{8,10,11}



The broiler industry is being driven by policies within the South African Poultry Master Plan that were agreed at the end of 2019. The Plan’s main objective is to increase the consumption of chicken meat on a per capita basis through a number of measures, including those that support the existing local industry, while driving demand through ensuring affordability for consumers. The Plan lists several challenges that the industry faces but food safety is

not one of them. However, within the “Enhancing the Regulatory Framework and ensuring compliance” part of its listed actions, it refers to food safety through its intentions to improve traceability of imported products, and to review regulations on thawing frozen products. Beyond this, our research has highlighted several other issues of concern regarding food safety and the commercial broiler system (🔗 **Figure 3**).



FIGURE 3

BROILER SYSTEM FOOD SAFETY CONCERNS

- Based on the Poultry Master Plan
- Based on recent research findings



“South Africa lacks an agency with an overarching responsibility for food safety”

Research findings

South Africa’s food policies in general have been criticised for being formulated and implemented within silos¹². Responsibility for food safety policy currently lies within three government departments: the Department of Agriculture, Land Reform and Rural Development (DALRRD), the Department of Health (DoH), and the Department of Trade, Industry and Competition (DTIC). Each department has a separate mandated role and area of focus, and while there is some overlap, structural departmental barriers inhibit the formulation and implementation of coherent, integrated policies¹³. Much of the DoH’s operational aspects of food safety are devolved

to local municipalities, and dependent on highly variable local budgets and affected by different local budgeting priorities¹³. South Africa lacks an agency with an overarching responsibility for food safety, such as the Food Standards Agency in the UK and the European Food Safety Authority.

Within the broiler industry, government food safety regulations often fall below those required of large-scale producers who supply the major supermarket and fast-food restaurant chains, some of whom strive, or are obliged, to maintain international standards¹³. The high-end private sector actors have reputational



and financial incentives to ensure food safety, and in many cases use their own monitoring systems, and private in-house veterinary and laboratory services¹³. Government laboratories operate under tighter budgets and different priorities than commercial enterprises, and only 5 of the approximately 260 National Health laboratories are able to process food samples¹³. Outside of the obligations for reporting notifiable diseases, data sharing from private laboratories to national surveillance systems is constrained by client confidentiality¹³. Fear of bad publicity, financial consequences and litigation are barriers to private laboratory data sharing, which counterintuitively is reportedly worse in the wake of the listeriosis outbreak¹³.

Large-scale local producers feel they are unfairly targeted by government enforcement officers, due to their superior record keeping and ease of record access, and their higher production volume¹³. Smaller-scale producers escape the same level of scrutiny because of poor enforcement capacity¹³. With recent surges in imports, this capacity at ports of entry is inadequate¹³, raising several food safety concerns of which the Poultry Master Plan addresses only some.

At the level of retail, the current one-size-fits-all regulatory framework within the Foodstuffs, Cosmetics and Disinfectants Act (Act No. 54 of 1972)

is considered unfit for purpose by representatives of the retail and manufacturing industry⁹. Critically, there is not the capacity to implement regulations contained in the Act across the wide spectrum of actors within the system⁹. Similarly to producers, large-scale retailers undertake self-monitoring to high standards, yet undergo closer scrutiny, with many smaller-scale and informal retailers working beneath the enforcement radar⁹. Small-scale and informal actors often lack knowledge and understanding of the regulations, and most of the requirements are out of their reach, given the informal environment in which many of them operate⁹.

The relationship between government and the broiler industry has, in recent history, been tainted by perceptions of hostility and mistrust¹³. However, food safety represents a shared interest of all actors, given the WHO's assertion that "Food safety is everyone's business"¹⁴. A cross-sectoral shared focus on food safety could therefore provide an opportunity for change. It could help develop public and private partnerships that result in integrated and coherent policies, with more realistic, risk-based regulations¹³. These policies and regulations would require the support of knowledge-sharing campaigns, and would need to be backed up by regulation enforcement capacity.

RECOMMENDATIONS

Establish a dedicated cross-sectoral food safety agency built on public-private partnerships to develop integrated and coherent policies with realistic regulations and adequate enforcement capacity.

Invest in food safety awareness, education and training for consumers, and for smaller-scale and informal actors within the broiler system.





Conclusion

Food safety is a crucial responsibility of many actors across the food system. Given the consumption trends in broiler meat and the role of the commercial producers and large-scale retailers within the supply chain, particular attention should be applied by policy makers to ensure mitigation of food safety risks from broiler products across the spectrum of production, distribution and consumption. Food safety governance, disjointed and siloed in different government departments, results in fragmented policymaking and regulations that can be difficult to enforce. An overarching cross-sectoral food safety agency is absent – creating one has the potential to rebuild public–private trust and develop partnerships to deliver on their shared interest in food safety.



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