

https://dspace.org/

The role of business and government in shaping South Africa's food safety regime between 2000-2015

Mbenyane, Balungile C

2016

http://hdl.handle.net/10539/21828

Mbenyane, Balungile C. The role of business and government in shaping South Africa's food safety regime between 2000-2015, University of the Witwatersrand, Johannesburg, <http://wiredspace.wits.ac.za/handle/10539/21828>

Downloaded from a DSpace repository. https://dspace.org/

The role of Business and Government in shaping South Africa's food safety regime between 2000-2015

Balungile C. Mbenyane

Masters Research Report

Supervisor: Prof. David J. Hornsby

Department of International Relations
School of Social Sciences
Faculty of Humanities
The University of the Witwatersrand

DECLARATION

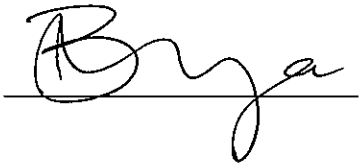
I, Balungile Clementina Mbenyane, hereby declare that:

I am aware that plagiarism (the use of someone else's work without their permission and/or without acknowledging the original source) is wrong.

I confirm that the work submitted for assessment for the above course is my own unaided work except where I have explicitly indicated otherwise.

I have followed the required conventions in referencing the thoughts and ideas of others.

I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my own work and/or that I have failed to acknowledge the source of the ideas or words in my writing.

Signature:  Date: 22 July 2016

ABSTRACT

This research report provides a framework to assess the value of private-public partnerships (PPPs) in shaping the regulatory framework of the food safety regime within southern Africa. As one of Africa's largest economies and major exporting countries, South Africa provides a clear case for analysing how developing countries in Africa have adopted and enforce international standards relating to the safety of foodstuffs that are produced, distributed and sold. Within the international systems, governments are generally held responsible for the ratification of international treaties that inform global standards and are criticised or excluded when they fail to comply. However, the role of private sector in supporting and enforcing food safety practices has not been evaluated in any meaningful way. The aim of this research is further the understanding of how PPPs have formed in South Africa and to what extent they have had a positive impact on the advancement of food safety between the years 2000 and 2015. With the help of document analysis and a review of the current regulatory framework, this research is framed within the concept of hybridity and allows us to better understand the focus of PPPs within South Africa's food safety regime. The main conclusion is that South Africa's commitment to food safety is strong but the relevant policy remains uncoordinated and undefined. South African businesses and the government are involved at the international level in terms of standards-setting and are aware of the global food safety strategy. The primary reason for this is that the country's involvement improves trade prospects and affirms its role as a collaborative actor within the International Food Safety Complex (IFSC). However, South Africa still experiences several issues relating to food safety risks that affect trade and challenge the efficacy of existing food safety regulations. The recommendation is that public and private sectors should invest more capital and capacity in establishing a comprehensive food safety policy that brings together legislation, identifies key actors and provides a guideline to improve transparency and accountability relating to food safety issues in South Africa.

Key words: ***Codex Alimentarius, food safety, food safety risks, hybridity, international food safety complex, public-private partnerships, SPS Agreement, TBT Agreement***

ACKNOWLEDGEMENTS

Firstly, I would like to acknowledge the University of the Witwatersrand's Postgraduate Merit Award, which has been instrumental in my ability to further my studies. This fund has been empowering and I can only hope that it continues to benefit more and more students in the near future.

I would like to thank my wonderful partner and best friend, Brendan, for his constant and complete support. His patience, perspective and personal drive have made me want to improve, and his kindness and understanding has been the stuff of legend.

I am grateful to my friends and family, especially my uncle, Enzo, and my mother, Lindi, who have walked this particular path with me from the very beginning. I am quite certain that, without all their attention and support, this research report would have remained unwritten.

Finally, I want to thank my supervisor and one of my greatest role models, Professor David Hornsby of the Department of International Relations at the University of the Witwatersrand. His encouragement and ever-inspiring example have made me a better student and person. The past six years have been a privilege.

TABLE OF CONTENTS

DECLARATION 2
ABSTRACT 3
ACKNOWLEDGEMENTS 4
TABLE OF CONTENTS 5
ACRONYMS 7
CHAPTER 1: BACKGROUND 9
The Problem Statement 9
Background 9
The International Food Safety Complex 13
Rationale of the Study 15
Conceptual Framework 18
Research Question 20
Chapter Outline 21
CHAPTER 2: LITERATURE REVIEW 22
Food safety as a 'public good' literature 22
Food safety in South Africa literature 26
CHAPTER 3: RESEARCH METHODOLOGY 30
Hypotheses 30
Approach 30
Key variables and causal mechanisms 31
Case selection 32
Collection 35
Validity and Reliability 36
Limitations 36
Significance of Study 38
CHAPTER 4: FINDINGS 39
Introduction 39
Cost 40

Cooperation 48
Contestation 55
Challenges 59
Conclusion 69
Recommendations 71
REFERENCES 73
Appendix A - International Food Safety Complex (IFSC) 83
Appendix B - South Africa's Food Safety Regime 84

ACRONYMS

AGOA	African Growth and Opportunity Act
ANC	African National Congress
ANT	Actor Network Theory
AsgiSA	Accelerated and Shared Growth Initiative for South Africa
CDC	Centers for Disease Control and Prevention
Codex	Codex Alimentarius Commission
DAFF	Department of Agriculture, Forestry and Fisheries
DoH	Department of Health
DTI	Department of Trade and Industry
EFSA	European Food Safety Authority
EHPs	Environmental Health Practitioners
EU	European Union
FAO	Food and Agriculture Organization
FIFA	Fédération Internationale de Football Association
FMD	foot and mouth disease
FSDs	Food Supply and Distribution Systems
FSI	Food Safety Initiative
FTA	Free Trade Agreement
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
IFSC	International Food Safety Complex
ILSI	International Life Sciences Institute
IFSS	Integrated Food Security Strategy (for South Africa)
IPPC	Secretariat of the International Plant Protection Convention
MDGs	Millennium Development Goals
NCC	National Consumer Commission
OIE	World Organization for Animal Health

PPPs	Public-Private Partnerships
RASFF	Rapid Alert System for Food and Feed
RDP	Reconstruction and Development Programme
SABS	South African Bureau of Standards
SADC	Southern African Development Community
SAPA	South African Poultry Association
SANDF	South African National Defence Force
SPS Agreement	Agreement on the Application of Sanitary and Phytosanitary Measures
STDF	Standards in Trade Development Facility
TBT	Technical Barriers to Trade
TRAC	Trans African Concessions
WHO	World Health Organization
WTO	World Trade Organization
UDHR	Universal Declaration of Human Rights
UN	United Nations
UN-HABITAT	United Nations Human Settlements Programme
United States	The United States of America

CHAPTER 1: BACKGROUND

The Problem Statement

In South Africa, the regulatory framework for food safety is relatively underdeveloped. On paper, the government maintains a robust set of guidelines and regulations to ensure food safety. However, in practice, the government maintains little capacity in order to monitor and evaluate how food producers and providers adhere to the regulatory framework. In this vein, how does South Africa maintain its food safety regime and what role, if any, does the private sector play in terms of cooperating with the public sector concerning food safety?

Background

Over the past fifteen years, food security and food safety have become significant considerations for the growth of developed and developing economies. The United Nations (UN) Food and Agriculture Organization (FAO) has defined food security as a condition wherein: "…all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Household food security is the application of this concept to the family level, with individuals within these units as the focus of concern".[1] Food security and the right to food are also enshrined in the Universal Declaration of Human Rights (UDHR) of 1948.[2]

In South Africa, food security gained prominence after the country's democratic transition in 1994 and in 1996, the "right to access to sufficient food" was embedded in Sections 26 and 27 of the new Constitution."[3] The Constitution's stipulation is that all South Africa hold the right to

---

[1] Anderson, Molly D., and Anne C. Bellows. "Introduction to Symposium on Food Sovereignty: Expanding the Analysis and Application." *Agriculture and Human Values* 29, no. 2 (2012), p. 177.

[2] Du Toit, D.C. *Food Security*. Directorate Economic Services: Production Economics Unit. March 2011. http://www.nda.agric.za/docs/genreports/foodsecurity.pdf.

[3] Du Toit, D.C. *Food Security*. Directorate Economic Services: Production Economics Unit. March 2011. http://www.nda.agric.za/docs/genreports/foodsecurity.pdf.

sufficient food and water, which is directly right linked to social security. Based on this requirement, the Department of Agriculture, Forestry and Fisheries (DAFF) was given the mandate to ensure that the basic food needs of South Africans were met. The first example of a strategic framework to advance food security was outlined in the Reconstruction and Development Programme (RDP) that was pioneered by the new African National Congress (ANC)-led government. Aside from recognising food security as a fundamental human need, the RDP also identified poverty and food insecurity as legacies of the previous apartheid socio-economic and political order. Through years of refinement with the help of policy papers such as the 1995 Agriculture White Paper and the 1999 Agricultural Discussion Document, the RDP became the Integrated Rural Development Programme in 1999 and ultimately formed the basis of the food security policy of the new government of South Africa.[4] Food security continues to hold a place of prominence within South Africa. Despite wavering through the years, it returned to the government's list of priorities in line with the Millennium Development Goals (MDGs) that included halving the incidence of poverty by the year 2015.[5] This is not surprising considering that only half of South Africans were reported as having regular and reliable access to food. In 2013, only 45.6% of the population was considered "food secure", with a quarter of households experiencing hunger.[6]

Food safety, on the other hand, is a general term that refers to the different aspects of food handling, preparation, distribution and storage. As a result, there are chemical, microphysical and microbiological dimensions of food safety. The World Health Organization (WHO) describes food safety as "actions aimed at ensuring that all food is as safe as possible."[7] The globalisation

---

[4] Department of Agriculture. The Integrated Food Security Strategy for South Africa. Report. Pretoria, 2002.

[5] Du Toit, op. cit.

[6] "Food Security in SA Declining - Study." *News24*, August 6, 2013. Accessed February 8, 2016. http://www.news24.com/SouthAfrica/News/Food-security-in-SA-declining-study-20130806.

[7] "Food Safety and Zoonoses." World Health Organization. 2016. Accessed February 2, 2016. http://www.who.int/foodsafety/en/.

of production has given rise to the increased interest in the quality and safety of food.[8] This has been supplemented by the awareness of food safety risks in various countries particularly in Europe between the late 1990s and the early 2000s. In 2000, an outbreak of bovine spongiform encephalopathy, more commonly known as 'mad cow disease', occurred in France during which 100 cases were reported. The outbreak resulted in widespread panic across neighbouring European countries such as Italy, Greece and Spain. Contrary to the founding values of the European Union (EU), the outbreak resulted in trade bans amongst EU members. Most prominently, Italy implemented an outright ban on T-bones and other meat products produced in and exported by France. Poland also banned beef products from Spain and, despite its status as a non-EU member, Russia followed suit in this regard.[9] Due to the highly publicised food safety risks, middle-class consumers in developed markets became more sensitive to food safety. The New York Times reported that, during the mad cow disease outbreak, celebrity chefs had appeared on live television shows to offer their favourite vegetarian recipes[10]. The increased awareness of food safety risks drove consumers to be more discriminating about their commercial choices, thus creating a cultural shift. This phenomenon had a direct impact not only on the purchase choices of consumers but also contributed to the rapid shifts in demands that affected the reliability of the food supply chain.

In the context of Africa, the costs of food safety and the accompanying risks has been a major concern. The 1998 cholera outbreak costed Tanzania approximately US$ 36 million.[11] A subsequent outbreak of cholera that spread over 28 countries in 2004 led to 85 807 cases of which 2221 resulted in death.[12] During the same year, an outbreak of acute aflatoxicosis occurred

---

[8] Grunert, Klaus G. "Food Quality and Safety: Consumer Perception and Demand." *European Review of Agricultural Economics* 32, no. 3 (2005).

[9] Daley, Suzanne. "Mad Cow Disease Panicking Europe as Incidents Rise." The New York Times. December 1, 2000. Accessed February 2, 2016. http://www.nytimes.com/2000/12/01/world/mad-cow-disease-panicking-europe-as-incidents-rise.html.

[10] ibid.

[11] Mwikisa, FAO/WHO Regional Conference on Food Safety for Africa. Report. Rome: FAO, 2015.

[12] Mwikisa, C. N. FAO/WHO Regional Conference on Food Safety for Africa. Report. Rome: FAO, 2015.

in Kenya, where 317 cases and 125 deaths were reported.[13] The cost of replacing food amounted to 166 000 metric tons, enough to feed approximately 1.8 million people.[14] In Nigeria, foodstuffs contaminated by aflatoxins were worth approximately US$ 200 000, which, too, had to be destroyed.[15] Apart from the cost of destroying stock, consumers were often refunded when they return a potentially harmful food product during a recall, making the cost of food safety even higher, especially for the private sector.[16] Therefore, due to the massive financial implications, there became a need for food safety policies and actions that covered the entire food chain from production to consumption in order to mitigate the concerns of consumers and restore the safety of food in the long-term.[17]

Indeed, food safety and food security are strongly interlinked and cannot be delinked. This is based on the significant impact of food safety and security on the longevity, quality and productivity of human life. However, while food security has been accounted for in legislation and numerous international programs like the MDGs, it is also in the interest of developing governments to make food safety amongst its highest priorities in order to avoid the adverse economic, human development, and human safety implications of food safety risks. As stated by WHO, the key to sustaining life and promoting good health is access to sufficient amounts of safe and nutritious food. Thus, maintaining a high level of food safety is a giant step towards not only protecting public health and consumer interests but also to achieving sustainable development.

---

[13] FAO/WHO Regional Conference on Food Safety for Africa. Report. Rome: FAO, 2015.

[14] Mwikisa, op. cit.

[15] ibid.

[16] Department of Health. Policy Guidelines: National Food Safety Alerts and Recalls in South Africa. Report. 2004.

[17] "Food Safety." World Health Organization. Accessed July 06, 2015. http://www.who.int/topics/food_safety/en/.

The International Food Safety Complex

This research is significant due to its positioning and influence in terms of the global neoliberal regime. The increasing impact of globalisation means that the creation of policies and programmes to promote food safety have become necessary in the form of a targeted international food safety governance structure, which is what ultimately gave rise to the establishment of the International Food Safety Complex (IFSC).[18] The IFSC constitutes a multiplicity of institutions that serve specific roles in enhancing global food safety. These include the FAO and WHO, along with the World Animal Health Organization (OIE) and the Secretariat of the International Plant Protection Convention (IPPC)[19]. Through independent and joint action, these organisations tackle various aspects of food safety within the domain of the IFSC. For instance, the FAO's Food Safety Strategy is based on four elements that pertain to improving national systems of food control, global participation in standards-setting, the implementation of proper food safety management and the identification, communication and evaluation of emerging and recurring food safety risks. The OIE, which was established in 1924, tackles animal diseases at global level.

The World Trade Organization (WTO) is also a major actor within the IFSC and exerts its influence through the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) and the Agreement on Technical Barriers to Trade (TBTs). The SPS Agreement is an international treaty that came into force in 1995. It outlines a set of measures that governments must use in order to ensure the safety of the food that is consumed by humans and to prevent the spread of pests or diseases in plants or animals.[20] The measures enshrined in the

---

[18] Mukumba, Chenai, and David J. Hornsby. "The International Food Safety Complex in Southern Africa: Cooperation or Competition?" *South African Journal of International Affairs* 18, no. 2 (2011).

[19] Originally known as the *Office International des Epizooties*

[20] Prévost, Denise. "Private Sector Food-safety Standards and the SPS Agreement: Challenges and Possibilities." *SAYIL* 33 (2008).

SPS Agreement can explicitly or implicitly restrict trade.[21] The TBTs were designed by the WTO to "to ensure that technical regulations, standards, and conformity assessment procedures are non-discriminatory and do not create unnecessary obstacles to trade".[22] The Standards in Trade Development Facility (STDF) was established in 2001 through a joint communique by the heads of the FAO, WHO, OIE, WTO and the World Bank. The main objective of the STDF is to "jointly explore new technical and financial mechanisms for coordination and resource mobilisation to ensure the most effective use of technical and financial resources."[23] At the core of the IFSC is the Codex Alimentarius Commission, which was established by the FAO and WHO between 1961[24] and 1963.[25]

The standards established and enforced by the Codex, SPS Agreement, TBT Agreement and the STDF can simply be understood as 'norms'. Norms are "socially shared expectations, understandings, or standards of appropriate behaviour for actors with a given identity.[26] The norms that are referred to in this research are regulative as they define and constrain the behaviour of stakeholders with respect to food safety. The Codex is most relevant to this research, as it pertains strictly to the safety of food that is consumed by humans and forms the basis for national regulations. However, it must be noted that there are overlaps regarding food safety standards because plant health, animal health and consumer health are all intrinsically

---

[21] Jensen, Michael Friis. *Reviewing the SPS Agreement: A Developing Country Perspective*. The Royal Veterinary and Agricultural University. January 2002. Accessed August 15, 2016. http://curis.ku.dk/ws/files/135537901/1.pdf.pdf.

[22] "Technical Barriers to Trade." World Trade Organization. 2016. Accessed February 2, 2016. https://www.wto.org/english/tratop_e/tbt_e/tbt_e.htm.

[23] "History: Standards and Trade Development Facility." Standards and Trade Development Facility. 2016. Accessed February 2, 2016. http://www.standardsfacility.org/history.

[24] Trienekens, Jacques, and Peter Zuurbier. "Quality and Safety Standards in the Food Industry, Developments and Challenges." *International Journal of Production Economics* 113, no. 1 (2008): 107-22.

[25] Mukumba, Chenai, and David J. Hornsby. "The International Food Safety Complex in Southern Africa: Cooperation or Competition?" *South African Journal of International Affairs* 18, no. 2 (2011), p. 237

[26] Finnemore, Martha, and Kathryn Sikkink. "International Norm Dynamics and Political Change." *International Organization* 52, no. 4 (1998), p. 891.

linked. Appendix A provides an overview of the IFSC, including the main organisations and how they contribute to specific international frameworks with respect to food safety.

Rationale of the Study

The hypotheses of this research centre on the progress that has been made by business and government concerning food safety in South Africa between the years 2000 and 2015. It is important to note that the issue of food safety applies not only to South Africa, which is the primary focus of this research, but also to Africa in general. As noted at the FAO/WHO Regional Conference on Food Safety for Africa in 2005:

"In a region where food insecurity, political instability, communicable diseases, natural disasters and other major concerns dominate government agendas and the news media, the importance of food safety is often not well understood. However, food safety is of critical importance to Africa because of its aggravating impact over the above listed concerns."[27]

The influence of the IFSC on the food safety regime in South Africa is evident.[28] While the commitment and involvement of the state in standard-setting and compliance to food safety based on international standards has been a matter of extensive academic investigation, the interests of private sector in promoting food safety has not, despite the primary role that this sector plays within the food industry and in trade. This oversight is discussed at length in Chapter 2. I have a specific interest in economic development and the establishment of international regulations that encourage countries to enforce standards and policies relating in order to advance economic development. Particularly within developing countries, integrating the regulatory activities of government with the strategic behaviour of the private sector is

[27] FAO/WHO Regional Conference on Food Safety for Africa in Harare, Zimbabwe, 3-6 October 2005

[28] Mukumba, Chenai, and David J. Hornsby. "The International Food Safety Complex in Southern Africa: Cooperation or Competition?" *South African Journal of International Affairs* 18, no. 2 (2011).

crucial for economic stability and growth.[29] That said, the reality of many developing economies is that food safety regulation requires capital and technical expertise that are either limited or not readily available. In such circumstances, one of the options available to government is to place the responsibility for food safety in the hands of the private sector, which manufactures and sells foodstuffs to consumers.

Two central issues in this research illustrate the importance of food safety. The first issue is related to food production and distribution on the continent. Africa is one of the fastest growing markets in the world, with an estimated compound annual gross domestic product (GDP) growth rate of 5 percent between 2014 and 2025.[30] The regional agricultural sector employs 65 percent of the continent's labour force and accounts for 32 percent of its GDP.[31] In South Africa, "the agricultural sector employs around 5 percent of the total labour force and accounts for 7 percent of total exports".[32] Therefore, the agricultural food sector is a significant part of Africa's growing economy and contributes to its developmental prospects.

The relevance of Africa's growing agricultural food sector is particularly important due to its status as a developing region and because of the strategic importance of the efficient distribution of foodstuffs. According to the United Nations Human Settlements Programme (UN-HABITAT), 61.7 percent of the South African population currently lives in urban areas. Projections indicate that that this figure will rise to 66.6 percent by 2020, and then to 71 percent by 2030.[33] Due to rapid urbanisation and a growing middle class, this will result in spending being shifted from the

---

[29] Henson, Spencer, and Neal H. Hooker. "Private Sector Management of Food Safety: Public Regulation and the Role of Private Controls." *The International Food and Agribusiness Management Review* 4, no. 1 (2001).

[30] McKinsey and Co. The African Opportunity: Citibank Client's Meeting Discussion Document. Johannesburg: McKinsey and, 2014

[31] Kutha, Mirriam. "Why Low-Income Countries Should Care About Food Safety." Food Safety News. October 10, 2012. http://www.foodsafetynews.com/2012/10/should-low-income-countries-care-about-food-safety/#.VUsmJFvyC9Y.

[32] Bioenergy and Food Security Projects. *South Africa: BEFS Country Brief*. Report. Rome: FAO, 2013, p. 3.

[33] Bioenergy and Food Security Projects. *South Africa: BEFS Country Brief*. Report. Rome: FAO, 2013.

informal trading sector to formal shopping channels such as food retail chains. Nevertheless, food safety has largely been ignored as a policy area in Africa, which has resulted in the state of disorganisation of food systems within African countries.[34]

The second issue that illustrates the importance of food safety relates to the implications for international trade. According to WHO and the FAO, there are almost 2000 food safety-related deaths that occur in Africa every day.[35] In 2004, over 100 deaths occurred due to "acute mycotoxin intoxication".[36] Mycotoxin is a naturally-occurring toxin that is known to have impacted grain products in South Africa.[37] As a result of the 1994 GATT Agreement, the SPS Agreement does not only outline specific science-based guidelines regarding how the trade of agricultural products should be conducted.[38] Since the 1990s, African governments have pursued a neoliberal vision for development, placing emphasis on market-driven growth for the eradication of high levels of poverty and in improving sustainable development. South Africa's own reliance on market-driven policies, and its focus on global relations such as the BRICS (Brazil, Russia, India, China, South Africa) membership, demonstrates its commitment to trade and is directly linked to supporting the commonality and intensity of international food safety standards. The SPS Agreement directly impacts on a country's market access based on its adherence to food safety standards.[39] Furthermore, where trade disputes occur between countries, the Codex standards are used.[40]

---

[34] ibid.

[35] Blaine, Sue. "African Countries Told to Clean up Food Safety Standards." *Business Day Live*, September 12, 2013. http://www.bdlive.co.za/national/2013/09/12/african-countries-told-to-clean-up-food-safety-standards.

[36] FAO Regional Office for Africa. National Food Systems in Africa: A Situation Analysis. Report no. CAF/02. Accra: FAO, p. 1.

[37] ibid.

[38] Wilson, John S., and Tsunehiro Otsuki. "Food Safety and Trade: Winners and Losers in a Non-Harmonised World." *Journal of Economic Integration* 18, no. 2 (2003).

[39] Unnevehr, Laurian. "Food Safety Issues and Fresh Food Product Exports from LDCs." *Agricultural Economics* 23, no. 3 (2000).

[40] Trienekens, Jacques, and Peter Zuurbier. "Quality and Safety Standards in the Food Industry, Developments and Challenges." *International Journal of Production Economics* 113, no. 1 (2008).

Conceptual Framework

The purpose of this research report is to provide a framework for analysing food safety in South Africa - a dominant economy and tourist destination within sub-Saharan Africa - and assess to what extent both the public and the private sectors have been involved in the negotiation, advancement and implementation of food safety standards, both locally and internationally. To do this, I have adopted a conceptual framework based in Actor Network Theory.

The aim of a conceptual framework is to assist in guiding the research process and offering simplified versions of reality that explain through theory how the world operates within a particular domain.[41] Other scholars have argued that "theories should be understood as abstractions from a complex reality and that they attempt to provide generalisations about the phenomena under study".[42] Van Evera provided a slightly different rationalisation, simply stating that "theories are general statements that describe and explain the causes or effects of classes of phenomena".[43] Despite the varied understandings of theory, it is agreed that theory is an integral and defining part of research and it assists in answering the research question.

This research is framed within the concept of 'hybridity', a branch of the Actor Network Theory (ANT) that originated within the sociological study of science and technology.[44] The aim of ANT is to improve our understanding of the complexities of how technology and society function in relation to each other by adopting a refined socio-technical approach to society. Another aspect of ANT is that it considers different actors as part of a larger network, working towards a common purpose. ANT was devised as response to the development of institutions,

---

[41] Mearsheimer, J. J., and S. M. Walt. "Leaving Theory Behind: Why Simplistic Hypothesis Testing Is Bad for International Relations." *European Journal of International Relations* 19, no. 3 (2013).

[42] Dunne, Tim, Lene Hansen, and Colin Wight. "The End of International Relations Theory?" *European Journal of International Relations* 19, no. 3 (2013), 407.

[43] Van Evera, Stephen. Guide to Methods for Students of Political Science. Ithaca: Cornell University Press, 1997, p. 8.

[44] Law, John. "Notes on the Theory of the Actor-Network: Ordering, Strategy and Heterogeneity." *Systems Practice* 5 (1992).

organisations, states and nations and serves to account for the essence of the societies that they form, rather than examining the social interactions between them.[45] Thus, ANT involves the recreation of the framework of power networks, removing the element of 'human intention' and focusing instead on non-human actors and how they shape the power structures around them. Busch and Juska argued that ANT applies to the study of the political economy because it substitutes state-centrism with the "state-society complex".[46] Instead of approaching globalisation as the extension of networks - which is the standpoint of the study of the political economy - ANT aims to investigate how production, distribution and consumption networks are established and spread across localities, regions and nations, ultimately integrating new actors, products and technologies during the process.[47]

The relevance of ANT in this research is based on state-society complex that was developed in response to the rise of the International Food Safety Complex (IFSC), as mentioned above. An important consideration that must be made in terms of this research is that ANT has its origins in constructivism, which proposes that international systems are constituted by ideas. These ideas lead to practices and behaviour that can reproduce entire communities such as the South African food safety regime. The ideas that inform the practices and nature of the South African food safety regime are contained within documents such as the Codex, the SPS Agreement, the TBT Agreement and the STDF. The difference between critical and conventional constructivists lies mostly in their interpretation of identity.[48] While conventional constructivists aim to discover identities and investigate how these identities inform actions, critical constructivists focus more on how actors come to believe in identities and expose the "myths associated with identity formation".[49] The notion of identity is particularly important in systems such as the IFSC and

---

[45] Latour, Bruno. "On Actor-Network Theory: A Few Clarifications." *Soziale Welt* 47, no. 4 (1996): 369.

[46] Busch, Lawrence, and Arunas Juska. "Beyond Political Economy: Actor Networks and the Globalization of Agriculture." *Review of International Political Economy* 4, no. 4 (1997).

[47] ibid.

[48] Hopf, Ted. "The Promise of Constructivism in International Relations Theory." *International Security* 23, no. 1 (1998): p. 183.

[49] ibid., p. 184

South Africa's food safety regime because it can shape one actor's perception of other actors within the same system.[50]

South Africa's identity is shaped by its status as a developing country in the context of Africa and is tied to its goal of increased market access and sustainable economic development. Therefore, access to the IFSC is important, which is why the ideas (read: standards) created within the IFSC have been domesticated in South Africa's own regulatory framework. However, as a market-based economy, South Africa's interests in food safety are impacted not only by government but by business as well. In terms of food safety, it is no longer only the concern of the national government that food safety standards are enforced. The rise of the IFSC has made it necessary to look beyond the national government, and recognise other non-state actors that are stakeholders in the food business both domestically and internationally, who find themselves in co-constitutive relationships.[51] It is on this basis that I decided to frame my research within 'hybridity'.

Research Question

The question at hand relates to how private actors (food businesses) and public actors (the state) form partnerships in response to international norm dynamics. The strength of regulative norms is determined by two different factors: commonality and intensity.[52] Some norms can be deeply held by member-states whereas others may not, and this has an impact on the sense of obligation that the states have with respect to reproducing those norm within the domestic domain.[53] Therefore, how have PPPs made progress in terms of food safety in the context of South Africa between the years 2000 and 2015?

---

[50] ibid.

[51] Söderbaum, Fredrik. "Modes of Regional Governance in Africa: Neoliberalism, Sovereignty Boosting, and Shadow Networks." *Global Governance* 10, no. 4 (2004).

[52] Duffield, John. "What Are International Institutions?" *Int Studies Review International Studies Review* 9, no. 1 (2007).

[53] ibid.

Chapter Outline

This research report is set out in four different chapters. The first chapter introduces the research by presenting the research question, the background and scope. It is in this chapter that the research question is clearly defined, and the rationale and relevance of the study are discussed. This section is important because it provides a map of the research report and provides the reader with an understanding of the purpose and conceptual frame of the research.

The second chapter serves as the literature review and provides an analysis of existing literature pertaining to food safety. The chapter discusses seminal scholarly works that have focused on food safety as a public good that is crucial for trade and development outcomes. The variance in the literature in terms of context, perspective and research aims forms the state of knowledge regarding food safety in International Relations. This provides an opportunity to build on the state of knowledge through new research.

Chapter three delves into the research methodology, which includes the research approach and methods, the nature of which are informed by the research question and the expectations of the research outcomes. The research methodology also provides the conditions for the validity and the reliability of this research and also lays out any limitations of the research process.

The fourth Chapter is also the final section of this research report and presents the findings of the research. This analysis is supported by an appropriate conceptual framework – hybridity - which is located within Actor Network Theory. Specifically, this chapter will provides evidence of how government and business have collaborated in order to advance food safety within the context of South Africa. This chapter also provides recommendations based on the research conclusions. These recommendations provide a framework of possible actions that the public and private sector should take in order to strengthen and sustain South Africa's food safety regime in the long-term.

CHAPTER 2: LITERATURE REVIEW

The goal of this literature review is to capture the current state of knowledge associated with the dependent variable - food safety standards - within this research.[54] The various scholarly articles regarding food safety standards are explored. Two types of literature informed the development of the hypotheses: food safety as a public good and food safety in the context of South Africa.

This literature review will analyse the work of Reardon, Codron and Harris, Unnevehr, Ollinger and Moore, Medeiros, Van Holy and Makhoane, Antle and Van Der Merwe, amongst other scholars. All of the academic articles focus on the concept of food safety and the impact thereof in different contexts. The scholars have provided varied perspectives on these issues and how food safety relates to trade, health and development within economies. Thus, the purpose of this literature review is to identify key debates amongst scholars and understand in what way they have contributed to the way that we think about food safety. This literature review will also point out the shortcomings of the scholars' approaches and ultimately provide a better understanding of this significant debate within the study of the international political economy.

Food safety as a 'public good' literature

It is well-established fact that the liberalisation of international agricultural trade towards the late 1980s and early 1990s led to an increased consumer base that demanded better product quality and safety. Reardon et al. addressed the notion of agricultural food grades and standards, and the global changes that ensued as a result of that. 'Grades and standards' are based on the fulfilment of criteria that include quality (e.g., appearance, cleanliness, taste), safety (e.g., pesticide or artificial hormone residue, microbial presence), authenticity (guarantee of geographical origin or use of a traditional process) and the integrity of the production process.[55]

---

[54] Roselle, Laura, and Sharon L. Spray. "The Research and Writing Process." In *Research and Writing in International Relations*. New York: Longman, 2011.

[55] Reardon, T., J. Codron, and L. Harris. "Global Change in Agrifood Grades and Standards: Agribusiness Strategic Responses in Developing Countries." *The International Food and Agribusiness Management Review* 2, no. 3-4 (1999).

In this way, Reardon et al. provided a checklist that stakeholders in food safety can use, which also forms the basis of food safety standards. The focus on agricultural grades and standards relates to the general understanding that food safety contributes to higher trade output. A key observation by Reardon et al. is that grades and standards have evolved from a tool that was used to reduce transactions costs into a "strategic instrument of competition".[56] This has had a trickle-down effect on multinationals and local businesses who have opted to lobby their governments to domesticate these grades and standards in order to expand trade access.[57]

Another scholar who explored the causal relationship between food safety and trade is Laurian Unnevehr, one of the world's premier experts on food safety, policy and international trade. Unnevehr's standpoint is that food safety is paramount for development, particularly for less-developed countries that rely on fresh food exports. Fresh food products include fresh meat, seafood, vegetables and fruit, and these products usually face lower trade barriers and "high income elasticity of demand".[58] This means that when such foods are unsafe and are deemed to pose a safety risk they could be met with trade barriers, which further hampers trade prospects. Therefore, the central issue in Unnevehr's research is that food safety standards sometimes pose a threat to the economic growth of developing countries in the long-term.

In another paper by Unnevehr, which was co-written with Haddad and Delgado[59], food safety is described as a 'public good'. This implies that food safety has important policy implications that governments of developing countries should take seriously based on the impact thereof on overall health. Unnevehr et al.'s view is rests on the argument that food safety is playing an

---

[56] Reardon, T., J. Codron, and L. Harris. "Global Change in Agrifood Grades and Standards: Agribusiness Strategic Responses in Developing Countries." *The International Food and Agribusiness Management Review* 2, no. 3-4 (1999), p. 421.

[57] ibid.

[58] Unnevehr, Laurian J. "Food Safety Issues and Fresh Food Product Exports from LDCs." *Agricultural Economics* 23, no. 3 (2010), p. 232.

[59] Unnevehr, Laurian, Lawrence Haddad, and Christopher Delgado. *Food Safety in Food Security and Food Trade: Food Safety Policy Issues for Developing Countries*. Report. 7th ed. Vol. 10. Washington DC: International Food Policy Research Institute, 2003.

increasingly important role in determining whether countries are given access to exporting markets. This is also affected by "public sector interventions in terms of the benefits gained and costs incurred".[60] Unnevehr et al. make it clear that food safety is a governance issue and should be analysed according to the framework.

The benefits of food safety standards that Unnevehr et al. list demonstrates that their approach is based on socio-economic factors. These benefits include enhanced consumer wellbeing, increased life expectancy, greater productivity, and reduced healthcare costs as food-borne illnesses decrease. Unnevehr et al. also state that these benefits must be juxtaposed with the cost of actions and investments made by the public sector. These public actions or investments include policymaking, capacity-building, the provision of information, direct public efforts and investment in infrastructure and research.[61]

What is missing from Unnevehr et al.'s analysis is the further insight into the significance of these private actions and investments. The matter of capital investments is especially important because of an economic model called the 'cost-benefit analysis', which is discussed in Antle's article. Antle assessed the costs and benefits of food safety regulation and highlighted how consumer concerns have shifted the focus from the availability of food to the quality of food that is already available.[62]Antle stated that the role of governments has changed the way that food production is viewed in terms of the effectiveness, efficiency and transparency of regulations; all of which have an impact on the competitiveness of food economies.

A shortcoming of Antle's research - along with that of Unnevehr et al. and Reardon et al. - is that it is conducted from a Western conceptual perspective. This limits our ability to contextualise and draw conclusions on the importance of food safety and appropriate policy responses within

---

[60] Unnevehr, Laurian, Lawrence Haddad, and Christopher Delgado. *Food Safety in Food Security and Food Trade: Food Safety Policy Issues for Developing Countries*. Report. 7th ed. Vol. 10. Washington DC: International Food Policy Research Institute, 2003, p. 1.

[61] ibid.

[62] Antle, John M. "Benefits and Costs of Food Safety Regulation." *Food Policy* 24, no. 6 (1999).

the context of the developing world, including southern Africa. Thus, their analyses cannot be extrapolated due to structural, economic and historical differences. This limitation was also highlighted in Unnevehr's article where she stated that the food safety standards that are set by developed countries may be informed by sanitation and manufacturing practices that are otherwise absent in lesser-developed countries. This expectation demands additional political and capital investments that some developing countries can ill-afford. However, the analyses by Antle, Unnevehr et al. and Reardon et al. are not unhelpful. According to Antle, the primary benefit of food safety is a reduction in the risk of morbidity and of mortality rates. In the context of southern Africa, morbidity and mortality rates are a primary concern for governments particularly because of environmental factors such as water-borne diseases, food-borne illnesses and chemical poisoning.[63] Antle's article revealed the importance of providing a more thorough analysis of other prominent stakeholders in food safety like the private sector, specifically in the context of southern Africa. Antle's work is supplemented by that of Ollinger and Moore who argued that private actions, which are driven by market forces, have led to an overall decrease in the level of pathogens found in foodstuffs.[64]

What emerged from my analysis of existing literature is that it also focused on the consumer's role, which can be enhanced through food safety education, and how food safety is not only in the interest of the consumer, but that it is also a responsibility that is shared by business and government.[65] Unlike the other scholarly articles that provide a high-level view of food safety, Medeiros, Hillers, Kendall and Mason's article focused on the level of the consumer. They suggested that adequate cooking and personal hygiene, amongst other preventive measures, are important in combating food safety risks. This perspective proved to be valuable as it served to remind the reader that food safety is not restricted to the production, storage and distribution

---

[63] Wright, Caradee, and Linda Godfrey. The Impact of an Unhealthy Environment on Human Health in South Africa. CSIR - Natural Resources and the Environment. June 2010.

[64] Ollinger, Michael, and Danna L. Moore. "The Economic Forces Driving Food Safety Quality in Meat and Poultry." *Review of Agricultural Economics* 30, no. 2 (2008), p. 289-310.

[65] Medeiros, Lydia C., Virginia N. Hillers, Patricia A. Kendall, and April Mason. "Food Safety Education: What Should We Be Teaching To Consumers?" *Journal of Nutrition Education* 33, no. 2 (2001).

stages, over which government and business have a great deal of purview. Rather, food safety risks can also emerge within the home.

The position taken by Medeiros et al. is that by changing consumer behaviour - for example: ensuring that food is kept at safe temperatures and avoiding food sources that are unsafe - millions of cases of food safety risks can be mitigated. It is important to note that this article by Medeiros et al. was located within the context of the United States of America, one of the most developed countries in the world.[66] Therefore, suggestions such as 'avoid foods from unsafe sources' and 'avoid cross-contamination' come off as far too simplistic, especially when viewed from developing regions like Africa where, in the most rural of communities, poverty and malnourishment are more urgent priorities.[67]

What applies to the African context is the understanding that food safety risks pose productivity losses and high medical costs. Medeiros et al. provided a clearer understanding of the costs of each food safety risk case, considering that different pathogens cause varying levels of illness. Salmonella, for instance, was estimated to cost $US 900 per case, while E coli and botulism cost approximately US$ 3000 and US$ 18 000 per case, respectively. Again, however, the medical and pharmaceuticals industries of the United States cannot be easily compared with that of developing nations in southern Africa, for which infrastructural, human and financial resources are a perpetual challenge.

Food safety in South Africa literature

Van Holy and Makhoane provided the most specific research into food safety standards in South Africa. Their research analysed the microbiological quality of street-vended food in South

---

[66] Medeiros, Lydia C., Virginia N. Hillers, Patricia A. Kendall, and April Mason. "Food Safety Education: What Should We Be Teaching To Consumers?" *Journal of Nutrition Education* 33, no. 2 (2001).

[67] ibid.

Africa, which constitutes the informal food trading industry.[68] The interest in the viability of street-vended foods relates to the sheer size of the informal food market in developing countries like South Africa. Furthermore, the sanitary conditions of the foodstuffs and microbiological safety within the industry at large have become an increasing source of investigation.[69] The rise of urbanisation has contributed to a cultural shift away from foods prepared in home towards "ready-to-eat" foods[70] such as maize porridge, otherwise known as pap, meat stews, gravy and salads. Therefore, there is the recognition that, in the interest of achieving sustainable food safety, this lower-income sector should be regulated as well. In South Africa, street vendors generally "sell food to a specific economic class of workers at reasonable prices."[71] According to Van Holy and Makhoane, the food that was produced and sold on the street was found to be "relatively safe despite the unfavourable conditions in which the vendors operated". Furthermore:

"*South Africa's experiences also proved that success in this regard can only be ensured where food control authorities, street food vendors and all other stakeholders, including academic structures, collaborate to improve the sector, with all stakeholders having a clear understanding of their roles and responsibilities."*[72]

Through the observation about cooperation between stakeholders, Van Holy and Makhoane highlighted an angle that became important to explore about food safety in South Africa. Although their research focused specifically on street-vended foods, it provided the foundation for a unique view into multistakeholderism in terms of food safety within South Africa's food safety regime.

---

[68] Van Holy, A., and F. M. Makhoane. "Improving Street Food Vending in South Africa: Achievements and Lessons Learned." *International Journal of Food Microbiology* 111, no. 2 (2006).

[69] Proceedings of FAO/WHO Regional Conference on Food Safety for Africa, Zimbabwe, Harare.

[70] Mwikisa, FAO/WHO Regional Conference on Food Safety for Africa. Report. Rome: FAO, 2015.

[71] Maravanyika, Babington, "Street vendors meet city's health, safety standards". The Independent on Saturday. News. 3 May 2008, p. 5.

[72] Van Holy, A., and F. M. Makhoane, op. cit., p. 92.

South African scholar Charl van der Merwe also discussed the nature of multistakeholderism with a particular focus on urban food supply.[73] He stated that food is distributed to any urban or metropolitan area through various food supply and distribution systems (FSDSs). FSDSs are complex systems whereby a range of activities such as production, handling, storage, transport, processing, packaging and retailing are centralised in order to help cities meet their food needs. Van der Merwe pointed out that these specific activities are carried out by different actors within the food supply chain, referring specifically to the crucial role that government plays in fixing food systems that are already failing. While national FSDSs are beyond the scope of my research, Van Der Merwe's article and the study by Van Holy and Makhoane provided the foundation for a deeper exploration of specific ways in which business and governments have contributed to food safety in South Africa.

This literature review has provided a clear understanding of the debate about food safety standards, and how various scholars have grappled with the purpose and relevance of food safety, across distinct countries, and at different points in time. It is also clear that the research focus by the various authors dictated how their research was carried out. The knowledge gap however, has generated from a lack of literature that focuses on food safety in terms of capital investment, trade and development in the southern African context.

Where the literature has focused specifically on South Africa, as Van Holy and Makhoane and Van Der Merwe illustrated, the emphasis has been on either on the actions of the government or on business. I did not find any analysis of food safety in South Africa that dealt with the private and the public sectors, specifically with through the lens of multistakeholderism. Since the notion of cooperation and norms is such a major part of the study of international relations, I recognised this knowledge gap as an opportunity to contribute to the debate about food safety standards by looking at PPPs in South Africa. This perspective is actually supported by scholars such as Unnevehr and its premised on the same foundational arguments. However, it is the

---

[73] Van Der Merwe, Charl. *Challenges to Urban Food Supply in South Africa*. Issue brief no. No. 55. Africa Institute of South Africa, 2011.

inclusion of the concept of PPPs and the contextualisation specifically to South Africa in the issue of food safety that makes my research unique and relevant.

CHAPTER 3: RESEARCH METHODOLOGY

Hypotheses

Based on the literature review, there are two hypotheses that are tested in this research.

H1: Public-private partnerships have been developed in South Africa, which focus on advancing food safety standards that are based on international norms.

H2: Business and government have contributed through PPPs towards strengthening food safety in South Africa between years 2000 and 2015.

As is clear from the hypotheses, the independent variable in this research relates to public-private partnerships (PPPs) while the dependent variable refers to food safety standards.

Approach

Through the literature review, it was established that previous work has investigated the casual relationship between international food safety standards and the negative impact on the economies of developing countries in southern Africa. Therefore, it is not the goal of the research to establish whether a causal relationship exists. Alternatively, the literature review and conceptual framework establish a need for further research into the causal mechanism between PPPs and the implementation of international food safety standards domestically.

Causal mechanisms are primarily the domain of interpretivist researchers. While causal relationships address the systematic conjunction of two factors, causal mechanisms can be further deconstructed into smaller causal relationships.[74] Studying the causal mechanism of PPPs and food safety is most appropriate because this research also allows for the analysis of different

[74] Lin, Ann Chih. "Bridging Positivist and Interpretivist Approaches to Qualitative Methods." *Policy Studies Journal* 26, no. 1 (1998).

types of causal relationships between PPPs and food safety in South Africa. As is discussed in the Chapter relating to 'Findings', these relationships relate to cost, contestation, cooperation and challenges. What is most important is that this research seeks to understand 'how' government and businesses have been involved in establishing and implementing food safety standards in South Africa. The research does not look at why food safety standards have been domesticated; a premise of that the research and the basis of the hypotheses. The research also does not investigate what food safety standards are. There is plenty of research that has covered that. The interpretivist nature of the research question requires a qualitative research approach in order to gain an in-depth understanding of the actions by business and government. Qualitative research is particularly helpful in exploring and understanding a wide range of social and public policy issues rather than isolated events.[75]

Key variables and causal mechanisms

As mentioned, this research aims to explain the causal mechanism between PPPs and food safety in the context of South Africa. Variables are generally known as concepts that can have different values.[76] The dependent variable in this research is *public-private partnerships (PPPs)* while the independent variable refers to *food safety standards* in South Africa. There are other key variables that are discussed in this research that have a direct impact in the testing of the hypotheses. The variables that relate to PPPs are cost and contestation, while cooperation and challenges relates to the food safety standards specific to South Africa's history and context and reflect causal relationships.

[75] Ritchie, Jane, and Liz Spencer. "Qualitative Data Analysis for Applied Policy Research." In *Analyzing Qualitative Data*, by A. Bryman and RG Burgess, 173-97. London: Routledge, 2002.

[76] Van Evera, Stephen. Guide to Methods for Students of Political Science. Ithaca: Cornell University Press, 1997.

It is important to define the variables of this research, so that a common understanding regarding the aspects of the research can be established before the analysis can be carried out.[77]

Due to the importance of distinguishing these variables, the findings are presented in a way that focuses on each of the four casual relationships so that the hypotheses can be tested fully. 'Cost' is understood as any financial or capacity-driven investment made by the public or private sector in a way that advances food safety. 'Contestation' refers to verbal or official communication or actions by stakeholders within South Africa's food safety regime that reflects dissonance relating to a food safety issue. 'Cooperation' is the term that will be used to describe ways in which the government and business have been aligned through their messaging or have collaborated outright in addressing particular food safety issues. Finally, the term 'challenges' reflects on the state of food safety in the country, and refers to ongoing problems that stakeholders face in advancing food safety, which often have structural origins.

Another key variable that contributes to this research is the influence of the IFSC. However, due to limited time and space, dealing with this example of international norm dynamics goes beyond the scope of the research. Therefore, while the influence of the IFSC is measurable through South Africa's involvement in governing institutions such as the Codex Alimentarius, the SPS Agreement, the TBT Agreement and the STDF, it is briefly acknowledged and not fully explored in this research.

Case selection

Case studies provide investigations of multiple sources of data for both qualitative purposes.[78] The value of case studies is based on the fact that they allow us to focus on "a single individual,

---

[77] Roselle, Laura, and Sharon L. Spray. "Choosing Cases for Research." In *Research and Writing in International Relations*. New York: Longman, 2011.

[78] Sadovnik, Alan. "Qualitative Research and Public Policy." In *Handbook of Public Policy Analysis: Theory, Politics, and Methods*, by Frank Fischer, Gerald Miller, and Mara S. Sidney. New York: CRC Press, 2008.

group, community, event, policy area or institution".[79] In this research, the policy area is food safety and the case study is South Africa. This research was designed in order to assess whether the independent variable would lead to similar outcomes if the research was replicated by another scholar.[80] By exploring this holistic single case study in detail, this research method provides an essential view into the research question[81]. Case study research is particularly effective as it is located within the constructivist paradigm where pluralism rather than relativism provides a better understanding of phenomena.[82] Therefore, this also allows us to more accurately assess the applicability of the conceptual framework of hybridity.[83]

The method of case selection in this research was based on several aspects that are neither arbitrary nor subjective.[84] Currently some of the largest countries in Africa are characterised by emerging formal food retail sectors. In Ghana, spending in the formal food retail sector is 20 percent, in Nigeria it is 26 percent, in Senegal it is 36 percent, in Kenya it is 49 percent and in Angola it is 51 percent. The next highest level is that of South Africa which shoots up to 81 percent,[85] making it the only country on the continent with a formal retail sector that more closely resembles that of developed nations.

---

[79] Burnham, P., K. Lutz, Z. Layton-Henry, and W. Grant. "Research Design and the Research Process." In *Research Methods in Politics*. New York: Palgrave Macmillan, 2008.

[80] Roselle, op. cit.

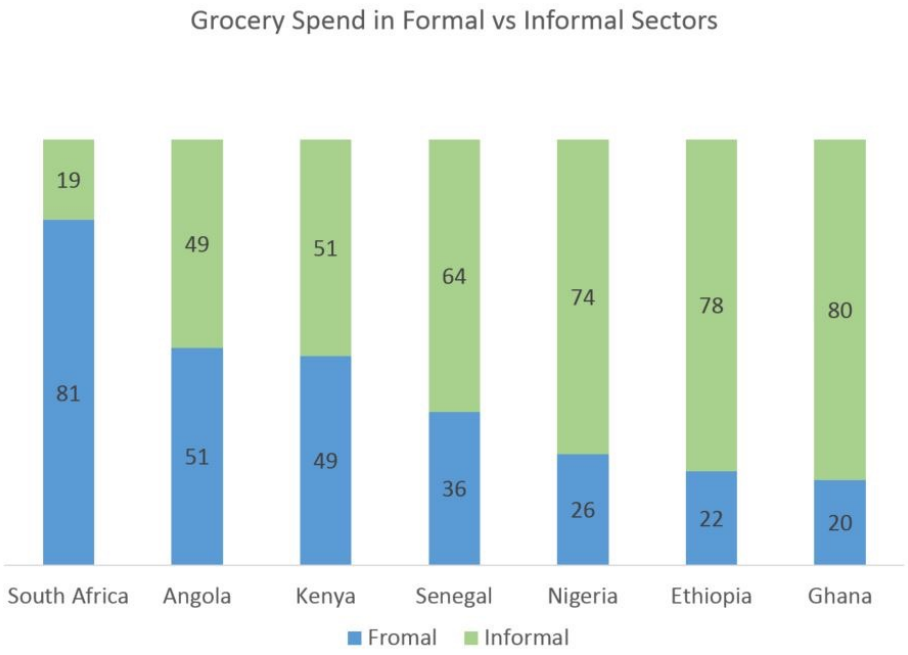
[81] Baxter, Pamela, and Susan Jack. "Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers." *The Qualitative Report* 13, no. 4 (December 4, 2008).

[82] Baxter, Pamela, and Susan Jack. "Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers." *The Qualitative Report* 13, no. 4 (December 4, 2008).

[83] Van Evera, Stephen. Guide to Methods for Students of Political Science. Ithaca: Cornell University Press, 1997

[84] Roselle and Spray, op cit.

[85] McKinsey and Co. The African Opportunity: Citibank Client's Meeting Discussion Document. Johannesburg: McKinsey and Co., 2014.



South Africa is Africa's second largest economy with a GDP of $US 370.3 billion, after it was surpassed by Nigeria in 2013, which has a GDP of $US 509.9 billion [86] This makes South Africa an interesting case study purely from a geo-strategic perspective. Considering the options of Nigeria and South Africa, I determined that because of my familiarity with South Africa's history and context, I could provide a more informed analysis of that case study. I also decided to focus on South Africa because of its significant reliance on the agricultural sector, which has a direct correlation to food safety. Sugar cane is the main crop produced by South Africa in terms of volume, and that is followed by maize and wheat. Maize and oranges are the country's main export crops based on value. Between 1999 and 2009, maize production increased by 52 percent and wheat production by 13 percent, while sugar cane production decreased only by 3 percent.[87]

South Africa is also home to numerous food retail chains, also locally known as supermarkets, such as Shoprite, Spar, Pick 'n Pay and Woolworths Food that are looking to capitalise on expansionist trends within the region and have published aggressive growth strategies for the rest

[86] "Nigeria Becomes Africa's Biggest Economy - BBC News." BBC News. April 6, 2014. http://www.bbc.com/news/business-26913497

[87] Bioenergy and Food Security Projects. *South Africa: BEFS Country Brief*. Report. Rome: FAO, 2013.

of southern Africa. The South African economy is therefore evolving as a result of globalisation and is becoming increasingly consumer-driven. Considerably, the expansion of the food industry in the country and throughout the rest of the region is primarily dependent on the interest of and investments by the private sector. The rise of food retails chains in the last two decades is also attributable to urbanisation and a growing middle-class.[88] While chains like Shoprite and Pick 'n Pay have been actively expanding to rural areas, they have also been dominating dynamic segments of the retail sector in urban areas.

An indirect impact of the rise of food retail chains is that they are generally perceived to be more demanding about standards of food quality and safety, and are perceived to have higher standards.[89] However, no evidence has been provided of this thus far. Therefore, it is important to look at the role of the private sector in the food safety regime, particularly within the context that is undergoing economic breakthroughs that also relate directly to consumer spending and the quality of human life.

Collection

The data relevant to this research relate to policy and policy actions. This is based on the fact that the adoption of food safety standards is a matter of public concern. Policy analysis is a strong qualitative research method, as it relies on collection of data based on observation, conversations or even document analysis.[90] The data were collected through a review of previous research, legislation, news articles and conference and meeting reports. An advantage in the data collection process was that, in South Africa, legislation is made publicly available on platforms such as Sabinet, which includes all updated and consolidated South African principal Acts, rules and

---

[88] Weatherspoon, Dave D., and Thomas Reardon. "The Rise of Supermarkets in Africa: Implications for Agrifood Systems and the Rural Poor." *Development Policy Review* 21, no. 3 (2003).

[89] ibid.

[90] Yanow, D. "Qualitative-Interpretive Methods in Policy Research." In *Handbook of Public Policy Analysis: Theory, Politics, and Methods*, by Frank Fischer, Gerald Miller, and Mara S. Sidney. New York: CRC Press, 2006.

regulations from 1910 to date. This made cross-referencing the rules and regulations relating to the quality and safety of food possible, as the data were available and accessible via internet search. The interpretivist nature of the research also allowed for policy analysis because the data were mostly word-based rather than number-based, and led to the collection of rich and descriptive information about events, statements and analysis about PPPs and food safety.

Validity and Reliability

The validity of this research was based on descriptive data and the use of multiple data sources that have been mentioned above.[91] Above all, it was also important for me as the researcher to acknowledge potential bias as a South African, which may have impacted the case selection based on convenience and access and the analysis of the findings. Nevertheless, the data collection and analysis processes were carried out in an objective manner, without preconceived conclusions regarding the data beyond the hypotheses stated above.

On the other hand, reliability refers to the consistency or stability of a measure.[92] This means that the research findings of the study must be replicable by another researcher, using the same research methodology outlined above, in order to yield the same results. I have attempted to do this by keeping the research question and following methodology simple and logical, driven by the theoretical framework, rather than my own opinions. Furthermore, I supplied the key variables of this research and their meanings earlier in this research report so that the measurements thereof remain consistent throughout the data collection and analysis stages.

Limitations

It is also important to consider the limitations of this research, particularly in terms of the methodology and the results, which may be a result of influencers that I, as the researcher, cannot

[91] Kelliher, Felicity. "Interpretivism and the Pursuit of Research Legitimisation: An Integrated Approach to Single Case Design." *Electronic Journal of Business Research Methods* 3, no. 2 (2005).

[92] ibid.

control. These influencers relate to the case study, the analysis and other factors such as time constraints. A potential limitation of this research in terms of the case studies would have been 'selection bias', which is particularly problematic within case study research, due to the selection of cases that represented a "truncated sample along the dependent variable of the relevant population of cases".[93] To avoid this, one case study was selected, which was explained earlier in this research report.

Another limitation of this case study is that the causal effects in the case of South Africa may not necessarily reflect the same result for all African, let alone southern African, countries. The political and economic landscapes of southern African countries are diverse, despite their similar historical conditions. The vast data that are often collected within case study research cannot "be used to generalise about the population as a whole as the case study is unique and not a representative sample".[94] This is an acceptable truth since southern African countries are not entirely homogenous to begin with. While South Africa, along with Botswana and Zimbabwe, have a history of British imperialism, other southern African countries were colonised by Portugal (Angola and Mozambique), Belgium (DRC), the Netherlands and Germany (Namibia). Therefore, while "most SADC countries have emerged relatively recently from colonial domination, white-minority rule or postcolonial war, and many are still riddled with internal political conflict and weak polities."[95] This means that although the generalisability of research is often the main goal, the results of the data may not necessarily allow for that. Nevertheless, this research serves to encourage a new conversation that centres on PPPs and hybridity within the food safety regime, and this can be built upon in future research.

---

[93] George, Alexander L., and Andrew Bennett. "Case Studies and Theory Development." In *Case Studies and Theory Development in the Social Sciences*, 3-36. Cambridge: MIT Press, 2004, p. 23.

[94] Burnham, P., K. Lutz, Z. Layton-Henry, and W. Grant. "Research Design and the Research Process." In *Research Methods in Politics*. New York: Palgrave Macmillan, 2008, p. 64.

[95] Hammerstad, Anne. "Domestic Threats, Regional Solutions? The Challenge of Security Integration in Southern Africa." *Review of International Studies Rev. Int. Stud.* 31, no. 01 (2005), p. 70.

Significance of Study

The research helps to explore a critical question about the role of the private sector and its efforts in collaborating with government in terms of food safety standards within the country, and in terms of highlighting its commitment to norms developed within the IFSC. South Africa has been a member of the Codex Alimentarius Commission since 1994 and is directly involved in other international institutions through its designated legislative bodies.[96] Hence, this research goes beyond acknowledging that a relationship between the IFSC and states exists. Instead, it tries to bridge a gap of understanding in the influence of private non-state actors in the process. As stated by Lin, it is important for the interpretivist researcher to realise that all policies require the support and cooperation of stakeholders in order for successful implementation to ensue.[97] Therefore, it is the behaviour of the actors that form PPPs and represent South Africa's joint interests that is under scrutiny.

Food safety is an important factor for developing countries that rely on human capital to support their agricultural sectors and trade in their economic development. This research intends to assist policymakers and the private sector assess their own efforts in improving food safety measures. This research may also assist local food businesses in South Africa and civil society gain knowledge about the state of the local food safety regime and how business is represented. Finally, this research allows for a thorough analysis of the concept of hybridity in terms of PPPS in the realm of food safety governance. In this way, hybridity, which is an emerging conceptual lens in the study of the political economy, can contributes to improving our understanding of emerging issues within governance. This insight can have an impact on the overall practice of food safety not only for the country but also for South Africa's trading partners within southern Africa and beyond.

---

[96] "List of Codex Members." Codex Alimentarius. February 1, 2016. Accessed February 12, 2016. http://www.fao.org/fao-who-codexalimentarius/members-observers/members/en/.

[97] Lin, Ann Chih. "Bridging Positivist and Interpretivist Approaches to Qualitative Methods." *Policy Studies Journal* 26, no. 1 (1998).

CHAPTER 4: FINDINGS

Introduction

The data presented and analysed in this chapter are presented in terms of cost, cooperation, contestation and challenges. Each of these sections integrates the concept of hybridity, which supports the idea of a 'third sector'. The third sector is characterised by cooperatives or heterogenous arrangements that combine elements of public and private governance.[98] There are four types of 'third sector' organisations: a) formal/informal, b) non-profit/profit, c) public/ private and d) individual. These findings are most applicable to the public/private type of organisations, which are essentially partnerships that represent the interests of their members. This is achieved through activities such lobbying and establishing rules and codes. A key example of this is the FAO/WHO Regional Conference on Food Safety for Africa that was held in Zimbabwe in 2005. During this conference, government and private industry stakeholders focused on the theme 'Practical Actions to Promote Food Safety'. It was also at this conference where the importance of government and private industry involvement in taking responsibility for improving food safety was a major discussion point.[99] The main outcome of the conference was a nine-point five year strategic plan for food safety for adoption by the FAO and WHO along with the African Union.

These nine-point plan encouraged African governements and businesses to focus on:

- Food safety policies and programmes
- Legislative and institutional aspects
- Standards and regulations

---

[98] Brandsen, Taco, Wim Van De Donk, and Kim Putters. "Griffins or Chameleons? Hybridity as a Permanent and Inevitable Characteristic of the Third Sector." *International Journal of Public Administration* 28, no. 9-10 (2005).

[99] Ayensu, Edward S. "Keynote Address." Address, FAO/WHO Regional Conference on Food Safety for Africa, Zimbabwe, Harare, January 2, 2016.

- Food inspection programmes and techniques
- Food analysis and food safety testing laboratories
- Monitoring food-borne diseases and the safety of foods on the market
- Participation in Codex
- Communication and stakeholder involvement (including industry officials and consumers)
- National, regional and international cooperation

In South Africa, the food safety regime is comprised of the public sector and the private sector, which are governed by a legal framework of laws and regulations relating specifically to the quality and safety of food. Appendix B provides an overview of the South African food safety regime. Comparably, South Africa has the highest number of laws and regulations relating to food safety governance amongst all southern African countries and is followed by Kenya, Tanzania and Mozambique.[100] These laws and regulations are enforced by the different institutions that include the government, privately-owned business and organisations that act in the interest of these businesses. The latter refers to organisations such as the South African Bureau of Standards (SABS), the South African Poultry Association (SAPA) and the Citrus Growers' Association, which will be mentioned in the discussion of findings. In terms of local actors within the public sector, South Africa has dedicated specific government departments that play a role in food safety governance. For instance, the DoH also serves as the country's National Codex Contact Point and the DAFF serves as the National SPS Enquiry Point. The DTI is also the National Regulator for Compulsory Specifications.

Cost

South Africa has had more experience with public-private partnerships than any other country in southern Africa since its transition to democracy in 1994.[101] A prominent example involves the

---

[100] "Basic Food Laws and Enabling Regulations and the Ministries, Departments and Agencies Involved." 58-69. Proceedings of FAO/WHO Regional Conference on Food Safety for Africa, Zimbabwe, Harare.

[101] Farlam, Peter. "Assessing Public–Private Partnerships in Africa." The South African Institute of International Affairs: Nepad Policy Focus Series, February 2005. Accessed January 2, 2016.

construction of the Maputo Corridor on the N4 national road between the mining town of Witbank in South Africa and the capital city of Maputo in Mozambique. Due to the fact that, on one hand, the Mozambican government did not have the capital to construct and maintain its section of the national road and, on the other hand, the South African government had an accrued deficit of approximately R37 billion, the solution was to involve the privately-owned Trans African Concessions (TRAC). This allowed the two governments a 30-year concession, while TRAC bore the financial costs of constructing and maintaining the N4 infrastructure during that period. The construction of the N4 was the quintessential public-private partnership, involving a range of construction companies such as Stocks and Stocks, Bouygues, and Basil Read who also sponsored R331 million worth of equity in the project.[102] This indicates that where capital is available, public-private partnerships can be successful.

In terms of food safety, South Africa has grappled with the nature of the involvement of stakeholders in what can often be long and drawn-out Codex processes. At the FAO/WHO Regional Conference on Food Safety for Africa in October 2005 in Harare, Zimbabwe, several South African delegates were represented from the South African Bureau of Standards (SABS), International Life Sciences Institute (ILSI) South Africa, Nampak Research and Development, Coca Cola South Africa, Food Regulatory Advisor, Nestlé South Africa, government ministries and academia.[103] However, what tends to happen is that different representatives of stakeholders are introduced to the process, which ultimately results in more time and money being spent 'playing catchup'. Despite that this issue cannot always be avoided, South Africa has been able to keep at least one industry stakeholder present at Codex and other proceedings, with the cost of attendance being borne by the industry, and not government. This supports the notion that within the IFSC, government and businesses have indeed formed a partnership. A concern here, however, is that all facets of the industry are certainly represented but not to the degree that they can truly make an impact. For example, observer status may allow stakeholders to contribute to

[102] Farlam, Peter. "Assessing Public–Private Partnerships in Africa." The South African Institute of International Affairs: Nepad Policy Focus Series, February 2005. Accessed January 2, 2016.

[103] "List of Participants." 13-30. Proceedings of FAO/WHO Regional Conference on Food Safety for Africa, Zimbabwe, Harare.

FAO/WHO proceedings, but member states have the ultimate say in the decisions. Therefore, the private sector may not really have the power to influence the standards that are set.

According to a 2011 report regarding the establishment of GAP standards, there is particular importance in integrating small-scale farmers and suppliers into the global food trading system. South Africa, like Chile, Kenya and Malaysia, has played its part in updating its regulatory framework in order to ensure the producers and suppliers were able to meet the high demand for clean, safe and healthy food. From a cost-benefit analysis, the initial investment cost to build the infrastructure for fertiliser and pesticides to fulfil this mandate for food safety is high, forming approximately 69 percent of all costs in the context of South Africa. While government involvement in advancing compliance to food safety standard is necessary, there are also incentives that are being created by the private sector in order to fully support farmers that product and supply foodstuffs that meet these standards. This specifically relates to the notion of the government/public sector within the actor-network, which "present[s] itself as a unified actor" through the adoption of commonly adopted standards.[104]

While government and the private sector have been called on repeatedly to collaborate on improving food safety, I found that the most involvement came from other interested stakeholders such as consumer and advocacy groups, and academic organisations.[105] For instance, the FAO Food and Nutrition Division and WHO's Regional Office for Africa supports activities such as education campaigns to increase consumer awareness about the safety of street-vended food. They also support the training of public health and food safety officials and improvements to equipment and materials used by street-food vendors.[106]

---

[104] MacKay, Joseph. "State Failure, Actor-Network Theory, and the Theorisation of Sovereignty." *Brussels Journal of International Studies* 3 (2006), p. 68.

[105] FAO/WHO Regional Conference on Food Safety for Africa. Report. Rome: FAO, 2015.

[106] FAO/WHO Regional Conference on Food Safety for Africa. Report. Rome: FAO, 2015.

Neverthless, the eThekwini Municipality, which represents government, has taken active steps to support street vendors of food. In March 2007, temporary environmental health practitioners (EHPs) were employed by the government to upgrade street vendors that mostly operated the Durban area, and to ensure that health certificates were issued to vendors who met health requirements.[107] These health requirements included a "cooler box for the storage of perishable food, the provision of water in containers, and cooking on demand so that food is sold hot and not displayed for a long period of time."[108]

Through the Accelerated and Shared Growth Initiative for South Africa (AsgiSA), the government has attempted to link emerging producers particularly within the informal sector with "bulk buyers such as schools, hospitals and correctional services."[109] The main issue so far is the lack of a registry of informal producers, making it a challenge to transfer information between stakeholders.[110] Furthermore, for businesses in the informal sector, there is very little representation at the Codex level.

At other times, environmental degradation and the lack of infrastructure can further hamper the prospects of small-scale businesses, particularly those that supply fresh produce such as fruit and vegetables. Due to the fact that water availability and water quality are intrinsically linked, South Africa's food safety objectives are directly impacted by its resources. National food retail chain Pick 'n Pay requires its agricultural producers to assess the microbiological quality of their water every month. Between 2008 and 2009, the retail chain identified the Western Cape, Mpumalanga

---

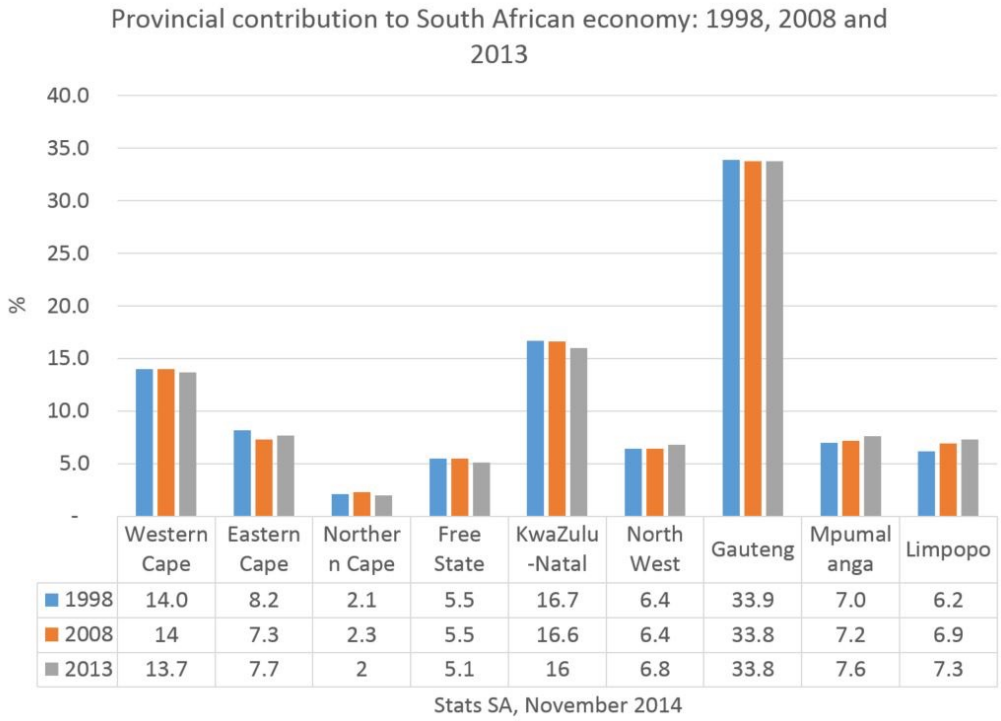
[107] Maravanyika, Babington, "Street vendors meet city's health, safety standards". The Independent on Saturday. News. 3 May 2008, p. 5.

[108] Maravanyika, Babington, "Street vendors meet city's health, safety standards". The Independent on Saturday. News. 3 May 2008, p. 5.

[109] Agenbag, Mike, Ryk Lues, and Liezel Lues. "Exploring Policy Compliance of the South African Informal Milk-producing Segment." *Journal of Public Health Policy* 33, no. 2 (2012).

[110] ibid.

and Limpopo provinces as “problem areas” while the water used in Gauteng and the North West were deemed “relatively clean” due to the regular sourcing and use of borehole water.[111]



	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North West	Gauteng	Mpumalanga	Limpopo
1998	14.0	8.2	2.1	5.5	16.7	6.4	33.9	7.0	6.2
2008	14	7.3	2.3	5.5	16.6	6.4	33.8	7.2	6.9
2013	13.7	7.7	2	5.1	16	6.8	33.8	7.6	7.3

Stats SA, November 2014

According to a joint study by the University of Pretoria’s Departments of Plant Sciences and Department of Food Sciences, and the University of Kwa-Zulu Natal’s Department of Microbiology, the levels of E coli in irrigation water sources have often exceeded the 1000 colony-forming units to 100 ml, which is the allowable maximum set by WHO and supported by the DoH.[112] Furthermore, the E coli traces found in these water sources were discovered to be “resistant to multiple antibiotics by up to 42 percent.”[113] Incidentally, along with naturally carrying more nutrients, vegetables such as leafy greens, carrots, potatoes and onions[114] were

---

[111] Salgado, Inge. “Everybody’s business — and no one’s job”. The Star. Business Report. 27 January 2009, p. 5.

[112] Bega, Sheree. “Leafy greens carry a lot more than nutrients; High levels of e coli and other pathogens found on irrigated crops.” The Star. News. 29 August 2015.

[113] loc. cit.

[114] Salgado, Inge. “Everybody’s business — and no one’s job”. The Star. Business Report. 27 January 2009, p. 5.

also found to have higher levels of contamination than fruit, on average. This is due to the combination of the vegetables being grown below soil[115] and the irrigation method that allows for direct contact of contaminated water with edible parts of the plant.[116] The reliance on surface water sources by farmers is the main reason for the discovery of a high level of pathogens such as C coli, salmonella, protozoa and Hepatitis A.[117] Increasing urbanisation, along with the rising number of informal settlements and poor water treatment plants, have debilitated the quality of these surface water sources. Another cause for concern has been acid drainage, a by-product of mining activity, which allows water containing heavy metals to enter groundwater and river systems.[118] The study by the South African universities, which was initiated in 2008 and was funded by the Water Research Commission[119], served to investigate the relation between irrigation water and fresh produce within the food production chain; 'from farm to fork'.

Massive skills shortages and the lack of resources within municipalities make it nearly impossible for government to deal with the declining quality of the country's water resources. For small-scale food suppliers, the cost of applying food safety standards has led to significant barriers to entry, job opportunities and the creation of wealth.[120] For instance, adhering to the Consumer Protection Act, which serves a prerequisite for doing business with any large retailer, adds costs and capacity, digging into the margins of small businesses that produce, process and supply foodstuffs such as fruits and vegetables. On the other hand, the desperation by local suppliers to gain a competitive advantage has also been seen in the country. In 2006, it emerged

---

[115] Salgado, Inge. "Everybody's business — and no one's job". The Star. Business Report. 27 January 2009, p. 5.

[116] Bega, op. cit.,

[117] Bega, Sheree. "Leafy greens carry a lot more than nutrients; High levels of e coli and other pathogens found on irrigated crops." The Star. News. 29 August 2015.

[118] Salgado, Inge. "Everybody's business - and no one's job". The Star. Business Report. 27 January 2009.

[119] ibid.

[120] Strydom, TJ. "Uncertainty and red tape strangle the small guy". The Times. Economy, Business and Finance, 2 October 2012.

that suppliers to the national grocery franchise named Spar, specifically in the Eastern Cape province, had tampered with expiry date labels on dry produce. It also emerged that some Spar store owners in Johannesburg were not complying with regulations on expiry dates relating to fresh produce.[121] This fragmentation can be related back the Spar group where all stores are owner-managed, which can create a failure of standards within the group and harm to the overall brand.[122]

Similarly, the Shoprite retail chain also experienced a blow to its reputation after one of its stores at Eldorado Park Shopping Centre was forced to shut down in 2013. After a three-hour long investigation, the City of Joburg discovered "a number of transgressions" relating to meat transportation and storage, evidence of rodent faeces and an infestation of flies in the store.[123] Only once the branch had satisfied the safety requirements of the City, could it be allowed to be allowed to operate again. While these transgressions translate into financial losses for businesses, they also provide a clear view of the weakness of controls within the local food safety regime. However, it emerged that the regime's weaknesses are not only systematic but are also structural in nature.

A contributing factor may be that South Africa has no food safety policy and functions merely on the establishment of a fragmented regulatory framework.[124] In 2010, South African President Jacob Zuma conducted a visit to Europe for the SA-EU Summit. During his Brussels leg of the trip, the matter of food safety was discussed and the Zuma administration committed to establishing a food safety agency that could "issue certificates for proceed products exported to

---

[121] Hall, Wendy. "Tampering with dates on food causes alarm". Business Day. Economy, Business and Finance. 31 August 2006.

[122] ibid.

[123] Van Schie, Kristen. "Shoprite branch told to close doors after inspection". The Star. News. 19 February 2015, p. 6.

[124] Hall, Wendy. "Tampering with dates on food causes alarm". Business Day. Economy, Business and Finance. 31 August 2006, p.1

the EU and other markets"[125] The issue of a lack of a food safety policy was echoed by the DoH as recently as in 2013.[126] While "public-private partnerships bring the efficiency of business to public service delivery", environmental factors, especially when they are unforeseen can create more problems that require the resources of government and business, slowing overall progress.[127] There are four main reasons that PPPs arise: a) fiscal benefits, b) efficiency gains, c) development of local financial markets and d) increased private sector development.[128] Unfortunately, the existence of risk at the production level speaks to fundamental and structural issues that cannot be mitigated without high cost, often minimising the benefits that businesses can provide within a PPP.

An interesting element of PPPs is that they are intensely involved in the process of identity formation.[129] This is especially relevant when considering the argument put forward by conventional constructivists which states that a country's identity can vary. "The same state is, in effect, many different states in world politics, and different states behave differently toward other states based on the identities of each." In this way, hybridity offers us a new way of looking at multilateralism. There are several examples of this particularly when food safety risks could have an impact on the perception of the business and affect its capital gains. In 2015, Nestlé South Africa found itself in a position where it had to respond to concerns about a food safety risk relating to its noodles product. The safety risk occurred thousands of miles away in India where

---

[125] Radebe, Hopewell. "Food Safety Agency Will Aid Exports." *Business Day*, October 13, 2010, Economy, Business and Finance sec.

[126] Blaine, Sue. "African Countries Told to Clean up Food Safety Standards." *Business Day Live*, September 12, 2013. http://www.bdlive.co.za/national/2013/09/12/african-countries-told-to-clean-up-food-safety-standards.

[127] Farlam, Peter. "Assessing Public–Private Partnerships in Africa." The South African Institute of International Affairs: Nepad Policy Focus Series, February 2005. Accessed January 2, 2016, p. i

[128] ibid, p. 4

[129] Brandsen, Taco, Wim Van De Donk, and Kim Putters. "Griffins or Chameleons? Hybridity as a Permanent and Inevitable Characteristic of the Third Sector." *International Journal of Public Administration* 28, no. 9-10 (2005): 749-65.

Maggi noodles were reported to contain high levels of lead.[130] Nestlé SA released an official statement and partook in media interviews, assuring the public that a different recipe was used for products sold to the South African market and that the products distributed in South Africa was produced locally in its Babelgi factory in the city of Tshwane, unlike the Indian equivalent.

Nestlé SA's reaction can be compared to that of the East African retail chain Nakumatt, which imported its Maggi noodle product from India. Nakumatt attempted to mitigate its implication in the same scandal by voluntarily resolving to withdraw the product from its shops in Kenya, Uganda, Tanzania, Rwanda and South Sudan.[131] In India, at the locus of the outbreak, Nestlé executives blasted the reports, asserting that the laboratory that had tested the sample of Maggi noodles was not accredited and that the results were "highly unreliable".[132] The countrywide ban on the product was eventually lifted and a public helpline was established in order to address consumer concerns and deal with food risks in future. What is noteworthy is how Nestlé SA responded to concerns about the food safety risks and/or outbreaks even though the risk was not directly related to its market. In the case of South Africa, communication about the risk reflected the intention to prevent any fallout from outbreak that may have translated into reputational costs to the brand and capital losses by the company.

Cooperation

Hybridity places cooperation by the government and business at the centre of South Africa's food safety regime, with communication is one of the most important aspects of cooperation. In times of food safety and control risks and/or outbreaks, the way that stakeholders disseminate information is crucial to the management and resolution thereof. At an FAO/WHO Workshop in Dar es Salam in December 2012, the discussion centred on facilitating increased private sector

---

[130] "Maggi noodles go back on sale in India after recall." BBC. November 9, 2015. Accessed January 9, 2016. http://www.bbc.com/news/business-34759615.

[131] "Are Maggi Noodles Safe to Eat?" ENCA. June 9, 2015. Accessed January 31, 2016. https://www.enca.com/africa/are-maggi-noodles-safe-eat.

[132] loc. cit.

involvement in preparing national and regional positions on Codex issues. While the Workshop focused on the East African Community - with cases from Tanzania, Rwanda, Uganda, Burundi and Kenya - South Africa appeared as a case study in at least four presentations relating too the country's involvement in standards-setting in the fish industry. The benefits of private sector involvement related directly to increasing public awareness and making sure that public policymakers were sensitised to the function of the Codex work and its implications.[133]

In terms of this, South Africa has made some progress particularly relating to food safety risks and product recalls. In 2002, two South African children died from botulism[134] after consuming a can of pilchards in tomato sauce. After a nationwide food safety alert was issued and all the products in that batch were recalled, it was discovered that the incident was not a general case of a food safety risk. Instead, the children who came from a disadvantaged family had consumed the product despite that the can was visibly rusted and damaged.[135] The botched recall revealed a lack of efficiency and control within South Africa's food safety regime and the need to establish better forms of coordination between stakeholders with respect to food safety alerts. Food safety alerts refer to instances where the public is informed about a potential or established health risk relating to a specific food product. Food safety alerts are, in most cases, supplemented by product recalls in order to protect the health and safety of consumer, while also prevented the increase of the food safety risk.[136]

While South Africa has food safety practices that were devised by the DoH, there are few concrete measures or standards in place to facilitate national food product recalls. Apart from the

---

[133] "Introduction." 1-43. Proceedings of FAO/WHO Workshop on Facilitating Increased Private Sector Involvement in Preparing National and Regional Positions on Codex Issues within the East African Community (EAC) Partner States, Dar Es Salaam. FAO/WHO, 2012.

[134] a rare and potentially fatal illness caused by a toxin produced by the bacterium Clostridium botulinum

[135] Department of Health. Policy Guidelines: National Food Safety Alerts and Recalls in South Africa. Report. 2004.

[136] Department of Health. Policy Guidelines: National Food Safety Alerts and Recalls in South Africa. Report. 2004.

Foodstuffs, Cosmetics and Disinfectants Act that prevents anyone from selling food that is not fit for consumption, there is no legislation that forces government or businesses to initiate a product recall once a food safety risk has been established.[137] Instead, recalls are carried out on a voluntary basis in two types of instances: a) when the consumer returns food that is or has the potential to be harmful, or b) when the government or food supplier identifies a potential risk in food and alerts consumers.[138] In lieu of the legal framework for addressing food risks or recalls, the DoH can voluntarily institute a national food safety alert in the form of an official notice or by issuing a media release.

International events are encouraging South Africa to improve. In 2009, the DoH was given access to the European Commission's Rapid Alert System for Food and Feed (RASFF), a system focused on monitoring potential threats to consumer products and health.[139] This exchange of information opened the channels for communication between South Africa, amongst other African countries, and Europe, in order to better deal with foodstuffs that are traded internationally between the two regions. The core reason for introducing the rapid response system was also to help African governments respond to food safety risks as soon as they are detected and confirmed. The RASFF, which relies on a range of communications including telephone, internet and fax, is only useful *after* food safety risks have been detected, thereby preventing *further* spread or harm.[140] The RASFF became used more widely during the outbreak of the mad cow disease in Europe during the early 2000s, and was also useful during the melamine milk scandal in China in 2008. The involvement of the DoH in using the RASFF provided the opportunity for improved food controls in the local market and international market,

---

[137] ibid.

[138] ibid.

[139] Momberg, Eleanor. "Towards putting a lid on dangerous food substances". The Sunday Independent. 6 December 2006, p.5.

[140] ibid.

particularly in terms of keeping consumers informed about food safety risks and keeping food safety risks off shelves.[141]

Global systems like RASFF are beneficial to countries like South Africa where the lack of a clear food safety policy means that regulation is weak. The need for internal controls that the RASFF provides can often prevent multinational corporations from distributing foodstuffs that do not meet safety requirements and continue business without repercussions. Nestlé SA, for instance, was exposed in 2008 for using the banned red colourant erythrosine in the Nesquick Strawberry milk product found on South African food-store shelves.[142] Erythrosine is believed to have an "adverse effect on activity and attention in children", can cause sensitivity to light and can increase thyroid hormone levels.[143] The discovery of traces of erythrosine was made by the European Food Safety Authority after South Africa exported a batch of the product to the EU. At the time, South Africa did not have access to the RASFF. However, this is an example of the IFSC at work, and how the international system is socially constructed specifically through diplomatic practices.[144]

Interestingly, when the food industry or the implicated business fails to issue a food safety risk alert, the DoH, as the national health authority, tends to do so.[145] This applies in the case of industry recalls and in a consumer recalls. In terms of communication about food safety alerts and recalls, the DoH's Directorate of Food Control or its Directorate of Communicable Disease Control usually drafts a media release. This media released is approved by the DoH Director

---

[141] ibid.

[142] "Nesquick strawberry drink pulled from supermarkets". Cape Times. News. 18 August 2008, p. 7.

[143] loc. cit.

[144] Guzzini, Stefano. "A Reconstruction of Constructivism in International Relations." *European Journal of International Relations* 6, no. 2 (2000).

[145] ibid.

General before being released to the media.[146] In the case of the Nesquick strawberry milk product scandal, neither Nestlé SA nor the Department issued an alert. It is concerning that the Policy Guidelines on National Food Safety Alerts and Official Food Product Recalls in South Africa do not address this issue, which indicates a critical lack of accountability.

Nestlé SA explained its predicament by stating that they had misinterpreted South Africa's regulations relating to permissible colourants in foodstuffs. However, the Regulations Relating to Food Colourants clearly states that erythrosine may be used only in sugar confectionery, cocktail and candied cherries in syrup, cherries in fruit cocktails and in raw or unprocessed meats and processed meat. This was based on the level of tolerable daily intake of erythrosine that was jointly by the FAO and the WHO - and was very low. Nestlé's position as that the widely banned colourant did not pose a food safety risk, yet conducted a silent recall of the Nesquick strawberry product, which is primarily marketed to children, after being instructed by the government to do so.[147] Nestlé's stance and subsequent action is indicative of the problems that characterise public-private partnerships.

Although they are ideologically different, hybridity presents the argument that different actors or stakeholders can set aside their different ideologies because they find that cooperation can be mutually beneficial. The example of the Nesquick strawberry product scandal illustrates that very point. However, the institutional gaps that were exhibited through that case can often be a hindrance to cooperation and progress. With respect to food safety alerts and recalls, the Codex Code of Ethics for International Trade in Food specifically states that all people are entitled to safe and nutritious food, and that no one "can put into international trade any food that is unfit for human consumption".[148] Therefore, by extension, this places the onus on governments and

---

[146] Department of Health. Policy Guidelines: National Food Safety Alerts and Recalls in South Africa. Report. 2004.

[147] "Nesquick strawberry drink pulled from supermarkets". Cape Times. News. 18 August 2008, p. 7.

[148] "Nesquick strawberry drink pulled from supermarkets". Cape Times. News. 18 August 2008, p. 5.

their partner-suppliers to ensure that any food safety risk originating within their jurisdictions do not become a matter of transnational concern.

An important tenet of hybridity is that the main interest of institutions is the "capitalist pursuit of profit and therefore the motivation to adopt whatever methods that would most efficiently maximise it".[149] Therefore, institutions are prone to evolve if they are faced with a change in economic circumstances due to the collective interests within the environment that they function. It is through this lens that we can view how South Africa has recently developed an institution called the Food Product Recall Committee, which assembles when a food safety alert has been issued and/or a product recall becomes necessary. While the Food Product Recall Committee is not a standing committee, the founding agreement stipulates that the SABS, the DTI and the DoH's Directorate for Disease Prevention and Control have to be represented if the risk is in a food product that falls under their control. Additionally, the Department of Health's Directorate of Food Control, Environmental Health Services of the Provincial Health Department and the Local Authority, and all implicated food businesses/suppliers should be the major players, essentially driving the recall process.[150] This represents an evolution in how South Africa has committed dealing with food safety risks.

Food safety is a priority that transcends partisan differences in South Africa. For instance, the Cape Town Food Quality and Safety Program requires its pool of more than 13 000 businesses, both in the formal and informal sectors, to attain a Certificate of Acceptability.[151] This Certificate is mandated in the Regulations Governing General Hygiene Requirements for Food Premises and

---

[149] Sterling-Folker, Jennifer. "Competing Paradigms or Birds of a Feather? Constructivism and Neoliberal Institutionalism Compared." *International Studies Quarterly* 44, no. 1 (2000), p. 103.

[150] Department of Health. Policy Guidelines: National Food Safety Alerts and Recalls in South Africa. Report. 2004.

[151] "Addressing Health Issues of Precious Environment; City Is Working to Reduce Safety Risks Resulting from Contaminated or Misbranded Foods Supplied by Formal and Informal Establishments." *Cape Argus*, September 26, 2014.

Transport of Food - R 918 of 1999.[152] An issue here is that there are no audits associated with the Certificate, which means that once it has been issued, there is no obligation for follow-up inspections or enforcement of other crucial regulations.[153] This is a program, which seeks to prevent health and safety risks associated with contaminated and/or mislabelled food, is run by the City of Cape Town - the local government body. Specifically with respect to "regulations governing the labelling and advertising of foodstuffs", this is overseen by City Health. Port Health Authorities have the purview of imported foodstuffs. Therefore, the fact that this programme is run by the province's Democratic Alliance-led government, the official opposition of the ANC that governs the country, demonstrates a sense of maturity in South Africa's political will to combat food safety risks.

[152] "Licensing and Certification." City of Cape Town. 2016. Accessed January 4, 2016. https://www.capetown.gov.za/en/CityHealth/EnviroHealth/FoodQualityandSafety/Pages/LicencingandCertification.aspx.

[153] Makwabe, Buyekeza, Power, Megan. "SA has too few meat inspectors". Sunday Times. Crime, Law and Justice. 24 February 2013.

Contestation

The third sector can, at times, be understood as *"a 'contested arena' between state and market where public and private concerns meet and where individual and social efforts are united, a sector at once a visible and compelling force in society and an "elusive mass of contradictions."*[154]

As mentioned previously, the broad grouping of the "third sector" can potentially be misleading. However, for the purpose of this research, the public-private distinction, specifically, is what is most relevant. In this case, the public-private organisational structure is based on the intersection of the state (public/government) and the market (private/industry).[155] A poignant example of the existence of the existence of contestation within the third sector in South Africa is apparent in what I will refer to as the AGOA Poultry Trade Debacle. The AGOA Poultry Trade Debacle is the most significant and most recent combined effort by the South African government and the private food industry to collaborate in an extended economic and diplomatic battle between South Africa and the United States of America (henceforth referred to as the 'United States').

For some context, the African Growth and Opportunity Act (AGOA) is a trade law that was enacted by the United States in May 2000[156]. Simplistically, AGOA served two purposes: on the one hand, to promote trade with qualifying African countries, and, as a result, essentially set up a strategic business partnership within the Sub-Saharan African region. On the other hand, AGOA also serves to provide duty-free market access for exports from African partner-countries.[157] South Africa's inclusion in the AGOA agreement was announced in March 2015, giving the

---

154 Brandsen, Taco, Wim Van De Donk, and Kim Putters. "Griffins or Chameleons? Hybridity as a Permanent and Inevitable Characteristic of the Third Sector." *International Journal of Public Administration* 28, no. 9-10 (2005), p. 751.

155 ibid.

156 "African Growth and Opportunity Act." Trade.gov. 2015. Accessed January 13, 2016. http://trade.gov/agoa/.

157 "US Warns of Fallout over Poultry Trade Impasse." *Cape Argus*, October 22, 2015.

developing country and the United States a little under a year to reach an agreement that would activate South Africa's formal inclusion in the agreement.[158]

Common practice is that the minimum requirements of safety standards must be met in order for market access to be granted.[159] Nevertheless, negotiations between the United States and South Africa hit several hurdles between late 2014 and all through 2015, due to the methods that would be used to detect salmonella in chicken meat imported from the United States. South Africa's cause for concern was that H5 outbreaks were reported in commercial and wild poultry between December 2014 and June 2015 as reported by the United States Department of Agriculture and the United States Department of Interior.[160] As a result, 42 million chickens and 7.5 million turkeys had to be killed.[161] South Africa officially banned US poultry imports in December 2014 following the H5 outbreak.[162] It is important to note that Avian influenza is airborne and thus very difficult to contain and test. This increases costs for government and businesses in terms of managing the virus.[163]

The AGOA debacle speaks to the sensitivity of transnational food safety and contestation: if a disease or virus does not exist within the country, the government is more willing to take steps to prevent it from entering their jurisdiction. South Africa has a clear position on this, which was illustrated in the case of foot and mouth disease (FMD). In order to protect its population from the onset of FMD, in 2015 the DAFF committed to using every means necessary to prevent the

---

[158] Steyn, Lisa. "US Demand Spooks SA Agriculture." *Mail and Guardian*, November 13, 2015, Business sec.

[159] Hammoudi, A., R. Hoffmann, and Y. Surry. "Food Safety Standards and Agri-food Supply Chains: An Introductory Overview." *European Review of Agricultural Economics* 36, no. 4 (2000).

[160] "H5 Viruses in the United States." Centers for Disease Control and Prevention. August 04, 2015. Accessed February 02, 2016. http://www.cdc.gov/flu/avianflu/h5/.

[161] Steyn, op. cit.

[162] "US Warns of Fallout over Poultry Trade Impasse." *Cape Argus*, October 22, 2015.

[163] Steyn, op. cit.

introduction of the disease to South Africa, including the deployment of the South African National Defence Force (SANDF). While FMD which has not been defined as deadly, it can lead to massive losses in livestock, and affect the profitability of producers. Another concern is that once the disease has been introduced to livestock herds, it becomes difficult and costly to eliminate.[164] From a conservation point of view, wild buffalo populations would also be at risk due to the fact that they are also susceptible to the disease.[165] Therefore, the cost and only the benefit of food safety may often drive contestation within the IFSC.

In 2015. South Africa was under immense pressure to meet the US' conditions or lose out on the preferential trade benefits offered by AGOA.[166] The R1.05 billion deal was supposed to have been finalised in October 2015, but South Africa missed the deadline due to its refusal to meet the United States' demands.[167] In fact, "at the behest of Congress and meat industry lobbyists, [US President Barack] Obama in November gave South Africa until January 4 [2016] to remove remaining barriers to US chicken, beef and pork, barriers the US judged to be unwarranted and not in line with WTO's rules."[168] To clarify, the ultimatum related to duty-free access of South Africa's agricultural exports, not all exports under AGOA.[169] In response to the ultimatum, the South African Poultry Association (SAPA), which was established in 1904, accused the United States' government of pressuring South Africa to lower its standards in terms of the detection of

---

[164] Helfrich, Kim. "SANDF will help control food and mouth disease when asked" defenceweb. 14 January 2015. Accessed January 31, 2016. http://www.defenceweb.co.za/index.php?option=com_content&view=article&id=37525&catid=74&Itemid=30.

[165] Helfrich, Kim. "SANDF will help control food and mouth disease when asked" defenceweb. 14 January 2015. Accessed January 31, 2016. http://www.defenceweb.co.za/index.php?option=com_content&view=article&id=37525&catid=74&Itemid=30.

[166] Barber, Simon. "SA Has Two Months to Implement Latest Agoa Deal." BDLive. January 12, 2016. Accessed January 31, 2016. http://www.bdlive.co.za/business/trade/2016/01/12/sa-has-two-months-to-implement-latest-agoa-deal.

[167] "US Warns of Fallout over Poultry Trade Impasse." *Cape Argus*, October 22, 2015.

[168] Barber, op cit.

[169] "US to Blame for Agoa Hold-up, Says Poultry Association." TimesLive. January 6, 2016. Accessed January 31, 2016. http://www.timeslive.co.za/local/2016/01/06/US-to-blame-for-Agoa-hold-up,-says-poultry-association.

salmonella.[170] SAPA's cooperation with the government illustrated how hybrids often develop in highly competitive markets and often compete against one another.[171] It could be argued that the South African food safety regime recognised the importation of US poultry products as a threat to the local poultry industry and the economy. This would be contrary to the fact that it was in the interest of South Africa to be included and benefit from the preferential trade access. Notably, America's agricultural exports are worth around US$ 170 million, while the total AGOA-related trade with South Africa was worth between US$ 1.7 billion[172] to US$ 2 billion[173] per year. Nevertheless, considering the food safety risk, it became South Africa's stance that the financial losses that might occur as a result of being excluded from AGOA would be a small price to pay to avoid food safety and health risks in the long-term.[174]

It can also be argued that the resistance by SAPA was related to the intention to keep the South African poultry market restricted, and retain greater internal access for its members. However, South Africa has been relatively consistent in its actions. In 2007, the developing country banned all live poultry birds, meats and other bird product imported from Germany following the outbreak of the lethal H5N1 strain of avian influenza.[175] This ban was based on the standards set by the OIE. The bird flu outbreak in the Thuringen area of the country prompted German authorities to destroy almost 1000 domestic birds that were within a 3 kilometre radius of the outbreak.[176] Interestingly, South Africa's ban came months after the EU lifted its own ban on

---

[170] ibid.

[171] Skelcher, Chris (2012) *What do we mean when we talk about 'hybrids' and 'hybridity' in public management and governance?* Working Paper, Institute of Local Government Studies, Birmingham: University of Birmingham, p. 7

[172] "US Warns of Fallout over Poultry Trade Impasse." *Cape Argus*, October 22, 2015.

[173] op. cit.

[174] ibid.

[175] "SA Bans Poultry from Germany.(News)." *Pretoria News*, July 16, 2007.

[176] "SA Bans German Poultry". July 12, 2007. Accessed January 2, 2016. http://www.fin24.com/Economy/SA-bans-German-poultry-20070712?pageNo=1.

South African ostrich, due to the outbreak of the H5N2 strain of avian influenza in the Western Cape province. This demonstrates a harmony is standards between South Africa and the EU. It is also important to note that the H5N5 virus that was found in the US is less harmful than the deadly H5N1 virus[177] which has killed almost 2000 worldwide.[178] Moreover, veterinary import permits for German poultry were cancelled by South Africa.[179]

Arguably, the US has not been consistent. It has the third strictest food safety standards for processed and unprocessed products destined for import in the world, with Japan and the EU at number two and number one, respectively.[180] Thus, while realists argue that a state's interests are constant and always stem from the pursuit of power, the constructivist argument that an actor can have different interests at the same time depending on the inter-subjectivity seems to more accurately describe South Africa's relationship with the US.[181] It is important to also consider the long-term goals of the South Africa in its involvement with AGOA - will South Africa be able to access the US market after the initial ten-year period?

Challenges

As illustrated by the AGOA example, South Africa has experienced a high levels of tension caused by the food standards that government tries to implement and the controls that the private sector is prepared to follow. These tensions have translated into trade and developmental challenges. In 2008, melamine - a chemical milk additive that is used in fertiliser and plastics[182] -

---

[177] "SA Bans Poultry from Germany.(News)." *Pretoria News*, July 16, 2007.

[178] "Bird Flu Sparks SA Ban on German Poultry." The M&G Online. July 12, 2007. Accessed January 2, 2016. http://mg.co.za/article/2007-07-12-bird-flu-sparks-sa-ban-on-german-poultry.

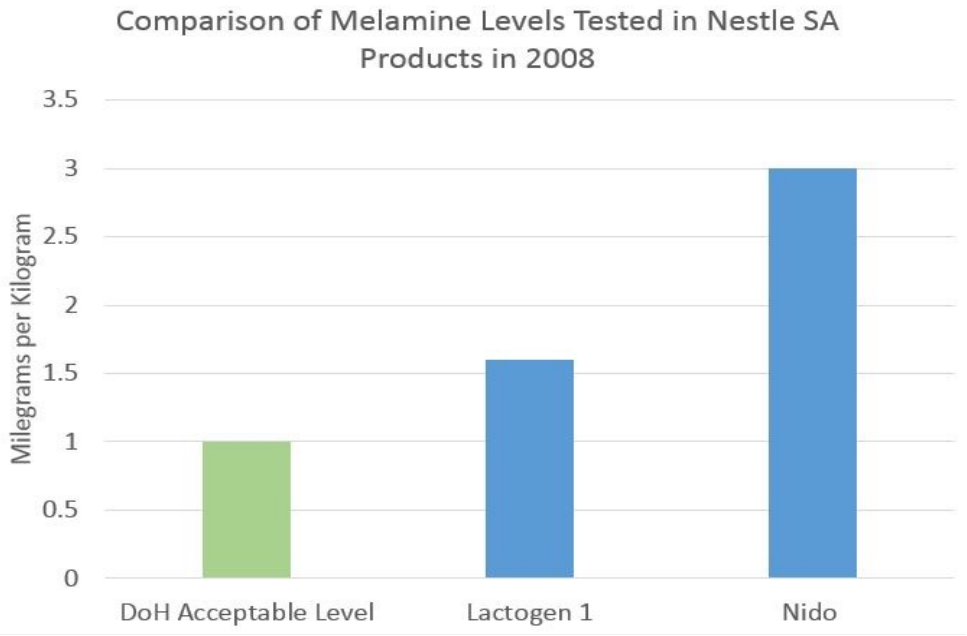
[179] ibid.

[180] Radebe, Hopewell. "Food Safety Agency Will Aid Exports." *Business Day*, October 13, 2010, Economy, Business and Finance sec.

[181] Hopf, Ted. "The Promise of Constructivism in International Relations Theory." *International Security* 23, no. 1 (1998)

[182] "Bid to cut cancer agent is food". Pretoria News. News. 2 July 2010, p. 8.

was implicated in a food safety scandal that resulted in the deaths of four Chinese babies while 54 000 other babies developed kidney stones. In South Africa, batches of two Nestlé baby formula products, Lactogen 1 and Nido, were urgently recalled after it was confirmed that a melamine contamination had occurred.[183] The provincial DoH in the Kwa-Zulu Natal province stated that the melamine levels found in Lactogen 1 (1.6 milligrams per kilogram) and Nido (3 milligrams per kilogram) were above the international standard relating to daily intake, and surpassed the Department's own acceptable level of one milligram per kilogram. Nestlé SA responded by assuring consumers that the levels found were within the WHO's stipulated daily tolerable intake.[184]



The problem here is that there are actually no internationally agreed upon levels of melamine intake due to the lack of scientific evidence relating to the extent of the hazards it holds for humans and babies, in particular.[185] It emerged that the suspected source of the toxin originated

[183] Comins, Lyse. "Milk recall: wake up for authories; Legislation to be reviewed". Daily News. 28 November 2008.

[184] ibid.

[185] Comins, Lyse. "Milk recall: wake up for authories; Legislation to be reviewed". Daily News. 28 November 2008.

in animal feed, which supports the view that Nestlé SA's complicity in the food safety risk was not malicious.[186] This points to the importance of the involvement of the OIE and the IPPC is supplementing Codex standards not only internationally, but domestically as well. Notably, the Directorate of Plant Health of the DAFF serves as the National Contact Point of the IPPC. Additionally, Nestlé SA and the DoH, along with the Consumer Goods Council and the Food Safety Initiative, cooperated to deal with the melamine contamination, ensuring that the batches in which the toxin was detected were all destroyed. However, whether or not the private entity was deliberately undermining South Africa's food safety is not the point — the lack of food control can be devastating nonetheless. This is evidenced by rise of calls for the improvement of legislation relating to best practice and consumer protection within the dairy industry after the melamine poisoning scandal.[187]

At the forefront of the conversation relating to food safety and trade is the argument that what may be fit for one market is not always necessarily good for another.[188] Ultimately, the decision regarding accepting imports often rests with the government, rather than the private sector, unless the situation escalates. In 2011, a 22-ton shipment of cheddar cheese from Ireland that was destined for distribution in South Africa was found to be the source of an E coli contamination. In cases like these, the Health Act of 1977 enables Environmental Health Practitioners (EHPs) to seize and detain any foodstuff that is deemed to pose a consumer health risk.[189] After the Irish dairy shipment arrived in Durban harbour, it was found to be "too risky for human consumption" and was sent back to its Irish shipper because of the perceived risk. This incident prompted South African dairy producers to request their government to place a temporary ban on Irish dairy products. The reason supplied by the local dairy producers was that Ireland was dumping

---

[186] ibid.

[187] ibid.

[188] McMahon, Martha. "What Food Is to Be Kept Safe and for Whom? Food-Safety Governance in an Unsafe Food System." *Laws* 2, no. 4 (2013).

[189] FAO/WHO Regional Conference on Food Safety for Africa. Report. Rome: FAO, 2015.

"inferior, under-priced cheese" on the local market.[190] Hybridity helps us understand that the response by South Africa was preceded by the standards agreed to by the government and the private sector. The private sector's interest in profit and the government's interest in trade resulting in economic development serve as common ground within the third sector.

However, this also raises the question of how food safety, like other commodities, can sometimes be used to leverage the interests of certain stakeholders in the IFSC. The South African dairy producers, for instance, may have tried to exploit the government's interest in food safety in order to maximise and maintain as much access to the domestic market as possible by eliminating competition. This view is supported by Wang who highlighted that the very definition of PPPs has evolved within academia and throughout history.[191] While this research focuses on the existence of PPPs relating to food safety primarily for the public good and sustainable development, it has been argued that the first PPPs originated through a "combination of ambition and greed" in the form of the colonial experiment. This was driven by the ambitious yet incapable state and supported by the greedy and resourceful private sector.[192] Hence, there is an understanding that the benefit, no matter the origin or basis, must be mutual for both the market and the state.

The examples above capture the South African private sector's response to international imports that pose a food safety risk within its own domestic borders. However, South Africa has experienced its share of strict controls on its exports particularly with respect to fruit and meat exports destined for the EU. In 2007, South Africa faced being removed from the EU trading list due to "ineffective and dysfunctional" resident control systems. This removal affected its ostrich

---

[190] "South Africa Finds E. Coli in 22 Tons of Irish Cheese." Food Safety News. November 14, 2011. Accessed January 31, 2016. http://www.foodsafetynews.com/2011/11/e-coli-found-by-south-africa-in-22-tons-of-irish-cheese/#.Vq53hzYp1FI.

[191] Wang, Yin. "A Broken Fantasy of Public-Private Partnerships." *Public Administration Review* 69, no. 4 (2009).

[192] ibid., p. 779.

meat, poultry, dairy, honey and pork exports.[193] According to reports at the time, South Africa had "failed to submit residue-monitoring results for 2005 and 2006, in contravention of the EU's policy for meat suppliers."[194] The EU also expressed concern that there was a lack of local staff in South Africa who could monitor the control systems relating to the food safety.[195] South Africa's ostrich meat export business with the EU amounted to approximately R1.2 billion, at the time[196] with approximately "90% of ostrich meat produced locally was exported to EU countries."[197] Due to the ostrich ban, South Africa has had to conduct tests on some of its eggs and breeding stock exports every month.[198]

While trade bans can often lead to corrective action, which is a long-term benefit for consumers, they are sometimes viewed by the affected government as superfluous. A notable case occurred when the European Food Safety Authority (EFSA) placed a trade ban on citrus imports from South Africa in 2013.[199] At that time, South Africa's citrus trade with the EU was worth approximately R14.1 billion a year. Then in March 2015, South Africa - the world's third largest exporter of oranges - faced the possibility of its citrus stocks being banned again from the EU, following concerns over a fungus called black-spot disease.[200] The official response by the DTI was that the concerns of the EU regarding the transmission of black-spot disease were misplaced.

---

[193] Nicholson, Zara. "Stores Give Pledge on Food Safety after EU Export Ban Threat." *Cape Argus*, November 20, 2007, Tuesday ed., News sec.

[194] Khumalo, Sibongile. "Ostrich Meat Loses EU Status." *The Star*, November 19, 2007, Business Report sec, p. 13.

[195] Khumalo, Sibongile. "Ostrich Meat Loses EU Status." *The Star*, November 19, 2007, Business Report sec.

[196] ibid.

[197] Khumalo, op. cit., p. 13

[198] Steyn, Lisa. "US Demand Spooks SA Agriculture." *Mail and Guardian*, November 13, 2015, Business sec.

[199] "Fungus Spoils Orange Exports." *Sunday Tribune*, September 14, 2014.

[200] Momberg, Eleanor. "Towards putting a lid on dangerous food substances". The Sunday Independent. 6 December 2006.

The Minister of Trade and Industry, Rob Davies, was quoted as saying that "there are other drivers of this [ban] and they are linked to commercial interest". Apart from specifically highlighting how food safety may limit trade, Minister Davies also alluded to the needs of his country's citrus industry, which employs about 60 000 people. As though to support the stance of the government, the Citrus Growers' Association in South Africa, also disputed the findings[201] by the EFSA.

Interestingly, the Citrus Growers' Association indicated the local businesses should look towards trading with Asian economies such as China, which had expressed interest in South African citrus as an export partner.[202] Chinese products that have been implicated in food safety risk scandals include peanuts with high aflatoxins and canine food that was found with traces of melamine.[203] As discussed in the literature review, adopting food safety standards often helps in improving the reputation of a country as an exporter and therefore increases that country's market access. However, when international standards are in flux, the ideas that actors hold and their identities remain susceptible to change. The case of citrus bans by the EU, which gave rise to a new trade opportunity with Asia, demonstrates quite clearly how the lack of standardisation relating to food imports and exports on the global scale can negatively impact not only trade prospects, but shift trade relations entirely.

It is particularly clear that South Africa has an interest in maintaining a marketplace for its products, while ensuring the protection and health of consumers as well. This interest and commitment is exemplified in the National Consumer Commission, a statutory body whose work is mandated and protected by the country's Constitution.[204] The citrus bans along with the other

---

[201] ibid., p. 5.

[202] "Fungus Spoils Orange Exports." *Sunday Tribune*, September 14, 2014.

[203] Momberg,op. cit.

[204] Blaine, Sue. "African Countries Told to Clean up Food Safety Standards." *Business Day Live*, September 12, 2013. http://www.bdlive.co.za/national/2013/09/12/african-countries-told-to-clean-up-food-safety-standards.

bans discussed above also demonstrate support for the notion that international trade is "no longer a game of tariffs, but rather a game of quality, standards and compliance" with respect to global market eligibility and entry.[205] Technological requirements such as the SPS Agreement and TBT Agreement have often been perceived as 'challenging' by developing countries and sub-Saharan exporters such as South Africa. This is primarily because they are specific to products, which means that they can negatively impact the entire industry, as has been demonstrated in South Africa's fruit and meat industries in distinct situations. This is the case despite that they are enforced in order to fulfil public policy objectives such as consumer protection.[206] Local legislation such as the Consumer Protection Act also lay the groundwork for placing direct responsibility of food safety on the public and private sectors.

Ahead of the FIFA World Cup that was hosted by South Africa in 2010, the country saw the launch of several initiatives by the government and the private sector, aimed at highlighting and improving the state of food safety. For instance, the eThekwini Municipality hosted a series of Food Advisory seminars involving hotels, guest houses and restaurants, along with food manufacturers and suppliers in the formal food sector. This program was devised by the Department of Environmental Health.[207] Similarly, the first Eastern Cape Meat Safety Awards were hosted in 2009 in an effort to recognise four abattoirs in the Eastern Cape province for their improved food safety practices.[208] These awards actually formed part of a pilot program by the Eastern Cape provincial government, aimed at promoting compliance to the Meat Safety Act.

Despite the efforts demonstrated prior to the World Cup, it emerged in 2013 that South African government has only a third of the meat inspectors that it needs in order to ensure the meat safety

---

[205] Mohun, Poonam. "Beyond tariff wall: Non-tariff hurdles in sub-Saharan Africa". Bridges Africa 3, no. 10 (2014), p. 1.

[206] ibid.

[207] "Food Safety Seminars." *Daily News*, October 29, 2009.

[208] Makhafola, Gertrude. "Abattoirs Rewarded for Food Safety." *Sowetan*, November 27, 2009, Health sec.

in the country. According to the DAFF, in 2013, there were 91 inspectors in the country, when 232 was the requisite number. These inspectors had to support 425 red meat and 214 poultry abattoirs nationwide.[209] The widespread mislabelling of meat products has also been a highly publicised problem for the country. For instance, traces of donkey, horse and kangaroo meat were found in beef products that were sold to consumers, some of whom expected halal.

The DAFF, DTI and DoH, along with the National Consumer Commission (NCC) and the National Regulator of Compulsory Specifications (NRCS) have held consultative processes regarding safety controls relating specifically to meat labelling.[210] The combination of these issues has pushed the country's government to recognise the need for a single national meat inspection agency, which would report directly to Parliament and serve to restore, not only food safety, but also consumer confidence in the local meat industry.[211] The Meat Inspection Service, based on the mandate of the Meat Safety Act, was proposed based on the structure of a public-private partnership model. The Meat Safety Act provides the basis for promoting meat safety and the safety of animal products. It directly addresses the conditions for the slaughter of animals, national standards relating to abattoirs, meat safety schemes, restrictions on importation and exportation of meat and inspections of facilities.[212] The Minister of Agriculture, Forestry and Fisheries would hold the power to appoint an independent service provider to perform meat inspections at any abattoir in the country.[213]

---

[209] Makwabe, Buyekeza, Power, Megan. "SA has too few meat inspectors". Sunday Times. Crime, Law and Justice. 24 February 2013.

[210] Department of Health, Department of Agriculture, Forestry and Fisheries, and Department of Trade and Industry. *Food Safety and Food Control in South Africa: Specific Reference to Meat Labelling*. Report. 2013.

[211] Cronje, Jan. "Singe meat inspection agency plan welcomed". Cape Times. News. 28 March 2013. p. 4

[212] ibid.

[213] *Government Gazette*. No. 39519. Department of Agriculture, Forestry and Fisheries, https://www.greengazette.co.za/documents/national-gazette-39519-of-15-december-2015-vol-606_20151215-GGN-39519.pdf

In the interest of remedying the issues within the local meat industry, the Red Meat Industry Forum launched an application in April 2015 against the national DAFF and its provincial structures, relating to the meat inspectors.[214] The Red Meat Industry Forum approached the High Court of South Africa after years of appealing to Parliament to no avail. The application, which was approved by the High Court, directed the DAFF to "take steps to provide independent meat inspection services to all grades of abattoirs in respect of all slaughtered animals."[215] At the time, the Red Meat Industry Forum also pointed out that the Meat Safety Act called for an independent inspector to be appointed, a requirement that had not been fulfilled by government since the early 2000s. In contravention of the same requirement, some abattoirs had for years employed their own inspectors.[216] Notably, the privatisation of meat inspections was legitimised through the promulgation of the Abattoir Hygiene Act in 1992, which placed the responsibility of meat inspections on the abattoirs themselves rather than the government.[217] This demonstrated a need to align action with legislation. The current privatisation of meat inspection has compromised the 'technical independence' of meat inspectors by the industry.[218] Therefore, the conversation around the establishment of a renewed Meat Inspection Service has raised the importance of PPPs in order to tackle issues within the industry.

Hybridity typically refers to co-constitutive relationships that are made up of people, animals, plants or other actors.[219] From its origins in biology, we understand hybridity to describe "the parents of different species, genera or families".[220] In economics, the term 'hybridity' is used to

---

[214] Venter, Zelda. "Meat industry wins high court cases to ensure food safety". News. 14 April 2015.

[215] ibid.

[216] ibid., p. 5.

[217] Songabe, Tembile. Portfolio Committee Briefing: Proposal for Meat Inspection in South Africa. Report. Department of Agriculture, Forestry and Fisheries, 2013.

[218] ibid.

[219] Slee, Bill, and James Kirwan. "Exploring Hybridity in Food Supply Chains." In *International Marketing and Trade of Quality Food Products*, edited by Maurizio Canavari, 131-49. Bologna: Wageningen Academic Publishers, 2009.

[220] Slee, op. cit., p. 133.

describe situations where “elements of more than one policy perspective manifest themselves, not as separate entities, but as interconnected parts of the same policy or governance framework or where theoretical explanation draws on more than one theoretical perspective to explain socio-economic phenomena”.[221] When used in public administration literature, hybridity refers to “policy designs [that] involve the interaction of government, business, civil society and not-for-profits” through harmonisation.[222] Hybridity can also refer to the combination of resources by government and by private actors, whether they are not-for-profit organisations or business. Hybridity is useful as a theoretical concept because it “has a “strong association with forms of organisation, management and governance”.[223]

However, in South Africa, there is evidence of a high level of fragmentation within the food safety regime. For instance, in 2006, the Consumer Goods Council of South Africa announced the launch of a food safety agency. This agency would have no regulatory and enforcement function over the food industry.[224] However, it can be argued that there are several independent organisations that constitute a good safety agency. The Council, which is 12 000 member companies-strong is a representative body that serves the interests of the consumer goods industry within the country with respect to manufacturing, wholesale and retail. It is also affiliated with the Consumer Goods Forum.[225] Therefore, the co-constitutive nature of PPPs can actually result in the multiplication of roles and responsibilities. The lack of focus further decreases the capital and capacity that stakeholders have to definitively and effectively commit to advancing food safety in South Africa.

---

[221] ibid.

[222] Skelcher, Chris (2012) *What do we mean when we talk about 'hybrids' and 'hybridity' in public management and governance?* Working Paper, Institute of Local Government Studies, Birmingham: University of Birmingham, p. 1.

[223] Skelcher, op. cit., p. 3.

[224] Hall, Wendy. "New Food Safety Agency Sees Light of Day." *Business Day*, February 9, 2006, Science & Technology sec.

[225] "About CGCSA: About Us." Consumer Goods Council of South Africa. 2015. Accessed January 4, 2016. https://www.cgcsa.co.za/cgcsa/about.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

Conclusion

Food is no longer a commodity, but rather a public health issue that concerns consumers, the government and businesses alike. Where mistakes have been made and risks have occurred, the South African government and the private sector have, particularly with the help of the media, made good-faith statements regarding attempts to keep improving at food safety for the benefit of both public and private interests. At times, however, responses to food safety risks and outbreaks have proven to be an expensive problem to solve, as was demonstrated in the discussion of the findings relating to 'Costs'.

From the evidence provided, it is apparent that public-private partnerships in South Africa are actually strong, but are driven by the stakeholders themselves who opt into PPPs despite that few formal structures that promote and supports those partnerships exist. The hybridity analysis has contributed to our understanding of the complexity of the food safety regime within South Africa. Brandsen et al. grappled with the notion of hybridity within PPPs using the metaphors of a griffin and a chameleon. The griffin is a mythical creature with the body, tail, and hind legs of a lion, the head and wings of an eagle and an eagle's talons as its front teeth. The chameleon, on the other hand, is a real creature that exists within the natural environment. While sometimes it is red, or green, or a mixture of colours, it remains a chameleon, changing merely to blend in with its environment.[226] Both creatures are understood as hybrids of different aspects. Using the same metaphor, it can be argued that the nature of public-private partnerships in South Africa is more akin to the griffin. The food safety regime within South Africa reflects consistent action taken by business and government based on principle notwithstanding the lack of a centralised national food safety policy.

---

[226] Brandsen, Taco, Wim Van De Donk, and Kim Putters. "Griffins or Chameleons? Hybridity as a Permanent and Inevitable Characteristic of the Third Sector." *International Journal of Public Administration* 28, no. 9-10 (2005).

Furthermore, while the national food safety regime is robust, it is also characterised by a "multiplicity of players, resulting in overlaps and gaps, breakdown of the chain of command, lack of effective coordination and inefficient use of resources."[227] It is in this way that South Africa has not quite found the right balance in terms of food safety standards, and is a work in progress. In lieu of a clear food safety policy, South Arica has developed a rapid response framework for is food safety risks. However, legislation is open to vulnerabilities and not all food safety risks have been dealt with the expertise that clear food safety policy would provide.

South Africa is currently involved the FAO's project aimed at 'Strengthening Controls of Food Safety, Plant and Animal Pests and Diseases for Agricultural Productivity and Trade in Southern Africa', which has been running since 2014 and is due to end in 2018. The project seeks to enhance food safety while improving terms of trade within the Southern African Development Community (SADC) region. South Africa, which is arguably the dominant economic power within the region has a long way to go in order to demonstrate its own commitment to improving trade within the region. So while the FAO project in project is a clear indication that South Africa is highly involved in standards-setting at the regional and international levels, a little more attention needs to be paid to matters at the domestic level.

In reference the first hypothesis, PPPs have been developed in South Africa, which focus on advancing food safety standards that are based on international norms. While South Africa has been described as having a good food standards system, supplemented by well-established inspection mechanism and adequate laboratory services, the evidence shows that there is some room for improvement. Furthermore, business and government have contributed towards strengthening food safety in South Africa between years 2000 and 2015. However, the creation of a single food policy can help coordinate efforts between multiple businesses and the government so that the challenges discussed above can be avoided in future.

[227] Food safety and food control in South Africa: specific reference to meat labelling", p. 6.

Recommendations

Despite that South Africa does not find itself in conflict, the country still experiences socio-economic issues that contribute to the demise of its populace on a daily basis, and that sabotage the country's prospects for sustainable development in future. The matter of food safety compounded with the crisis of food security will be an interesting point of future research. This is based on the most recent situation that South Africa finds itself in, with respect to the greatest drought that it has experienced in years. Climate change is a global phenomenon and appears on the agenda of major international and diplomatic exchanges such as the G20. Another concern, which is specific to South Africa and has featured as a top policy issue in the past two decades, is the matter of land redistribution.

What is interesting is that while conducting this research, I came across a large number of resources that kept framing the issue of food safety in terms of an issue of greater significance considering South Africa's high HIV/Aids rate, incidence of malaria, and tuberculosis and other ailments. I have reason to believe that there are dozens of articles that discuss these issues from this perspective. The repetition of this point makes me wonder whether the private sector would have a genuine interest in contributing meaningfully to resolve social issues like this. Apart from the construction and maintenance of the food safety regime, how would the private sector support the public sector in supporting health-related development cases in South Africa? Ultimately, profitability is at the centre of the private sector's interest. Health is the primary concern of public sector and are perhaps the secondary or even tertiary concern of private sector. Therefore, a study of cooperation in this regard would further deepen the understanding of the importance of food safety stands for sustainable development.

Moreover, there is a great volume of literature that addresses food safety in a general sense with respect to the African continent. What my research provides is a different perspective by delving into the South African context, a country with its own dynamics, unique aspects and economic growth trajectory. I must concede that it is difficult to look at the country without completely

considering it in view of the greater region. However, I must also say that holding the purview of South Africa as an African economy has helped me refrain from confusing its development and food safety situation with that other countries in the world, particularly countries in developing regions such as Asia, and South America.

Nevertheless, it would be very interesting to look at the food safety regime in terms of the SADC region, for instance, or in terms of the greater African continent. Southern Africa is a region with immeasurable potential. However, the inheritance of poor infrastructure and low industrialisation are among the primary reasons for the lack of development. A primary motive for adopting food safety is the promise or prospect of increased trade. I have discussed this at length in my literature review and in my research findings.

A further research project could look into how an organisation like SADC deals with the matter of food safety in terms of economic integration and trade through, for example, joint training programs. The theoretical framework here would focus on power dynamics and institutional theory, and how efforts towards improving food safety can be a positive driving force for countries within this region to overcome their developmental challenges. For this future research, it would be interesting to look into whether SADC as a regional organisation has made significant strides relating to food safety, with the starting point of the analysis being the organisation's Free Trade Agreement.

REFERENCES

“About CGCSA: About Us." Consumer Goods Council of South Africa. 2015. Accessed January 4, 2016. https://www.cgcsa.co.za/cgcsa/about.

"Addressing Health Issues of Precious Environment; City Is Working to Reduce Safety Risks Resulting from Contaminated or Misbranded Foods Supplied by Formal and Informal Establishments." Cape Argus, September 26, 2014.

"African Growth and Opportunity Act." Trade.gov. 2015. Accessed January 13, 2016. http://trade.gov/agoa/.

Agenbag, Mike, Ryk Lues, and Liezel Lues. "Exploring Policy Compliance of the South African Informal Milk-producing Segment." Journal of Public Health Policy 33, no. 2 (2012), p. 230-43.

Anderson, Molly D., and Anne C. Bellows. "Introduction to Symposium on Food Sovereignty: Expanding the Analysis and Application." Agriculture and Human Values 29, no. 2 (2012), p. 177-84.

Antle, John M. "Benefits and Costs of Food Safety Regulation." Food Policy 24, no. 6 (1999), p. 605-23.

"Are Maggi Noodles Safe to Eat?" ENCA. June 9, 2015. Accessed January 31, 2016. https://www.enca.com/africa/are-maggi-noodles-safe-eat.

Ayensu, Edward S. "Keynote Address." Address, FAO/WHO Regional Conference on Food Safety for Africa, Zimbabwe, Harare, January 2, 2016.

Barber, Simon. "SA Has Two Months to Implement Latest Agoa Deal." BDLive. January 12, 2016. Accessed January 31, 2016. http://www.bdlive.co.za/business/trade/2016/01/12/sa-has-two-months-to-implement-latest-agoa-deal.

Bioenergy and Food Security Projects. South Africa: BEFS Country Brief. Report. Rome: FAO, 2013.

"Basic Food Laws and Enabling Regulations and the Ministries, Departments and Agencies Involved." 58-69. Proceedings of FAO/WHO Regional Conference on Food Safety for Africa, Zimbabwe, Harare.

Baxter, Pamela, and Susan Jack. "Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers." The Qualitative Report 13, no. 4 (December 4, 2008): 544-59.

Bega, Sheree. “Leafy greens carry a lot more than nutrients; High levels of e coli and other pathogens found on irrigated crops.” The Star. News. 29 August 2015, p. 5.

“Bid to cut cancer agent is food”. Pretoria News. News. 2 July 2010, p. 8.

Blaine, Sue. "African Countries Told to Clean up Food Safety Standards." Business Day Live, September 12, 2013. http://www.bdlive.co.za/national/2013/09/12/african-countries-told-to-clean-up-food-safety-standards.

Borys, Bryan, and David B. Jemison. "Hybrid Arrangements as Strategic Alliances: Theoretical Issues in Organizational Combinations." The Academy of Management Review 14, no. 2 (April 1989): 234-49.

Brandsen, Taco, Wim Van De Donk, and Kim Putters. "Griffins or Chameleons? Hybridity as a Permanent and Inevitable Characteristic of the Third Sector." International Journal of Public Administration 28, no. 9-10 (2005): 749-65.

Burnham, P., K. Lutz, Z. Layton-Henry, and W. Grant. "Research Design and the Research Process." In Research Methods in Politics. New York: Palgrave Macmillan, 2008.

Busch, Lawrence, and Arunas Juska. "Beyond Political Economy: Actor Networks and the Globalization of Agriculture." Review of International Political Economy 4, no. 4 (1997).

Comins, Lyse. “Milk recall: wake up for authorities; Legislation to be reviewed”. Daily News. 28 November 2008, p. 2.

Cronje, Jan. “Singe meat inspection agency plan welcomed”. Cape Times. News. 28 March 2013. p. 4.

Daley, Suzanne. "Mad Cow Disease Panicking Europe as Incidents Rise." The New York Times. December 1, 2000. Accessed February 2, 2016. http://www.nytimes.com/2000/12/01/world/mad-cow-disease-panicking-europe-as-incidents-rise.html.

Department of Agriculture. The Integrated Food Security Strategy for South Africa. Report. Pretoria, 2002.

Department of Health. Policy Guidelines: National Food Safety Alerts and Recalls in South Africa. Report. 2004.

Department of Health, Department of Agriculture, Forestry and Fisheries, and Department of Trade and Industry. Food Safety and Food Control in South Africa: Specific Reference to Meat Labelling. Report. 2013.

Dunne, Tim, Lene Hansen, and Colin Wight. "The End of International Relations Theory?" European Journal of International Relations 19, no. 3 (2013), 407.

Du Toit, D.C. Food Security. Directorate Economic Services: Production Economics Unit. March 2011. http://www.nda.agric.za/docs/genreports/foodsecurity.pdf.

FAO Regional Office for Africa. National Food Systems in Africa: A Situation Analysis. Report no. CAF/02. Accra: FAO.

FAO/WHO Regional Conference on Food Safety for Africa. Report. Rome: FAO, 2015.

"FAO/WHO Workshop on Facilitating Increased Private Sector Involvement in Preparing National and Regional Positions on Codex Issues within the East African Community (EAC) Partner States." FAO, 2013. http://www.fao.org/3/a-au247e.pdf.

Farlam, Peter. "Assessing Public–Private Partnerships in Africa." The South African Institute of International Affairs: Nepad Policy Focus Series, February 2005. Accessed January 2, 2016.

"Food Safety." World Health Organization. Accessed July 06, 2015. http://www.who.int/topics/food_safety/en/.

"Food Safety and Zoonoses." World Health Organization. 2016. Accessed February 2, 2016. http://www.who.int/foodsafety/en/.

"Food Safety Seminars." Daily News, October 29, 2009.

Foss, Kanina. "Chinese Products in SA Melamine-free.(News)." The Star (South Africa), October 1, 2008. Accessed January 31, 2016. http://www.highbeam.com/doc/1G1-186130533.html?refid=easy_hf.

Fungus Spoils Orange Exports." Sunday Tribune, September 14, 2014.

George, Alexander L., and Andrew Bennett. "Case Studies and Theory Development." In Case Studies and Theory Development in the Social Sciences, 3-36. Cambridge: MIT Press, 2004.

Gosling, Melanie. "Onus Is on Suppliers." Cape Times, July 18, 2007.

Grobbelaar, Hendrina H., and Carin E. Napier. "Child and Youth Care Workers: Profile, Nutrition Knowledge and Food Safety and Hygiene Practices." Health SA Gesondheid 19, no. 1 (August 03, 2014): 1-7.

Grunert, Klaus G. "Food Quality and Safety: Consumer Perception and Demand." European Review of Agricultural Economics 32, no. 3 (2005).

Guzzini, Stefano. "A Reconstruction of Constructivism in International Relations." European Journal of International Relations 6, no. 2 (2000): 147-82.

"H5 Viruses in the United States." Centers for Disease Control and Prevention. August 04, 2015. Accessed February 02, 2016. http://www.cdc.gov/flu/avianflu/h5/.

Hall, Wendy. “Tampering with dates on food causes alarm”. Business Day. Economy, Business and Finance. 31 August 2006.

Hammerstad, Anne. "Domestic Threats, Regional Solutions? The Challenge of Security Integration in Southern Africa." Review of International Studies Rev. Int. Stud. 31, no. 01 (2005).

Hammoudi, A., R. Hoffmann, and Y. Surry. "Food Safety Standards and Agri-food Supply Chains: An Introductory Overview." European Review of Agricultural Economics 36, no. 4 (2009): 469-78.

Helfrich, Kim. “SANDF will help control food and mouth disease when asked” defenceweb. 14 January 2015. Accessed January 31, 2016. http://www.defenceweb.co.za/index.php?option=com_content&view=article&id=37525&catid=74&Itemid=30.

Henson, Spencer, and Neal H. Hooker. "Private Sector Management of Food Safety: Public Regulation and the Role of Private Controls." The International Food and Agribusiness Management Review 4, no. 1 (2001).

"History: Standards and Trade Development Facility." Standards and Trade Development Facility. 2016. Accessed February 2, 2016. http://www.standardsfacility.org/history.

Hopf, Ted. "The Promise of Constructivism in International Relations Theory." International Security 23, no. 1 (1998): 171-200.

"Introduction." 1-43. Proceedings of FAO/WHO Workshop on Facilitating Increased Private Sector Involvement in Preparing National and Regional Positions on Codex Issues within the East African Community (EAC) Partner States, Dar Es Salaam. FAO/WHO, 2012.

Ismail, Adiel. "No Poison in Maggi Two Minute Noodles in South Africa." Health24. October 7, 2015. Accessed January 31, 2016. http://www.health24.com/Diet-and-nutrition/Food-safety/No-poison-in-Maggi-Two-Minute-Noodles-in-South-Africa-20150525.

Janse Van Vuuren, Andre. "South Africa Citrus Growers Skirt Spain Over Disease Dispute." Bloomberg. March 30, 2015. Accessed June 12, 2015. http://www.bloomberg.com/news/articles/2015-03-30/s-africa-citrus-growers-skirt-spain-due-to-disease-test-dispute.

Jensen, Michael Friis. Reviewing the SPS Agreement: A Developing Country Perspective. The Royal Veterinary and Agricultural University. January 2002. Accessed August 15, 2016. http://curis.ku.dk/ws/files/135537901/1.pdf.pdf.

Kelliher, Felicity. "Interpretivism and the Pursuit of Research Legitimisation: An Integrated Approach to Single Case Design." Electronic Journal of Business Research Methods 3, no. 2 (2005).

Khumalo, Sibongile. "Ostrich Meat Loses EU Status." The Star, November 19, 2007, Business Report sec.

Kutha, Mirriam. "Why Low-Income Countries Should Care About Food Safety." Food Safety News. October 10, 2012. http://www.foodsafetynews.com/2012/10/should-low-income-countries-care-about-food-safety/#.VUsmJFvyC9Y.

Latour, Bruno. "On Actor-network Theory: A Few Clarifications." Soziale Welt 47, no. 4 (1996): 369.

Law, John. "Notes on the Theory of the Actor-Network: Ordering, Strategy and Heterogeneity." Systems Practice 5 (1992).

"Licencing and Certification." City of Cape Town. 2016. Accessed January 4, 2016. https://www.capetown.gov.za/en/CityHealth/EnviroHealth/FoodQualityandSafety/Pages/LicencingandCertification.aspx.

"List of Codex Members." Codex Alimentarius. February 1, 2016. Accessed February 12, 2016. http://www.fao.org/fao-who-codexalimentarius/members-observers/members/en/.

Lin, Ann Chih. "Bridging Positivist and Interpretivist Approaches to Qualitative Methods." Policy Studies Journal 26, no. 1 (1998).

"List of Participants." 13-30. Proceedings of FAO/WHO Regional Conference on Food Safety for Africa, Zimbabwe, Harare.

MacKay, Joseph. "State Failure, Actor-Network Theory, and the Theorisation of Sovereignty." Brussels Journal of International Studies 3 (2006).

"Maggi noodles go back on sale in India after recall." BBC. November 9, 2015. Accessed January 9, 2016. http://www.bbc.com/news/business-34759615.

Makhafola, Gertrude. "Abattoirs Rewarded for Food Safety." Sowetan, November 27, 2009, Health sec.

Makwabe, Buyekeza, Power, Megan. “SA has too few meat inspectors”. Sunday Times. Crime, Law and Justice. 24 February 2013.

Maravanyika, Babington, “Street vendors meet city’s health, safety standards”. The Independent on Saturday. News. 3 May 2008.

McKinsey and Co. The African Opportunity: Citibank Client's Meeting Discussion Document. Johannesburg: McKinsey and Co., 2014.

McMahon, Martha. "What Food Is to Be Kept Safe and for Whom? Food-Safety Governance in an Unsafe Food System." Laws 2, no. 4 (2013): 401-27.

Mearsheimer, J. J., and S. M. Walt. "Leaving Theory Behind: Why Simplistic Hypothesis Testing Is Bad for International Relations." European Journal of International Relations 19, no. 3 (2013).

Medeiros, Lydia C., Virginia N. Hillers, Patricia A. Kendall, and April Mason. "Food Safety Education: What Should We Be Teaching To Consumers?" Journal of Nutrition Education 33, no. 2 (2001): 108-13.

Mohun, Poonam. “Beyond tariff wall: Non-tariff hurdles in sub-Saharan Africa”. Bridges Africa 3, no. 10 (2014), p. 1.

Momberg, Eleanor. “Towards putting a lid on dangerous food substances”. The Sunday Independent. 6 December 2006, p.5.

Mukumba, Chenai, and David J. Hornsby. "The International Food Safety Complex in Southern Africa: Cooperation or Competition?" South African Journal of International Affairs 18, no. 2 (2011): 235-56.

Mwikisa, FAO/WHO Regional Conference on Food Safety for Africa. Report. Rome: FAO, 2015.

“Nesquick strawberry drink pulled from supermarkets”. Cape Times. News. 18 August 2008, p. 7.

Nicholson, Zara. "Stores Give Pledge on Food Safety after EU Export Ban Threat." Cape Argus, November 20, 2007, Tuesday ed., News sec.

"Nigeria Becomes Africa's Biggest Economy - BBC News." BBC News. April 6, 2014. http://www.bbc.com/news/business-26913497

Ollinger, Michael, and Danna L. Moore. "The Economic Forces Driving Food Safety Quality in Meat and Poultry." Review of Agricultural Economics 30, no. 2 (2008): 289-310.

Prévost, Denise. "Private Sector Food-safety Standards and the SPS Agreement: Challenges and Possibilities." SAYIL 33 (2008).

Proceedings of FAO/WHO Regional Conference on Food Safety for Africa, Zimbabwe, Harare.

Radebe, Hopewell. "Food Safety Agency Will Aid Exports." Business Day, October 13, 2010, Economy, Business and Finance sec.

Reardon, T., J. Codron, and L. Harris. "Global Change in Agrifood Grades and Standards: Agribusiness Strategic Responses in Developing Countries." The International Food and Agribusiness Management Review 2, no. 3-4 (1999), p. 421 - 435.

Ritchie, Jane, and Liz Spencer. "Qualitative Data Analysis for Applied Policy Research." In Analyzing Qualitative Data, by A. Bryman and RG Burgess, 173-97. London: Routledge, 2002.

Roselle, Laura, and Sharon L. Spray. "Choosing Cases for Research." In Research and Writing in International Relations. New York: Longman, 2011, p. 39.

Roselle, Laura, and Sharon L. Spray. "The Research and Writing Process." In Research and Writing in International Relations. New York: Longman, 2011.

“SA Bans German Poultry”. July 12, 2007. Accessed January 2, 2016. http://www.fin24.com/Economy/SA-bans-German-poultry-20070712?pageNo=1.

"SA Bans Poultry from Germany.(News)." Pretoria News, July 16, 2007.

Sadovnik, Alan. "Qualitative Research and Public Policy." In Handbook of Public Policy Analysis: Theory, Politics, and Methods, by Frank Fischer, Gerald Miller, and Mara S. Sidney. New York: CRC Press, 2008.

Salgado, Inge. “Everybody’s business - and no one’s job”. The Star. Business Report. 27 January 2009, p. 5.

Skelcher, Chris. "Chapter 15: Public-Private Partnerships and Hybridity." In The Oxford Handbook of Public Management, by Ewan Ferlie, Laurence E. Lynn, and Christopher Pollitt, 347-70. Oxford: Oxford University Press, 2005.

Skelcher, Chris (2012) What do we mean when we talk about 'hybrids' and 'hybridity' in public management and governance? Working Paper, Institute of Local Government Studies, Birmingham: University of Birmingham.

Slee, Bill, and James Kirwan. "Exploring Hybridity in Food Supply Chains." In International Marketing and Trade of Quality Food Products, edited by Maurizio Canavari, 131-49. Bologna: Wageningen Academic Publishers, 2009.

Söderbaum, Fredrik. "Modes of Regional Governance in Africa: Neoliberalism, Sovereignty Boosting, and Shadow Networks." Global Governance 10, no. 4 (2004).

"South Africa Finds E. Coli in 22 Tons of Irish Cheese." Food Safety News. November 14, 2011. Accessed January 31, 2016. http://www.foodsafetynews.com/2011/11/e-coli-found-by-south-africa-in-22-tons-of-irish-cheese/#.Vq53hzYp1FI.

Sterling-Folker, Jennifer. "Competing Paradigms or Birds of a Feather? Constructivism and Neoliberal Institutionalism Compared." International Studies Quarterly 44, no. 1 (2000), 103.

Steyn, Lisa. "US Demand Spooks SA Agriculture." Mail and Guardian, November 13, 2015, Business sec.

Strydom, TJ. “Uncertainty and red tape strangle the small guy”. The Times. Economy, Business and Finance, 2 October 2012.

"Technical Barriers to Trade." World Trade Organization. 2016. Accessed February 2, 2016. https://www.wto.org/english/tratop_e/tbt_e/tbt_e.htm.

Trienekens, Jacques, and Peter Zuurbier. "Quality and Safety Standards in the Food Industry, Developments and Challenges." International Journal of Production Economics 113, no. 1 (2008): 107-22.

Unnevehr, Laurian. "Food Safety Issues and Fresh Food Product Exports from LDCs." Agricultural Economics 23, no. 3 (2000).

Unnevehr, Laurian, Lawrence Haddad, and Christopher Delgado. Food Safety in Food Security and Food Trade: Food Safety Policy Issues for Developing Countries. Report. 7th ed. Vol. 10. Washington DC: International Food Policy Research Institute, 2003: 1.

"US to Blame for Agoa Hold-up, Says Poultry Association." TimesLive. January 6, 2016. Accessed January 31, 2016. http://www.timeslive.co.za/local/2016/01/06/US-to-blame-for-Agoa-hold-up,-says-poultry-association.

"US Warns of Fallout over Poultry Trade Impasse." Cape Argus, October 22, 2015.

Van Der Merwe, Charl. Challenges to Urban Food Supply in South Africa. Issue brief no. No. 55. Africa Institute of South Africa, 2011.

Van Evera, Stephen. Guide to Methods for Students of Political Science. Ithaca: Cornell University Press, 1997, p. 8.

Van Holy, A., and F. M. Makhoane. "Improving Street Food Vending in South Africa: Achievements and Lessons Learned." International Journal of Food Microbiology 111, no. 2 (2006).

Van Schie, Kristen. “Shoprite branch told to close doors after inspection”. The Star. News. 19 February 2015, p. 6.

Väyrynen, Raimo. Political Power, Accountability, and Global Governance. 1995. http://www.tampereclub.org/e-publications/11Vayrynen.pdf.

Venter, Zelda. “Meat industry wins high court cases to ensure food safety”. News. 14 April 2015, p. 5.

Wang, Yin. "A Broken Fantasy of Public-Private Partnerships." Public Administration Review 69, no. 4 (2009).

Weatherspoon, Dave D., and Thomas Reardon. "The Rise of Supermarkets in Africa: Implications for Agrifood Systems and the Rural Poor." Development Policy Review 21, no. 3 (2003).

Wendt, Alexander E. "The Agent-structure Problem in International Relations Theory." International Organization Int. Org. 41, no. 03 (1987): 335-70.

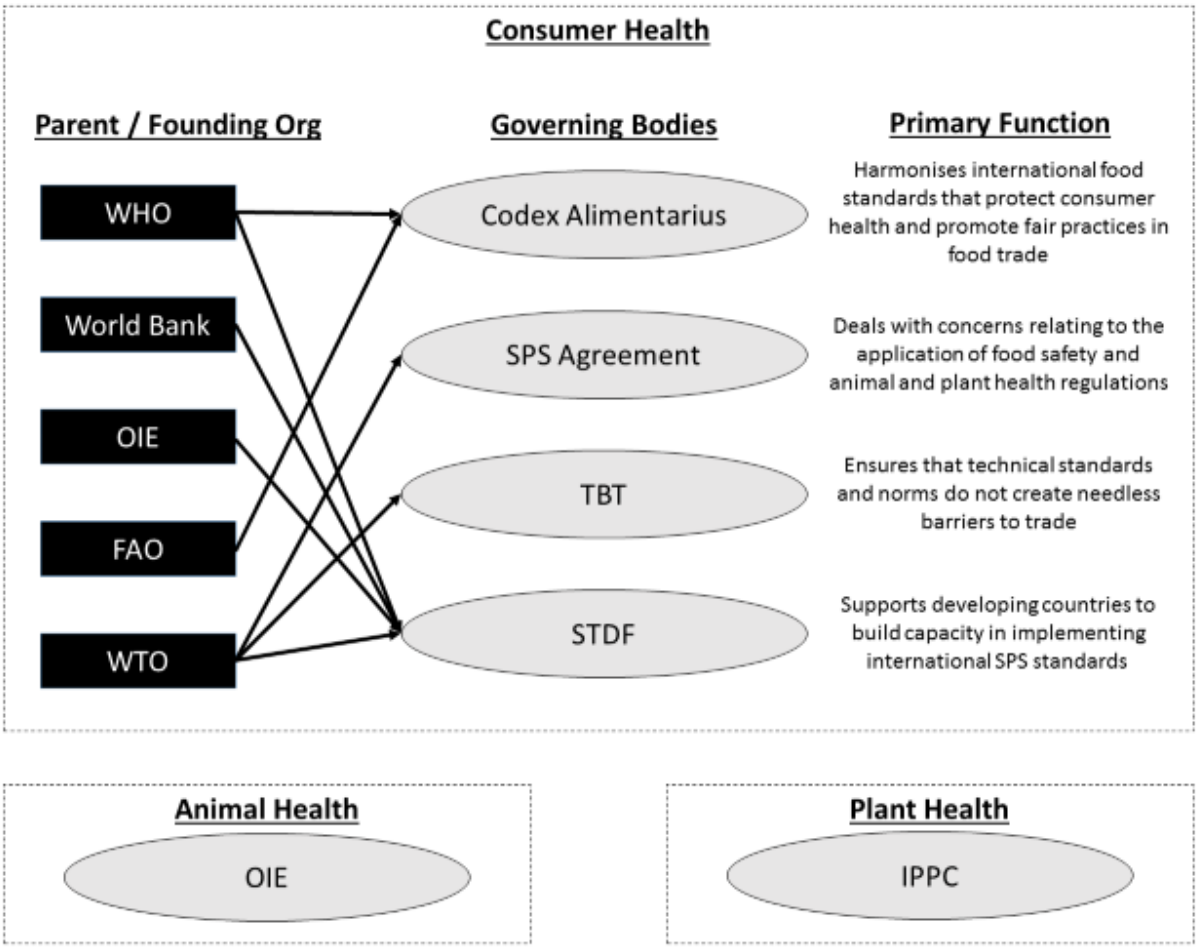
Wilson, John S., and Tsunehiro Otsuki. "Food Safety and Trade: Winners and Losers in a Non-Harmonised World." Journal of Economic Integration 18, no. 2 (2003).

Wright, Caradee, and Linda Godfrey. The Impact of an Unhealthy Environment on Human Health in South Africa. CSIR - Natural Resources and the Environment. June 2010.

Yanow, D. "Qualitative-Interpretive Methods in Policy Research." In Handbook of Public Policy Analysis: Theory, Politics, and Methods, by Frank Fischer, Gerald Miller, and Mara S. Sidney. New York: CRC Press. 2006.

Zikhali, Precious. "Public Sector Support for Inclusive Agribusiness Development – An Appraisal of Institutional Models in South Africa." FAO: Agriculture and Consumer Protection, 2014. http://www.fao.org/3/a-i3642e.pdf.

Appendix A - International Food Safety Complex (IFSC)



The International Food Safety Complex (IFSC) can be distinguished into three arenas which govern consumer health, animal health and plant health. Within the consumer health arena there are four governing standards-setting bodies. This diagram depicts these four bodies, their founding organizations and their primary functions.

Appendix B - South Africa's Food Safety Regime

