



Improving policy coherence for food security and nutrition in South Africa: a qualitative policy analysis

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Abstract

Like most other low and middle-income countries, South Africa must address a rising burden of diet-related chronic disease in a situation of persistent food insecurity and undernutrition. Supply-side policy interventions are a critical component of action to address the double burden of malnutrition. However, the food supply is governed by a number of different policy sectors, and policy incoherence can occur between government action to promote a healthy food supply and objectives for economic liberalization. We analysed the coherence of food supply policy content with respect to nutrition and food security in South Africa, and conducted 14 in-depth interviews with 22 public and private sector actors to identify opportunities to improve policy coherence across sectors governing the food supply. Drawing on Sabatier's conceptualization of actors as influential in shaping policy outcomes, we identified three coalitions of actors related to food security and nutrition in South Africa: the dominant Economic Growth coalition, the Food Security coalition, and the Health coalition. Understanding the frames, beliefs and resources held by these coalitions offers insights into the policy tensions faced by the Government of South Africa with respect to the food supply. The analysis indicates that the current reconsideration of economic policy agendas favouring liberalization in South Africa, including the termination of most bilateral investment treaties, may present an opportunity for increased recognition of food security and nutrition priorities in food supply policy making. Opportunities to strengthen policy coherence across the food supply for food security and nutrition include: specific changes to economic policy relating to the food supply that achieve both food security/nutrition and economic objectives; creating links between producers and consumers, through markets and fiscal incentives that make healthy / fresh foods more accessible and affordable; increasing formal avenues for engagement by Civil Society in nutrition and food security policy making; and including consideration of the nutritional quality of the food supply in policy objectives across sectors, to create a framework for policy coherence across sectors relating to the food supply.

Keywords Food security · double burden of malnutrition · policy · South Africa

1 Introduction

South Africa, along with many other low and middle income countries, is experiencing a rising burden of diet-related Non Communicable Diseases (NCDs) while still struggling to address persisting household food insecurity and undernutrition¹ (Muzigaba et al. 2016). Over the past 40 years, the prevalence of stunting among children in South Africa has remained at around 25% (Said-Mohamed et al. 2015). In the 2012 South

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¹ We considered food security and nutrition policy as related to the supply of healthy, affordable and accessible food, drawing on the UN Food and Agriculture Organization's definition of Food Security: "Food security [is] a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life". (Food and Agriculture Organization of the United Nations: The State of Food Insecurity in the World. Rome: FAO; 2001)

African National Health and Nutrition Examination Study (SANHANES) study, 54% of the South African population reported being food insecure, and 28% were at risk of hunger (Muzigaba et al. 2016). More recently, the prevalence of obesity has risen to 39% among women and 11% among men, and diabetes in the adult population to 10% (Shisana et al. 2014).

Addressing this double burden of malnutrition will require a comprehensive policy approach, which supports both demand for healthy food and its supply (Food and Agriculture Organization of the United Nations and World Health Organization 2014). In this paper, we focus on supply side interventions – and particularly, the need for policy across sectors to support availability of affordable healthy food (Republic of South Africa Department of Health 2013; Government of South Africa 2014). Global evidence shows that government action to promote a healthy food supply can be in tension with government objectives to pursue economic growth, particularly through economic liberalization (Hawkes 2005; Mihalache-O’keef and Li 2011; Popkin et al. 2012; Margulis 2013; Baker et al. 2014; Thow et al. 2015a). This tension between policy objectives of different sectors can result in policy incoherence. In contrast, policy coherence refers to ‘the systematic promotion of mutually reinforcing policies across government departments to create synergies towards achieving agreed objectives and to avoid or minimize negative spillovers in other policy areas’ (OECD 2016). Policy coherence is prioritized in Sustainable Development Goal 17 (United Nations 2015).

There are three key facets of incoherence between economic policies and food security and nutrition policies that have been observed globally. First, economic policies focused on liberalization – particularly of trade and investment – can have negative impacts on nutrition and food security. For example, increased competition and economies of scale associated with trade and investment liberalization, particularly for corporate and multinational food processors, manufacturers and retailers, have helped to decrease the price and increase the availability of highly processed foods, contributing to diet-related NCDs (Baker et al. 2014; Thow and McGrady 2014; Schram et al. 2015; Thow et al. 2015a; Thow et al. 2015b; Timmer 2016). In addition, poorer households may experience increased food insecurity through volatility of global food prices and negative impacts on employment as a result of trade liberalization (Brooks and Matthews 2015). For example, during the global food crisis of 2007–2009, shocks such as speculative behaviour in food commodity markets and the diversion of food crops to fuel production led to sudden increases in the prices of staple foods (De Schutter 2009). Second, nutrition-related policies that aim to reduce the availability and affordability of unhealthy, highly processed (and often highly profitable) foods can be at odds with economic policies that aim to attract or incentivize trade and investment in food processing, service

and retail. This can create tensions for governments due to the political power of investors with significant investments at multiple points in supply chains (Thow and McGrady 2014), because nutrition interventions may adversely affect the profitability of investments in food processing or agriculture. For example, initiatives such as a product tax or labeling measures to reduce highly processed food consumption. A potentially concerning result of this is the possibility for measures to be challenged under investor protection clauses within Investment Agreements (Thow and McGrady 2014; Woolfrey 2014). Third, policy incoherence can result from supply chain policies (including development, trade, finance, industrial and (some aspects of) agricultural production policies) that focus on objectives related to economic growth, but give little consideration to nutrition and food security objectives related to increasing access to affordable healthy food. As a result, nutrition and food security policy objectives can be undermined by economic policy action (Walls et al. 2015; Ruckert et al. 2016).

Previous research has indicated that these tensions appear to exist in South Africa, where the food supply is subject to binding agreements regarding trade in goods and services, and Foreign Direct Investment (FDI) (Greenberg 2017). There have been significant increases in food trade and investment, particularly related to processed foods, in the past two decades (Igumbor et al. 2012; Schram et al. 2013; Thow et al. 2015a). In this paper, we investigate, systematically, if and how the policy objectives articulated in economic, food security and nutrition related sectors across the Government of South Africa are coherent; identify if there are tensions among the policy objectives; and explore the underlying actor beliefs and frames that shape the current policy context. We then consider opportunities to improve policy coherence, and, particularly, outcomes for food security and nutrition.

2 Methods

The aim of the study was to identify 1) instances of policy incoherence and 2) opportunities to improve policy coherence among sectors with responsibilities for food supply policy related to food security and nutrition in South Africa. Our research questions were:

- What are the main current food supply policy objectives and actions related to food security and nutrition in South Africa?
- What are the political dynamics and actor beliefs that underlie food supply policy related to food security and nutrition?
- How could policy coherence be improved in relation to food security and nutrition?

This qualitative study used two methods for policy analysis: document analysis of existing policies and strategies, and interviews with actors engaged in the South African food policy space. Our analysis focused on South African national government sectors with policy responsibilities related to the food supply. These include Agriculture (food production and marketing), Investment (food production and processing), Commerce and Industry (food processing, marketing and distribution), Trade (food distribution), and Health (food and health-related legislation). To underpin our analysis, we drew on Sabatier's conceptualization of coalitions of actors as influential in shaping policy outcomes for a given policy area. The selection of this framework for analysis was informed by the observation during data collection that the incoherence evident in the policy content appeared to reflect obvious divergences in actor beliefs. In other words, the policy incoherence within the food policy subsystem appeared to not simply reflect different policy objectives across sectors, but also reflected different beliefs about food security and nutrition as a policy issue.

2.1 Policy content review

We searched government websites for relevant policies using each of these sectors as search terms, together with the words 'policy', 'strategy' and 'action plan', and then identified further policies through cross-references in policy documents. Based on the literature and global recommendations regarding 1) best-practice food security and nutrition policy and 2) the implications of international economic agreements and nutrition, our objective was to identify policy content that fostered positive incentives for food security and nutrition within the food supply, or indicated points of incoherence. We developed a framework for policy content analysis that enabled us to compare food policy objectives and content across sectors. We first extracted content relevant to the food supply from food security and nutrition policy documents. We then analysed policy content with respect to stated policy objectives, informed by the OECD policy coherence framework (OECD 2016), to identify the ways in which policy objectives and activities in the relevant economic policy documents supported or undermined food security and nutrition policy objectives.

In the case of trade, investment and industry policy, we augmented the assessment of policy coherence related to objectives and content with a review of the literature that identifies impacts from these economic policy sectors on food security and nutrition outcomes and policy space. This was to aid identification of policy incoherence, since these economic policies tend not to

explicitly mention food security and/or nutrition. The policy provisions identified are presented in Box 1.

2.2 Interviews

The interviews were designed to explore the nature of food policy incoherence in relation to food security and nutrition. In particular, policymaker beliefs and frames used to inform the development of the policies and which might help explain the policy (in)coherence between food security and nutrition policy objectives and actions related to the food supply on the one hand, and economic policy objectives and actions on the other. Interview schedules were based on policy analysis frameworks (Bennett and Howlett 1992; Shiffman and Smith 2007; Reich and Balarajan 2012) and the OECD policy coherence framework (OECD 2016), and asked about: influential actors; policy processes; policy priorities; policy context; framing of nutrition; and opportunities to improve coherence.

AMT, SG and MH conducted 14 semi-structured interviews, each 1–1.5 h in length, with 22 actors engaged in the South African food policy space in September 2016, in Cape Town, Pretoria and Johannesburg. Participants included 12 national-level government food policy actors from agriculture ($n=6$), economic policy ($n=3$), and health ($n=3$); 2 academics, 2 independent food policy consultants, and 6 food industry stakeholders. Participants were recruited through formal letters of invitation to the heads of relevant agencies, and through snowball sampling. We also requested interviews with three Investment Banks, as the largest source of investment in the food supply in South Africa, but the opportunity was declined. Interviews were all jointly conducted by three of the authors (with expertise in fisheries, agriculture and nutrition). All interviewers took detailed notes during the interviews, and each of these was combined into a single interview summary.

The first author conducted the analysis using NVIVO™, and coding and validity of the themes were then reviewed by two other authors. NVIVO is software that supports qualitative and mixed methods research by helping researchers to organize and analyze data (QSR International 2018). Themes were informed by Paul Sabatier's Advocacy Coalition Framework (Jenkins-Smith et al. 2014), as an established framework for understanding policy dynamics and opportunities for policy change. This framework identifies the role of actor coalitions (both inside and outside of government, bound together by beliefs) as core in shaping policy outcomes within a policy subsystem – in this case, the food and nutrition security policy subsystem. Themes examined included:

- Actor coalitions with interests in the food policy space in South Africa, and the beliefs and resources available to these coalitions
- Institutions and forums relevant to multi-sectoral policy making for nutrition and food security
- Framing/beliefs about food security and nutrition by different types of actors in the food policy space
- Context – particularly relevant characteristics of the political system and broad policy priorities
- Perceived policy opportunities that could further support the production and consumption of healthy foods

Findings from the document review were synthesized in relation to policy incoherence, and then – also drawing on the interview data – we identified three coalitions within the policy subsystem. We first focus on evident policy

coherence and incoherence in policy content related to food security and nutrition in the food policy subsystem – and then describe the three coalitions identified, based on the Advocacy Coalition analytical framework.

This study was granted ethical approval by the Humanities and Social Sciences Research Ethics Committee of the University of the Western Cape.

3 Results

This analysis of food supply policy identified a number of tensions and points of incoherence between economic perspectives on food supply policy goals, production-oriented perspectives on food security, and health-focused perspectives on nutrition. These points of incoherence primarily

Table 1 Nutrition/Food policy priorities in South Africa

Policy	Objectives relevant to nutrition	References to food supply
Strategic Plan for the Prevention and Control of Non-communicable Diseases, 2013–17	<ul style="list-style-type: none"> * Prevention of NCDs and promotion of health and wellness at population, community and individual levels. * Aligns to 2020 targets: <ol style="list-style-type: none"> 1. Reduce by at least 25% the relative premature mortality (under 60 years of age) from non-communicable diseases; 4. Reduce mean population intake of salt to <5 g/day; 5. Reduce by 10% the percentage of people who are obese and/or overweight; 6. Reduce the prevalence of people with raised blood pressure by 20%. 	<p>Objective: Increase healthy eating habits in the population through accessible and affordable healthy foods.</p> <p>Activities: Engage with relevant government departments, including agriculture, trade and industry and treasury to increase the accessibility and availability of healthy foods.</p>
National Policy on Food and Nutrition Security, 2014	<ul style="list-style-type: none"> * Access to sufficient food as human right (Bill of Rights) * ‘...ensure the availability, accessibility and affordability of safe and nutritious food at national and household levels’ * Focus on traditional food production and supply (e.g. amaranth, ground nuts) 	<p>Strategies:</p> <ul style="list-style-type: none"> * Efforts to increase food production and distribution, including <i>increased access to production inputs for the emerging agricultural sector</i>; * Leveraging <i>government food procurement</i> to support community-based food production initiatives and small-holders; and * The strategic use of <i>market interventions and trade measures which will promote food security</i>. * <i>Land tenure</i> highlighted as challenge to address * Implementation of <i>Agri-BEE Charter</i>
Sustainable Development Goals (SDGs)	<p>Goal 2:</p> <ul style="list-style-type: none"> * By 2030, end hunger and ensure access by all people... to safe, nutritious and sufficient food all year round * By 2030, end all forms of malnutrition... * By 2030, double the agricultural productivity... including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment * By 2030, ensure sustainable food production systems ... * By 2030, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals... * Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks... * Correct and prevent trade restrictions and distortions in world agricultural markets... * Adopt measures to ensure the proper functioning of food commodity markets and their derivatives... <p>Goal 3:</p> <ul style="list-style-type: none"> * By 2030, reduce by one third premature mortality from non-communicable diseases ... * By 2030, end preventable deaths of newborns and children under 5 years of age... 	

Table 2 Agricultural policy priorities in South Africa

Policy	Objectives	References to nutrition/food supply
Integrated Growth and Development Plan (IGDP), 2012	<p>Vision: to have ‘An equitable, productive, competitive, profitable and sustainable Agriculture, Forestry and Fisheries Sector growing to the benefit of all South Africans’.</p> <p>This vision is supported by a mission that states that the vision will be achieved through developing and sustaining a sector that contributes to and embraces:</p> <ul style="list-style-type: none"> • economic growth (and development) • job creation • rural development • sustainable use of natural resources • maintenance of biodiversity and ecosystems • sustainable livelihoods • food security. <p>Agriculture: ‘... position agriculture for the purpose of improving national food safety and security and agricultural economic output in a profitable and sustainable manner, through a qualitative and quantitative improvement of South Africa’s agricultural productivity and its trade and regulatory environment. By achieving the aforementioned, agriculture can contribute vitally to rural economic growth and development and thus increase rural employment, both on and off-farm.’</p> <p>Fisheries: ‘... manage the development and sustainable utilisation of marine and coastal resources, to maximise the economic potential of the fisheries sector and to protect the integrity and quality of the country’s marine and coastal ecosystems.’</p>	<p>p. 30: ‘... A sector that displays great levels of concentration and exclusion, while propagating smallholders and subsistence farming as a means to overcome rural poverty and food insecurity, reflects fundamental policy gaps. ...the focus in agriculture in particular has been skewed towards new entrants, especially linked to the land reform programme, while inadequate support has been given to existing participants in the sector who are marginalised. There is therefore a need to correct this imbalance, for example, by effecting changes that will facilitate existing smallholders’ gainful access to markets, by focusing less on primary cooperatives and more on secondary (e.g. marketing) cooperatives; and to improve the quality and accessibility of support systems and infrastructure so that larger numbers of producers may benefit.’</p> <p>Issues raised regarding food security</p> <ul style="list-style-type: none"> - high food prices (p.35) - need to target small holders (p.35,36) - urban food gardens and livestock farming (p.36) - need for ‘greater emphasis on both physical and economic access to food, when addressing food insecurity’ (p.39) - recognition of multi-sectoral issue: ‘Household food security is influenced by the availability, accessibility and affordability of nutritional food and this requires an integrated approach.’ (p.39) - threat of climate change (p.42)
Agricultural Policy Action Plan (APAP), 2015–19	<p>‘this first APAP focuses on a discrete number of value chains identified as strategic in meeting the objectives of the NGP, NDP and IPAP:</p> <ul style="list-style-type: none"> • Contribution to food security • Job creation • Value of production • Growth potential • Potential contribution to trade balance’ <p>Eleven sectoral interventions: poultry/soya beans/maize integrated value chain; red meat value chain; wheat value chain; fruit and vegetables; wine industry; sugar value chain; biofuels value chain; forestry; small-scale fisheries; Aquaculture Competitiveness Improvement Programme.</p> <p>Transversal interventions: Fetsa Tlala Integrated Food Production Intervention; research and innovation; promoting climate-smart agriculture; trade, agribusiness development and support; strategic integrated projects (SIPs); biosecurity.</p>	<p>Fetsa Tlala includes a focus on micronutrient content of crops</p>
White Paper on Agriculture, 1995 (referenced in IGDP)	<p>Vision: ‘to direct the development of agriculture in such a way that the factors of production, together with the related functions, will be utilised in such a manner that agriculture will contribute to the optimum economic, political and social development and stability of the Republic of South Africa, while simultaneously making a contribution towards the promotion of an economically sound farming community.’</p>	
White Paper on Marine Fisheries Policy for South Africa, 1997 (referenced in IGDP)	<p>Overall goal: ‘to improve the overall contribution from the fishing industry to the long-term vision of government as laid out in the Macro-Economic Strategy.’</p>	

Table 3 Overview of South African trade and investment policy documents for potential nutrition implications (including all existing/terminated BITs with English language text available)

Policy/Agreement	Date	Nutrition-relevant components	ISDS	Incentives to attract investment and trade	Exceptions
Treaty of the Southern African Development Community (SADC) (Consolidated text with amendments)	1992	<p>Art 5: Objectives:</p> <ul style="list-style-type: none"> * promote sustainable and equitable economic growth and socio-economic development... * harmonise political and socio-economic policies and plans of Member States * develop policies aimed at the progressive elimination of obstacles to the free movement of capital and labour, goods and services, and of the people of the Region generally, among Member States <p>Art 21: Areas of cooperation (harmonisation):</p> <ol style="list-style-type: none"> food security, land and agriculture infrastructure and services trade, industry, finance, investment and mining social and human development 	<p>Art 16, Art 32: Tribunal adjudicates disputes (state-state); sanctions or suspension may be imposed</p>	<p>* Tariff reductions (progressive)</p> <p>* Provides a bilateral forum for the two countries to address issues of interest, including African Growth and Opportunity Act (AGOA), TIDCA, trade and investment promotion, non-tariff barriers, sanitary and phytosanitary measures, infrastructure and others</p>	None
Denmark – SA BIT (Terminated)	1997	<p>Preamble:</p> <p>Desiring to create favourable conditions for investments in both states and to intensify the co-operation between private enterprises in both States with a view to stimulating the productive use of resources;</p> <p>Recognising that a fair and equitable treatment of investments on a reciprocal basis will serve this aim...</p>	<p>Art 9:</p> <ul style="list-style-type: none"> * International Centre for Settlement of Investment Disputes (ICSID) or United Nations Commission on International Trade Law (UNCITRAL) ISDS mechanism 	<p>Art 1:</p> <ul style="list-style-type: none"> * Broad/standard definition of investment <p>Art 3:</p> <ul style="list-style-type: none"> * Broad fair and equitable treatment provision * Most Favoured Nation <p>Art 5:</p> <ul style="list-style-type: none"> * Broad expropriation definition, but does not specifically note indirect expropriation 	<p>Art 4:</p> <p>No public health exemptions</p> <p>Expropriation - Art 5: 'except for expropriations made in the public interest, on a basis of non-discrimination, carried out under due process of law, and against prompt, adequate and effective compensation'</p>
Korea, Republic of – SA BIT (In force)	1997	<p>Preamble:</p> <p>Wishing to intensify economic cooperation to the mutual benefit of both States;</p> <p>Desiring to create favourable conditions for investments of investors of one Contracting Party in the territory of the other Contracting party, and</p> <p>Recognising that the encouragement and reciprocal protection of investments on the basis of this Agreement stimulates business initiative in both States...</p>	<p>Art 8:</p> <ul style="list-style-type: none"> * ICSID or UNCITRAL ISDS mechanism 	<p>Art 1:</p> <ul style="list-style-type: none"> * Broad/standard definition of investment <p>Art 3:</p> <ul style="list-style-type: none"> * Broad fair and equitable treatment provision * MFN <p>Art 5:</p> <ul style="list-style-type: none"> * Broad expropriation definition, but does not specifically note indirect expropriation 	<p>None specifically noted</p> <p>Expropriation - Art 5: 'except for a public purpose, under due process of law, on a non-discriminatory basis and provided that it is accompanied by prompt, adequate and effective compensation'</p>
Germany – SA BIT (Terminated)	1998	<p>Preamble:</p> <p>desiring to intensify economic co-operation between both States,</p> <p>intending to create favourable conditions for investments by nationals and companies of either State in the territory or the other State, recognising that the encouragement and contractual protection of such investments are apt to stimulate private business initiative and to increase the prosperity of both nations...</p>	<p>Art 10:</p> <ul style="list-style-type: none"> * Arbitration tribunal – ad hoc, agreed by contracting parties <p>Art 11:</p> <ul style="list-style-type: none"> * If dispute not settled in 6 months – ICSID 	<p>Art 1:</p> <ul style="list-style-type: none"> * Broad/standard definition of investment <p>Art 2:</p> <ul style="list-style-type: none"> * Broad fair and equitable treatment provision * MFN <p>Art 4:</p> <ul style="list-style-type: none"> * Broad expropriation definition, but does not specifically note indirect expropriation 	<p>None specifically noted</p> <p>Expropriation - Art 4: 'except for the public interest and against compensation'</p>

Table 3 (continued)

Policy/Agreement	Date	Nutrition-relevant components	ISDS	Incentives to attract investment and trade	Exceptions
Mauritius – SA BIT (In force)	1998	<p>Preamble: Desiring to create favourable conditions for greater investment by investors of one Contracting Party in the territory of the other Contracting Party; and</p> <p>Recognising that the encouragement and reciprocal protection under international agreement of such investments will be conducive to the stimulation of individual business initiative and will increase prosperity in the territories of both Contracting Parties...</p>	<p>Art 7: * ICSID or UNCITRAL ISDS mechanism</p>	<p>Art 1: * Broad/standard definition of investment</p> <p>Art 3: * Broad fair and equitable treatment provision</p> <p>* MFN</p> <p>Art 5: * Broad expropriation definition, but does not specifically note indirect expropriation</p>	<p>None specifically noted</p> <p>Art 5: 'except for public purposes, under due process of law, on a non-discriminatory basis and against prompt, adequate and effective compensation'</p>
United Kingdom – SA BIT (Terminated)	1998	<p>Preamble: Desiring to create favourable conditions for greater investment by nationals and companies of one State in the Territory of the other State;</p> <p>Recognising that the encouragement and reciprocal protection under international agreement of such investments will be conducive to the stimulation of individual business initiative and will increase prosperity in both States...</p>	<p>Art 7: * ICSID or UNCITRAL ISDS mechanism</p>	<p>Art 1: * Broad/standard definition of investment</p> <p>Art 2: * Broad fair and equitable treatment provision; 'no unreasonable or discriminatory measures'</p> <p>Art 3: * MFN</p> <p>Art 5: * Broad expropriation definition, but does not specifically note indirect expropriation</p>	<p>None specific to public health</p> <p>Art 5: Expropriation: 'except for a public purpose related to the internal needs of that Party on a non-discriminatory basis and against prompt, adequate and effective compensation'</p>
China – SA BIT (In force)	1998	<p>Preamble: Intending to create favourable conditions for investments by investors of one Contracting Party in the territory of the other Contracting Party;</p> <p>Recognising that the reciprocal encouragement, promotion, and protection of such investments will be conducive to stimulating business initiative of the investors and will increase prosperity in both States,</p> <p>Desiring to intensify the economic cooperation of both States on the basis of equality and mutual benefits...</p>	<p>Art 7: * Ad hoc tribunal ISDS mechanism</p>	<p>Art 1: * Broad/standard definition of investment</p> <p>Art 3: * Broad fair and equitable treatment provision</p> <p>* MFN</p> <p>Art 4: * Broad expropriation definition, but no specific mention of indirect expropriation</p>	<p>None specific to public health</p> <p>Art 4: Expropriation: 'except for public purposes, under domestic legal procedure, on a non-discriminatory basis and against compensation'</p>
Trade & Investment Framework Agreement - South Africa and USA	1999	<p>Art 1 The Parties will seek to:</p> <p>(1) expand trade in goods and services between them...</p> <p>(2) take appropriate measures to encourage and facilitate the exchange of goods and services, and to secure favorable conditions for long-term development and diversification of trade...</p> <p>(3) encourage private sector investment between the two countries, as a means of furthering growth, job creation, and economic</p>	None	<p>Art 3 (1) Either Party may, whenever it considers it appropriate, consult the civil society in its country, such as business, labor, consumer, environmental and academic groups, on matters related to the work of the Council. Either Party may, when it considers it appropriate, present the views of its civil society at meetings of the Council.</p> <p>(2) For the purposes of providing for the further expansion of bilateral trade and investment flows, the Parties will consider whether</p>	<p>Art 4 (1) This Agreement is without prejudice to the rights and obligations of either Party under its domestic law or under any other agreements, conventions or other instruments to which either country is a party.</p>

Table 3 (continued)

Policy/Agreement	Date	Nutrition-relevant components	ISDS	Incentives to attract investment and trade	Exceptions
Netherlands – SA BIT (Terminated)	1999	<p>development, and... promote an open and predictable environment for investment</p> <p>Preamble: Desiring to strengthen the traditional ties of friendship between their countries, to extend and intensify the economic relations between them particularly with respect to investments by the investors of one Contracting Party in the territory of the other Contracting Party, Recognising that agreement upon the treatment to be accorded to such investments will stimulate the flow of capital and technology and the economic development of the Contracting Parties and that fair and equitable treatment of investment is desirable...</p>	<p>Art 9: * ICSID or UNCITRAL ISDS mechanism</p>	<p>further agreements relating to taxation, intellectual property, and trade and investment issues would be desirable.</p> <p>Art 1: * Broad/standard definition of investment</p> <p>Art 3: * Broad fair and equitable treatment provision; no 'unreasonable or discriminatory measures'</p> <p>Art 4: * MFN</p> <p>Art 6: * Broad expropriation definition; both direct and indirect expropriation</p>	<p>None specific to public health</p> <p>Art 6: Expropriation: Unless conditions complied with: 'public interest', 'due process of law', 'not discriminatory or contrary to any undertaking which the Contracting Party... may have given', 'against just compensation'</p>
Sweden – SA BIT (In force)	1999	<p>Preamble: Desiring to intensify economic cooperation to the mutual benefit of both countries and to maintain fair and equitable conditions for investments by investors of one Contracting Party in the territory of the other Contracting Party;</p> <p>Recognising that the promotion and reciprocal protection of such investments favour the expansion of the economic relations between the two Contracting Parties and stimulate investment initiatives...</p>	<p>Art 7: * ICSID or UNCITRAL ISDS mechanism</p>	<p>Art 1: * Broad/standard definition of investment</p> <p>Art 3: * Broad fair and equitable treatment provision</p> <p>* MFN</p> <p>Art 4: * Broad expropriation definition; both direct and indirect expropriation</p>	<p>None specific to public health</p> <p>Art 4: Expropriation: Unless conditions complied with: 'public interest', 'due process of law', 'measures distinct and non-discriminatory', 'accompanied by provisions for payment of... compensation'</p>
Czech Republic – SA BIT (In force)	1999	<p>Preamble: Desiring to develop economic cooperation to the mutual benefit of both States, Intending to create and maintain favourable conditions for investments of investors of one State in the territory of the other State, and Conscious that the promotion and reciprocal protection of investments, in terms of the present Agreement, stimulates business initiatives in this field...</p>	<p>Art 7: * ICSID or UNCITRAL ISDS mechanism</p>	<p>Art 1: * Broad/standard definition of investment</p> <p>Art 2: * Broad fair and equitable treatment provision</p> <p>Art 3: * MFN</p> <p>Art 5: * Broad expropriation definition, but does not specifically note indirect expropriation</p>	<p>None specific to public health</p> <p>Art 5: Expropriation: 'except for a public purpose related to the internal needs of that Party on a non-discriminatory basis and against prompt, adequate and effective compensation'</p>
Finland – SA BIT (In force)	1999	<p>Preamble: Desiring to create favourable conditions for increased investment by investors of one Contracting Party in the territory of the other Contracting Party, Recognising that the encouragement and reciprocal protection of such investments on the basis of an Agreement will be conducive</p>	<p>Art 7: * ICSID or UNCITRAL ISDS mechanism</p>	<p>Art 1: * Broad/standard definition of investment</p> <p>Art 2: * Broad fair and equitable treatment provision broad; 'no unreasonable or discriminatory measures'</p> <p>Art 3: * MFN</p>	<p>None specific to public health (Art 7)</p> <p>Art 5: Expropriation: 'except for a public purpose related to the internal needs of that Party on a non-discriminatory basis ... accompanied by prompt, adequate and effective compensation'</p>

Table 3 (continued)

Policy/Agreement	Date	Nutrition-relevant components	ISDS	Incentives to attract investment and trade	Exceptions
Greece (Hellenic Republic)– SA BIT (In force)	2001	<p>to the stimulation of business initiatives and to increasing the economic prosperity of both States...</p> <p>Preamble: Desiring to intensify their economic cooperation to the mutual benefit of Contracting Parties on a long term basis, Having as their objective to create favourable conditions for investments by investors of either Contracting Party in the territory of the other Contracting Party, Recognising that the promotion and protection of investments, on the basis of this Agreement, will stimulate the initiative in this field...</p>	<p>Art 9: * ICSID or UNCITRAL or ad hoc ISDS mechanism</p>	<p>Art 5: * Broad expropriation definition, but does not specifically note indirect expropriation</p> <p>Art 1: * Broad/standard definition of investment</p> <p>Art 2: * Broad fair and equitable treatment provision; 'no unreasonable or discriminatory measures'</p> <p>Art 3: * MFN</p> <p>Art 5: * Broad expropriation definition, but does not specifically note indirect expropriation</p>	<p>None specific to public health (Art 7)</p> <p>Art 5: Expropriation: 'except for a public purpose related to the internal needs of that Party on a non-discriminatory basis ... accompanied by prompt, adequate and effective compensation'</p>
Iran – SA BIT (In force)	2002	<p>Preamble: Desiring to intensify the economic cooperation to the mutual benefit of both States; Intending to utilise their economic resources and potential facilities in the area of investments as well as to create and maintain favorable conditions for investments of the investors of the Contracting Parties in each other's territory and; Recognising the need to promote and protect investments of the investors of the Contracting Parties in each other's territory...</p>	<p>Art 12: * ad hoc ISDS mechanism</p>	<p>Art 1: * Broad/standard definition of investment</p> <p>Art 2: * full legal protection and fair treatment not less favourable than that accorded to its own investors or to investors of any third state who are in a comparable situation'</p> <p>Art 5: * MFN</p> <p>Art 6: * Broad expropriation definition but does not specifically note indirect expropriation</p>	<p>None specific to public health</p> <p>Art 6: Expropriation: 'for public purposes, in accordance with due process of law, in a non-discriminatory manner and upon payment of prompt, effective and appropriate compensation'</p>
Trade, Development and Cooperation Agreement (TDCA) (South Africa – EU)	2004	<p>The objectives of this Agreement are: (a) to provide an appropriate framework for dialogue between the parties, promoting the development of close relations in all areas covered by this Agreement; (b) to support the efforts made by South Africa to consolidate the economic and social foundations of its transition process; (c) to promote regional cooperation and economic integration in the southern African region to contribute to its harmonious and sustainable economic and social development; (d) to promote the expansion and reciprocal liberalisation of mutual trade in goods, services and capital;</p>	<p>State-state dispute settlement</p>	<p>* Art 5–12 Establishment of Free Trade Area and reductions in tariffs and NTBs</p> <p>* Art 13–15 Reductions in agricultural tariffs;</p> <p>* Art 16 Provision for agricultural safeguard</p> <p>* Art 20: 'The Parties may have regular consultations in the Cooperation Council on the strategy and practical modalities of their respective agricultural policies;' (i.e. before implementing changes to agricultural policies from those agreed)</p> <p>* Art 30: Removal of barriers and discrimination in services trade; positive services list</p> <p>* Art 45: Government procurement 'is governed by a system which is fair, equitable and transparent'</p> <p>* Art 46: Apply Trade-Related Aspects of Intellectual Property Rights Agreement (TRIPS) and International Union for the</p>	<p>* No mention of health in preamble</p> <p>* Art 27: Exceptions</p> <p>'The Agreement shall not preclude prohibitions or restrictions on imports, exports, goods in transit or trade in used goods justified on grounds of public morality, public policy or public security; the protection of health and life of humans, animals or plants; the protection of national treasures possessing artistic, historic or archaeological value; or the protection of intellectual, industrial and commercial property or rules relating to gold and silver. Such prohibitions or restrictions shall not, however, constitute a means of arbitrary or unjustifiable discrimination where the same conditions prevail or a disguised restriction on trade between the Parties.'</p>

Table 3 (continued)

Policy/Agreement	Date	Nutrition-relevant components	ISDS	Incentives to attract investment and trade	Exceptions
		Stated objectives			
		(e) to encourage the smooth and gradual integration of South Africa into the world economy;		Protection of New Varieties of Plants (UPDV), etc.	* Art 61: Economic cooperation on agriculture – support for production and supply chains. Plan for Agreement on Fisheries (Art 62)
		(f) to promote cooperation between the Community and South Africa within the bounds of their respective powers, in their mutual interest.		* Art 47 cooperation on standardisation (not harmonisation)	Art 92: cooperation to improve health
Nigeria – SA BIT (In force)	2005	Desiring to create favourable conditions for greater investment by investors of either Party in the territory of the other Party;	Art 8: * ICSID or ad hoc ISDS mechanism	Art 1: * Broad/standard definition of investment	None specific to public health
		Recognising that the reciprocal promotion and protection of investments will be conducive to the stimulation of individual business initiative, contribute to development and increase the prosperity of both Parties;		Art 4: * Broad fair and equitable treatment provision; 'no unreasonable or discriminatory measures'	Art 6: Expropriation: 'except for public purposes, under due process of law, on a non-discriminatory basis and against payment of prompt, adequate and fair compensation.'
		Recognising the right of the Parties to define the conditions under which foreign investment can be received and the investor's duty to respect the host country's sovereignty and domestic law;		Art 4: * MFN	
		Determined to increase favourable conditions for greater investment by nationals and companies of a Party in the territory of the other Party...		Art 6: * Broad expropriation definition, but does not specifically note indirect expropriation	
National Industrial Policy Framework (NIPF)	2007	1.1.4 ... to provide strategic direction to the economy with respect to the issue of industrial development. First, it is aimed at providing greater clarity and certainty to the private sector and social partners with respect to investment decisions leading up to 2014 and beyond. Second, it is intended to provide a reference point for substantial improvements in intra-governmental coordination of the numerous and complex set of policies and projects that will form part of the NIPF.		2.2 A stable and supportive macroeconomic and regulatory environment: Macroeconomic stability is critical for industrialisation in order to allow investors to plan.	
		1.4.1 The NIPF recognises the inherent intra-governmental nature of industrial policy. Section 2 demonstrates that four complementary sets of policies are necessary for the successful implementation of an industrial policy: a supportive macroeconomic and regulatory environment; skills and education; traditional and modern infrastructure; and support for technological effort.		2.3 Skills and education for industrialisation: In the short term, this requires much stronger alignment between industrial policies and skills institutions. In the longer term, it requires integration with the educational system, with a particular emphasis on ensuring larger numbers of graduates with tertiary technical skills.	
				2.4 Traditional and modern infrastructure: Sufficient, reliable and competitively priced traditional and modern infrastructure and logistics systems are essential for a modern industrial economy.	
				2.5 Innovation and technology: Technology ... can be imported from abroad; embodied in the form of foreign direct investment (FDI); [or]... domestic research and development generates indigenous technologies.	

Table 3 (continued)

Policy/Agreement	Date	Nutrition-relevant components	Stated objectives	ISDS	Incentives to attract investment and trade	Exceptions
Trade, Investment and Development Cooperation Agreement (TIDCA) - SACU and USA	2008	The Parties affirm their desire to promote an attractive investment climate and to expand and diversify trade between SACU and the United States.	n/a	Art 4, Para 2. For the purposes of providing for the further expansion of bilateral trade and investment flows, the Parties will cooperate on and consider whether further agreements such as those on sanitary and phytosanitary measures (SPS), standards, technical barriers to trade (TBT), customs cooperation and trade facilitation would be desirable, as well as cooperate in undertaking specific trade and investment promotion activities. * Strategic Tariff Policy: 'The South African Government has chosen a growth and development path that prioritises industrial upgrading in more labour intensive sectors to generate sustainable and decent employment' * Agriculture: 'South Africa has had a negative trade balance in processed agricultural trade since 2003... greater attention will be required to promote the development of this sub-sector.' * Regional integration a priority Para 6: FET narrowly defined: 'administrative, legislative and judicial processes' Para 8: National treatment	None	
Trade Policy and Strategy Framework (TPSF)	2010	... to promote and accelerate economic growth along a path that generates sustainable, decent jobs in order to reduce the poverty and extreme inequalities that characterise South African society and economy.'				None Strategic integration: 'South Africa will need to ensure that its ongoing integration into the global economy is pursued in a manner that more explicitly supports its national developmental objectives. [and]... ensure that we preserve the policy space to pursue national objectives while leveraging the benefits of more integrated regional and global markets.'
Protection of Investment Act - Unilateral	2015	Prior to preamble: To provide for the protection of investors and their investments; to achieve a balance of rights and obligations that apply to all investors; and to provide for matters connected therewith.' Para 4. The purpose of this Act is to— (a) protect investment in accordance with and subject to the Constitution, in a manner which balances the public interest and the rights and obligations of investors; (b) affirm the Republic's sovereign right to regulate investments in the public interest; and (c) confirm the Bill of Rights in the Constitution and the laws that apply to all investors and their investments in the Republic.	Para 13: No ISDS – reduce likelihood of international arbitration - allowance for state-state dispute settlement, where domestic remedies exhausted	Right to regulate Para 12. (1) 'Notwithstanding anything to the contrary in this Act, the government... may, in accordance with the Constitution and applicable legislation, take measures...' [no specific mention of health in list]		

Table 4 Economic incentives for investors, potentially relevant to nutrition

Incentive title	Details
Section 12I Tax Allowance Incentive (12I TAI)	<p>The incentive is designed to support Greenfield investments (i.e. new industrial projects that utilise only new and unused manufacturing assets), as well as Brownfield investments (i.e. expansions or upgrades of existing industrial projects). The incentive offers support based on capital investment and training. The minimum investment in Qualifying Assets required is R50 million for a Greenfield project and an additional investment of R30 million for a Brownfield project.</p> <p>Objectives:</p> <ul style="list-style-type: none"> The objectives of the incentive programme are to support: <ul style="list-style-type: none"> Investment in manufacturing assets, to improve the productivity of the South African manufacturing sector; and Training of personnel; to improve labour productivity and the skills profile of the labour force.
(ECA) Critical Infrastructure Programme (CIP)	<p>Objective: Support the competitiveness of South African industries by lowering business costs and risks and to provide targeted financial support for physical infrastructure that will leverage strategic investment with a positive impact on the economy.</p> <p>Applicability: New or expanding enterprises investing in infrastructure such as roads, railways, electricity transmission and distribution, water pipelines, telecommunication networks, sewage systems etc. Available to municipalities, public sector enterprises and private enterprises.</p> <p>Benefit: Cash grant incentive that covers between 10 and 30% of the infrastructure development costs limited to R30 million per application.</p>
(CEI) Enterprise Investment Programme (EIP): Aquaculture Development and Enhancement Programme (ADEP)	<p>Objective: Investment in the aquaculture sector.</p> <p>Applicability: SA entities involved in fish hatcheries and fish farms (primary aquaculture), processing and preserving of aquaculture fish (secondary aquaculture), service activities to operators of hatcheries and fish farms (ancillary aquaculture).</p> <p>Benefit: 20% - 45% grant for investment in land, and buildings, machinery and equipment, commercial vehicles and work boats and bulk infrastructure capped at R40 million per application.</p>
(CEI) Isivande Women's Fund (IWF)	<p>Isivande Women's Fund (IWF) is an exclusive women's fund established by the DTI Gender and Women Empowerment Unit in partnership with Old Mutual Masisizane Fund. The fund aims at accelerating women's economic empowerment by providing more affordable, usable and responsive finance than is presently the case. IWF targets formally registered, 60% women-owned and/or managed enterprises that have been existing and operating for two or more years with a loan range of R30 000 - R2 million.</p> <p>Objective: The fund improves and expands access to finance to women entrepreneurs by lending and investing in women enterprises and generating income that will improve their living standards.</p> <p>Applicability: The IWF targets formally registered, 60% women-owned and/or managed enterprises that have been in existence for at least two years. It also focuses on professional women with feasible business ideas, high potential survivalists, micro-enterprises and cooperatives on a case-by-case basis. The fund pursues deals involving start-up funding, business expansions, business rehabilitation and turnaround franchises and bridging finance.</p> <p>Benefit: Loan range from R30 000 - R2 million and the loan repayment period is a maximum of five years.</p>
(ECA) The Cooperative Incentive Scheme (CIS)	<p>Objective: To promote cooperatives by improving the viability and competitiveness of the cooperative enterprises by lowering the cost of doing business.</p> <p>Applicability: Any entity incorporated and registered in South Africa in terms of the Cooperatives Act. Target is cooperatives operating in the emerging sector, and manufacturing, retail and services sector.</p> <p>Benefits: Cost-sharing grant of 100% paid by the DTI up to a maximum of R350 000 for costs relating to business development services, business profile development, feasibility studies/market research, start-up requirements etc.</p>
(ECA) Jobs Fund	<p>Objective: To co-finance public and private sector projects that will significantly contribute to job creation.</p> <p>Applicability: The Fund will, on a competitive basis, consider co-financing proposals from private sector, non-governmental organisations, government departments and municipalities that show economic development potential linked to sustainable job creation.</p> <p>Benefit: Matching grant funding for the following windows: <ul style="list-style-type: none"> Enterprise development initiatives: Initiatives that reduce risk, remove barriers to market access and broaden supply chains; </p>

Table 4 (continued)

Incentive title	Details
(ECA) Sector Specific Assistance Scheme (SSAS)	<ul style="list-style-type: none"> • Infrastructure initiatives: Light infrastructure initiatives necessary to unlock job creation; and • Work-seekers initiatives: Initiatives linking work-seekers to the formal employment sector. <p>Objective: Develop new export markets, broaden the specific industry export base, increase participation of B-BBEE and SMME companies in the export process.</p> <p>Applicability: Approved export councils, registered industry associations and joint actions groups.</p> <p>Benefit: A matching grant of 80% of the cost to support the development and growth of exports.</p>
(ECA) Special Economic Zones (SEZs)	<p>Objective: To promote targeted investment to facilitate economic growth and job creation.</p> <p>Applicability: Qualifying projects located in SEZs.</p> <p>Benefit:</p> <ul style="list-style-type: none"> • 15% corporate tax rate. • Accelerated write-off of buildings over a 10 year period. • Employment tax allowance per job created. • Customs controlled area for duty-free rebate and VAT exemption for importing inputs of export products. • One-stop-shop for investment facilitation.
(ECA) Agro-industries	<p>Objective: Provide support to agro-processing and aquaculture sectors.</p> <p>Applicability: Focus areas are:</p> <ul style="list-style-type: none"> • Horticulture primary agricultural sector • Food processing sector • Agro-industrial sector • Beverage sector • Fishing and aquaculture sectors <p>Minimum finance requirement: More than R1 million in debt and/or more than R5 million in equity.</p> <p>Benefit: Competitive, risk-related interest rates are based on the prime bank overdraft rate.</p>
(ECA) Gro-E Scheme	<p>Objective: To promote competitiveness in the manufacturing arena and ensure job retention in this sector.</p> <p>Applicability: Financial support to start-up businesses, including funding for buildings, equipment and working capital. Companies wanting to expand also funded. The proviso is that they must show an ability to create jobs. Africa and the rest of the continent.</p> <p>Benefit: Competitive risk-related interest rates based on the prime bank overdraft rate.</p>
Preferential Corporate Tax Rate for Small Business	<p>Objective: To encourage small/medium business development in South Africa.</p> <p>Applicability: Qualifying small/medium businesses with a turnover for the year of assessment that does not exceed R14 million are eligible (for years of assessment commencing on or after 1 April 2012).</p> <p>Benefit (taxable income):</p> <ul style="list-style-type: none"> • R0 – R70 700 = 0% • R70 701 – R365 000 = 7% • > R365 001 = R20 601 + 21% of amount greater than R350 000 • > R550 000 = R59 451 + 28% of amount greater than R350 000 <p>Objective: To stimulate scientific or technological R&D.</p>

Table 4 (continued)

Incentive title	Details
(CRD) Research and Development (R&D)	<p>Applicability: Expenditure incurred in the discovery of novel, practical and non-obvious information or devising, developing or creating any invention, design or computer programme or any knowledge essential to the use of the invention, design or computer programme.</p> <p>Benefit: Deduction increased to 150% for expenditure incurred on or after 2 November 2006. Accelerated allowance on R&D assets.</p>
(ECA) 12i Investment and Training Allowance	<p>Objective: To promote industrial upgrading and new investment in large-scale manufacturing.</p> <p>Applicability: Medium to large manufacturers with investment from R30 million.</p> <p>Benefit: Training allowance: max. R36 000 per person. Max. 55% of qualifying investment costs in machinery and equipment.</p>

Source: South Africa: Investors handbook 2014/2015 (Republic of South Africa Department of Trade and Industry 2014)

reflected instances in which nutrition and food security policy objectives were not supported – or were undermined – by food supply policies in the economic sector.

3.1 Review of policy content

We identified 40 policy documents and related government initiatives relevant to food security and nutrition, including those relevant to the food supply more broadly (Tables 1, 2, 3, and 4). We start here by reviewing nutrition and food security policy priorities relevant to the food supply, and then examine the economic policies that govern the food supply.

3.1.1 Nutrition and food security policies

The Government of South Africa has identified specific policy objectives to improve nutritional health (Table 1). These include prevention of NCDs and promotion of health and wellness (Strategic Plan for Prevention and Control of NCDs, “NCD Strategic Plan”, 2013–2017), and, in line with the Government’s commitment to the Right to Food, ensuring “availability, accessibility and affordability of safe and nutritious food” (National Policy on Food and Nutrition Security, 2014). These policies both reflect global recommendations for using food supply policy to improve nutrition, with interventions targeting increased access to affordable healthy food, an explicit activity. The NCD Strategic Plan mandates engagement (by health) with relevant government departments, including agriculture, trade and industry, and treasury to achieve this. The National Policy on Food and Nutrition Security identifies the need to increase access to production inputs, leverage government procurement, use market interventions and trade measures for food security, and address land tenure.

3.1.2 Food security and agricultural policies

Food security has been identified repeatedly as a national priority, including in the National Development Plan (2012), which mandated the preparation of the Department of Agriculture, Fisheries and Forestry’s Integrated Growth and Development Plan (the national agricultural policy). The Government of South Africa’s agricultural policies are the Integrated Growth and Development Plan (2012) issued by the Department of Agriculture, Fisheries and Forestry and the Agricultural Policy Action Plan (2015–2019) (Table 2). National agricultural policies in South Africa include strong support for food security, although there is no mention of nutrition (Table 2).

The objectives that are emphasized in agricultural policies are those relating to economic growth, employment creation and rural development, and the dominant frame through which attainment of food security is articulated is economic and aggregate production oriented (rather than distribution oriented). In contrast, the text of the Food and Nutrition Security Policy is framed in the context of the right to food, and access to safe and nutritious food for households (Table 1). However, overall there is an implicit focus in all the food security related policies on the issue of quantity of food, and little consideration of nutritional quality.

3.1.3 Economic policies relevant to the food supply

South Africa's economic policies that affect the food supply have clear objectives: to increase economic productivity and employment through agriculture, food processing and food retail. Trade and investment policy commitments include reducing barriers to trade and investment with respect to goods and services (including food), and protecting intellectual property rights and investors (including in the food system). As part of this, specific measures to promote agri-food processing are highlighted as a growth area from an economic perspective (Box 1). Food processing – which is an issue of concern from a nutrition and health perspective – is a priority in the National Development Plan and Trade Policy and Strategy Framework, and investment incentives are provided in the Industrial Policy (Tables 3 and 4).

These economic food supply policy objectives are supported at a whole-of-government level by the National Development Plan, which focusses on economic and social development (National Planning Commission 2012). Key priorities relevant to the food supply include increased employment, poverty reduction and improved agricultural production – all of which would generally have positive spillover impacts for food and nutrition security. However, food supply policy objectives contained in this broader government policy agenda focus primarily on food as an economic commodity (for example, as a source of income and employment). The National Development Plan does include nutrition as a priority, but only in terms of direct (health sector) interventions for maternal and child undernutrition, with no mention of food supply intervention. (National Planning Commission 2012) Food security objectives in the National Development Plan focus on increasing economic access to food and decreasing the cost of food, but not on the nutritional quality of that food. Somewhat contradictory definitions of food security appear in the National Development Plan, which further explain this

lack of focus on the nutritional quality of the food supply. Although the Plan does acknowledge the definition by the United Nations Food and Agriculture Organization, which states that 'everyone has access to sufficient, nutritious and safe food at all times' (p.230), the focus overall is on household access dimensions of food security (for example, 'Household food security is determined by the ability to access food rather than its availability', p230). There is no mention of health, nutrition or food security in the preamble or objectives of trade or investment agreements (Box 1, Table 3). The only trade agreement with any exceptions for public health (implicitly including nutrition) is the Trade, Development and Cooperation Agreement between South Africa and the European Union. In addition, there is no mention of nutrition in relation to NCD prevention in Trade, Investment, Industry, or Agricultural policy documents, or of the food supply policy actions identified in the National Strategic plan for NCDs. There are also no provisions that explicitly protect food security where economic interests might be in conflict – for example, to ensure that expanding protection of intellectual property rights does not interfere with smallholder access to seeds.

However, trade policy directions and priorities in South Africa have evolved over the past decade to have more of a focus on equitable development (Box 1). A review of investment policy in South Africa was undertaken between 2007 and 2010, in part in response to an international investment dispute regarding the Broad-Based Black Economic Empowerment Act in 2007 under the Belgium/Luxembourg - South Africa Bilateral Investment Treaty (Mossallam 2015). This review led to the termination of several 'first generation' Bilateral Investment Treaties, and the new Protection of Investment Act 2015 (Mashigo 2014; Adeleke 2015), designed to maintain a level of investor protection while bringing current agreements into line with the priority given to non-economic (particularly social, sustainable development and equality focused) policy objectives (Government of South Africa 2010; Mossallam 2015).

The 2010 Trade Policy and Strategy Framework explicitly identifies the need for trade policy commitments to support broader national development objectives (Table 3). In addition, the new Promotion of Investment Act 2015 limits the scope for the food industry to contest food security and nutrition policy measures that might impact on the value of investments. The termination of existing investment agreements with very ambiguous definitions of key terms such as Fair and Equitable Treatment, and no broad development objectives in their preambles, opens a potential opportunity for policy space to protect and promote food security and nutrition (Box 1).

Box 1 Summary of provisions in trade and investment agreements and related economic policies with implications for food security and nutrition

Provisions in economic agreements with implications for food security and nutrition raised in literature	Relevant content of concern in the South African economic policy landscape (Detail in Tables 1, 2, 3, and 4)
Use of preamble and/or objectives to define scope and policy priorities in such a way that encompasses health (or social development) as policy priority for government more broadly.	<ul style="list-style-type: none"> • No mention of health or nutrition in objectives of agreements. • Acknowledgement of broader development objectives in trade and investment policy reviews.
Reductions in barriers to trade in goods and services, leading to increased availability of foods and food services.	<ul style="list-style-type: none"> • Trade agreements reduce barriers to trade in goods and services.
Incentives to promote investment, with implications for food industry investment. These may generate tensions regarding concerns about processed food affordability and availability (see also Annexures: Table 4).	<ul style="list-style-type: none"> • Investment incentives for food processing may be contrary to health. • Trade Policy and Strategy Framework promotes agri-food processing (growth area from economic perspective). • Investment incentives for aquaculture and infrastructure may support access to fish and primary produce. • Concerns over smallholder access to seeds.
Protection of intellectual property rights, with implications for biodiversity and food security.	
Provisions for harmonisation and regulatory coherence (included in Technical Barriers to Trade provisions and more generally) – can constrain policy space and innovation in nutrition action	<ul style="list-style-type: none"> • Harmonisation – not in SA agreements to date, but included within broad scope of Trade, Investment and Development Cooperation Agreement (TIDCA) between SACU and USA • Macro-economic stability priority (NIPF) may imply a reduced opportunity for innovation in using economic policy tools to improve food supply for health.
Fair and Equitable Treatment (FET) provisions underpinning investor protection, with implications for scope for industry to contest government (public health) measures, because it sets expectations for investors.	<ul style="list-style-type: none"> • Broad FET definition apparent in many active BITs (e.g. lack of clarity on what constitutes an ‘unreasonable’ measure). • 2015 Investor Protection Act contains very specific and narrow FET provisions.
Investor-State Dispute Settlement Mechanisms (ISDS), with implications for foreign investors’ opportunities to seek compensation regarding impact of measures on industry (constrain innovation).	<ul style="list-style-type: none"> • ISDS still in some active BITs but new Investor Protection Act moves away from this to state-state dispute settlement.
Exceptions to protect public health measures; also related is explicit priority given to nutrition.	<ul style="list-style-type: none"> • Few specific exceptions for public health (including nutrition) – only one is in TDCA between SA and EU. • No mention of nutrition in relation to NCD prevention in trade, investment, industry, or agricultural policy documents, or of the food supply priorities identified in the NCD Strategic Plan.

Source: (Schram et al. 2013; Baker et al. 2014; Thow and McGrady 2014; Hawkes 2015; Schram et al. 2015; Thow et al. 2015a; Thow et al. 2015b; Baker et al. 2016; Friel et al. 2016; Labonté et al. 2016; Ruckert et al. 2016)

3.1.4 Summary of policy document analysis: points of incoherence in food supply policy

Overall, nutrition and food security policy objectives articulated in health and agriculture policies – particularly those that relate to food supply change that promote availability of affordable nutritious foods – are not explicitly supported by the economic policy sectors. Economic policies relating to the food supply do not include explicit consideration of nutrition or food security policy space, but focus on food as an economic commodity.

3.2 Interviews: Actors and coalitions

Analysis of the interview data identified three key coalitions relating to food and nutrition policy, which reflected the points of policy incoherence identified in the policy content analysis. The dominant subsystem we termed ‘Economic Growth’, due to its framing of the

role of food systems as contributors to economic outcomes and employment. The second was termed, ‘Food Security and Agriculture Production’ (‘Food Security’), due to its emphasis on production aspects of food security. The third we termed the ‘Health’ coalition, due to its emphasis on food as a nutrition and health issue. These coalitions were mutually exclusive, in terms of the interviewees who articulated the main tenets of each coalition, but there was some overlap observed in beliefs between the Food Security and Health coalitions, and in some of the framing of food security between the Economic Growth and Food Security coalitions, as indicated below. Most of the actors in each coalition interacted formally in various forums and were thus linked not only in their frames and beliefs but also in formal policy processes. However, they did not refer to each other personally during the interviews, although many referred to colleagues’ institutions as influential.

3.2.1 Economic growth coalition

The Economic Growth coalition focused on the role of economic growth and employment in delivering improved food security and nutrition outcomes. Key actors were the Department of Trade and Industry and other economic policy departments, Agricultural trade within the Department of Agriculture, Fisheries and Forestry, the food industry, and agricultural producers/traders.

The Economic Growth coalition appeared to be a dominant coalition, as it had the most resonance with the priorities and frames of overarching government policy objectives: in particular, the resonance between the beliefs of this coalition, regarding food as primarily an economic commodity, and the primacy of economic growth (employment, balance of trade and other indicators) within the priorities of the National Development Plan. The framing and beliefs of this coalition were evident in the focus on economic growth and employment that permeated policy documents relating to the food supply, described above. In line with this policy content focus on economic growth, the interviews identified a strong bias towards economic interests (both government and private sector) in the formal government forums convened to inform policy making. Indeed, the dominance of this coalition was further indicated through the direct access that the food industry has to government, formalized through their participation in a range of forums, including the National Agroprocessing Forum, the Agricultural Trade Forum and Value Chain Roundtables on key commodities.

[We] have walked a long journey building relationships with government, so we can engage robustly [Interview 4, Food Industry]

Within government, cross-sectoral Clusters are convened at a high level (DG/Ministerial) to deal with policy coordination and cross cutting issues in government. These include Economic, Social, Trade and Foreign Policy Clusters. It was notable that interviewees did not identify an obvious place of responsibility in either the roundtables or these cross-cutting forums for food security and nutrition to be discussed.

Framing of food security and nutrition The Economic Growth coalition framed hunger and undernutrition as the priority issue to be addressed by food security and nutrition policy. Nutrition in the context of NCD prevention was perceived as something that would resolve itself with economic growth (i.e. consumers becoming wealthier), and trade in particular was seen as critical for ensuring food security. The Economic growth coalition framed the causes of nutrition and food

security problems as a lack of access to (healthy) food – related to income – among vulnerable sectors of the population. This was closely linked to employment opportunities.

40% unemployment is at the bottom of the issue... South Africa can't have food security when people don't have incomes ... [Interview 6, Academic, Food Science]

In the Economic Growth coalition there was acknowledgement of dietary change and a shift towards processed foods, with negative implications for nutrition. However, these trends were framed as the result of individual preferences for fat, salt and sugar, related to taste and palatability. Consumer decisions not to purchase healthy foods were also framed as personal decisions based on preference and consumer desires for 'status' foods. In line with this, solutions for NCDs were framed as addressing personal factors through improving education. This was seen as an avenue to improve consumption decisions and also as a mechanism to improve the food supply, since industry was seen as responding to consumer demands.

However, there was also some acknowledgement of the current food and nutrition problems as the result of systemic issues. One actor in the Economic Growth coalition identified the need for policy entrepreneurs and advocates as 'visionaries'. Such actors could use systems-thinking approaches to identify and articulate long-term economic consequences (including with respect to health) of policy making.

There may be unintended consequences [of liberalizing trade] for diets... South Africa has potential to pick this up earlier than the wealthy countries... We needed visionaries in negotiations back then... Thinking in systems would change policy making. [Interview 7, Agricultural trade].

Beliefs: economic solutions to achieve nutrition and food security Actors aligned with the Economic Growth coalition held an evident belief that food security and nutrition were positive by-products of economic growth. In contrast to the Health coalition (described below), there was little perceived tension between the goals of economic policy and nutrition/food security policy. Integration into global value chains was seen as the main opportunity for agricultural industries, which was a key point of difference with the Food Security coalition (described below). This reflected the priority given to employment and perceived indicators of economic development, such as maintaining a positive balance of payments.

In this coalition, there was an evident belief that industry was a (if not the) key stakeholder in achieving food policy

goals. Food industry actors were portrayed as highly knowledgeable stakeholders, and the avenue through which policy objectives would be achieved. A strong, formalized, competitive local industry was seen as critical to achieving development goals. The food industry supported this view, and articulated a belief that they were key to achieving food security and nutrition policy goals. As part of this, there was a belief that Government and Industry could be mutually supportive in achieving food security and nutrition goals.

It was evident within this coalition that there was little perceived tension between achieving goals of economic growth and food security/nutrition. There was a belief that the market would resolve any perceived tension:

If industry doesn't have a healthy market then they are not going to be economically viable, so they have vested interest in maintaining a healthy market ... It is possible to reconcile health/nutrition and profit motives... at the end of the day, the food supply is mostly consumer driven and a high level of competition means it is too risky to be unethical in marketing... [Interview 2, Food Industry].

Resources: high level political will and industry support

Alignment with the core objectives of the National Development Plan and priority government economic goals gave the Economic Growth coalition a high level of political support. For example, agriculture and the food industry were identified as a means to achieve the government's stated goal of creating 11 million jobs by 2030.

Industry and industry associations positioned themselves as key resources to achieve not only these economic objectives but also food security and nutrition policy goals. In particular, as the main holder of technical expertise, as evidenced by their assistance to government in setting food standards; as a source of innovation in food and nutrition; and as experts in logistics, essential for meeting food needs (e.g. fish, staples). Industry actors portrayed themselves as direct contributors to food security and nutrition, through general food production and their Corporate Social Responsibility activities. For example:

[Regulators] grossly underestimate [our] contribution to food security. [Interview 1, Food Industry]

3.2.2 Food security and agricultural production coalition

The Food and Nutrition Security Policy was the product of what we termed the (minority) 'Food Security and Agricultural Production' coalition (hereafter, the Food Security coalition). It was developed by the Food Security Division of the Department of Agriculture, Fisheries and

Forestry in consultation with (primarily) Education, Health and Social Development.

Framing of food security and nutrition In the Food Security coalition, food insecurity (i.e. lack of sufficient food) was framed as a major problem requiring a policy response, and there was little consideration of other issues of nutrition, such as NCD prevention and micronutrient deficiencies. In contrast to the Economic Growth coalition, the cause of the problem was framed primarily as one of increasing food prices and insufficient production, in a context of poverty, rather than a lack of access to income/employment. Although these are two sides of the same issue (food affordability), the difference in emphasis (production rather than employment) influenced perceptions of appropriate policy solutions.

Drought is a big problem ... Not enough food [was] produced so prices went up... the whole food basket [is] affected [Interview 13, Agriculture]

Framing of food supply problems tended to focus on the lack of support for local production of diverse food crops. The policy agenda of the Food Security coalition was perceived by other actors as being almost too focused on primary production [Interview 7, Agricultural trade]. Similarly, while public procurement was identified as a strategy to increase availability of fresh healthy food, provide stable income for local farmers, and support rural development, this was embraced more cautiously on the side of the Economic Growth coalition. Public procurement is a key issue in trade agreements, which tend to minimize the potential for preferential local public procurement.

However, there was some overlap between the Food Security and Economic Growth coalitions. For example, there were a few crops mentioned across coalitions as high economic value, and feasible for smaller scale production, such as berries [Interview 5 & 7, Agriculture]. Related to this are opportunities to improve demand for fresh produce through supporting local markets that link farmers more directly with consumers. This would increase accessibility of healthy food for consumers, support local farmers in a way that was inclusive of smallholder farmers, and support economic growth in rural areas (an economic policy priority) – and potentially reduce costs incurred by long supply chains. This strategy was also seen as feasible from the economic growth coalition because creating local markets and encouraging diversification would benefit small scale farmers economically.

Beliefs: food is a local, social good, and not an economic policy issue The Food Security coalition held an evident belief that food security was a social rather than economic issue. Actors highlighted the policy tension between food as an economic commodity, and as a social good.

Food security is a social issue... [it] will always be at opposite end to economics... The Government is trying to bring these together but it is not possible.... Economists will tell you that economic growth brings spin offs, but social issues are marginalized [Interview 13, Agriculture].

In line with this, the *Food and Nutrition Security Policy* was developed with limited input from the economic sector, despite the economic sector (Trade, Investment, Commerce etc) having a significant policy influence on the food supply. The key actors involved in the development of the policy were the Department of Education – seen as particularly relevant with growing interest in school feeding (“nutrition is a side issue for them but they are interested because of what children eat” [Interview 13, Agriculture]) – the Department of Health, because of their expertise in nutrition, and the Department of Social Development, which has early childhood development centres and provides social grants.

The Food Security coalition was also characterized by a belief that local markets (production and consumption) would strengthen food security, through a focus on providing access to consumers and also supporting poor farmers. Social grants were seen as helpful contributions at the household level, but the primary need was framed as affordable, accessible food.

The local food processing industry also positioned itself as contributing to the policy objectives of this coalition, particularly processing companies. They framed their supply chain expertise and preference for local primary produce as expanding production capacities and increasing local production:

[We are] supporting local farmers, and try to source locally ... we prefer not to import due to cost...and purchase 2 million tonnes of agricultural commodities per year, of which 2/3 is local [Interview 4, Food Industry].

Resources: high level political will but limited Civil Society engagement The Government of South Africa has prioritised food security as part of national and international commitments, including the Constitution and the Sustainable Development Goals (Table 4).

However, although this political commitment exists, the use of the term ‘food security’ in the National Development Plan appears to align more with the Economic Growth coalition’s frame than the Food Security frame, with more of a focus on increasing household employment and national measures of food security. In addition, while the Food and Nutrition Security Policy was developed by the Ministry of Agriculture, the locus of implementation of the Food Security and Nutrition Policy is with the National Government in the planning department. This may indicate future challenges in

maintaining the conceptualization of food security used by the Food Security Coalition.

Actors in this coalition reported interest from Civil Society Organizations (CSOs) in contributing to food security policy, but CSOs had limited involvement in policy making – and notably, no formal avenues for input. In particular, they weren’t included in the development of the Food Security and Nutrition policy. In the next policy stage (implementation) CSOs will be included in the high-level council on Food Security. However, an actor from Government expressed caution about engagement with CSOs, voicing a perception that small informal producers have limited representation.

Civil Society Organizations wanted to be consulted on policy ... But it is not clear who they represent. It is unlikely to be the rural poor... [and] farmer associations don’t have local roots. CSOs are not organized... [they] need to be properly represented and organized [Interview 13, Agriculture].

3.2.3 Health coalition

The actors in what we termed the Health coalition evidenced beliefs regarding the importance of food supply policy in creating healthy food environments for good nutrition for health (including aspects of food security, but more health focused). For example:

[Health and nutrition is] not just about education, because nutritious food/healthy convenience food is not affordable, even when you are not poor [Interview 11, Public Health]

The main actor was perceived as the Department of Health, as the focal ministry for nutrition related policy, and also CSOs. However, there was also recognition that achieving nutrition policy goals would require action in economic sectors.

The Food Legislation Advisory Group is the multi-stakeholder forum related to food and health, which sits with the Department of Health, and acts as a platform for Government to engage with industry associations, academics, and other government departments on food regulation. Although interviewees from a range of coalitions identified this as the key multisectoral forum relevant to food security and nutrition, it is not constituted to address either of these issues, and its main focus is on food safety.

Framing of food security and nutrition The Health coalition framed the main nutritional problem as the coexistence of multiple forms of malnutrition (undernutrition, micronutrient deficiencies and diet-related NCDs/obesity). In particular, they emphasized that these different forms of malnutrition

are affecting common (not different) populations, and thus needed to be addressed in a coordinated manner.

In the Health coalition the problem of poor diets was framed as a response to food environments, rather than an issue of personal choice, in contrast to the Economic Growth coalition – although there was recognition that limited household finances also played a role in skewing consumption to cheap, unhealthy foods. They identified the relative inexpensiveness of unhealthy foods, as well as industry efforts in the marketing and advertising of such foods as key factors driving dietary change.

Energy dense, low nutrient foods are what is commonly consumed... This is very cheap and tastes nice – e.g. chips [Interview 11, Public health]

In line with this, the solution was framed as a need for systemic change – to increase access to healthy affordable foods, such as fruit and vegetables. However, the food system was seen as very difficult to change in terms of reorienting to healthy food production.

Beliefs: solutions require food policy change, without industry influence Actors in the Health coalition articulated a belief that considerations of health and nutrition were marginalized in food supply policy. This was perceived as being due to the prevailing focus on “bringing investment, not on the impact of investment” [Interview 14, Public Health]. The Department of Health also had limited participation in decision-making regarding economic policy relating to the food supply.

Nutrition is not really considered [in the Interministerial Committee on Investment]... it is the domain of the Department of Health [Interview 8, Economic policy].

There were overlaps in beliefs about food security and nutrition policy between the Food Security and Health coalition, and also some evidence of collaboration between the Ministries of Health and Agriculture, for example on the development of orange-fleshed sweet potato. This was also supported by the consideration of micronutrient content of crops in the national agricultural policy (Table 2). However, a key difference appeared to be the focus of the Health coalition on the outcomes of agricultural production for the health of consumers, which was not perceived as a core issue for consideration by agricultural policy makers, who were seen by the health sector as more concerned with ensuring the welfare of farmers. This was seen as limiting the scope for more significant collaboration on nutrition.

In contrast to the Economic growth coalition, the Health coalition held a strong belief regarding the need to limit

industry involvement in food security and nutrition policy making due to conflicts of interest:

Policy space [for nutrition and food security] needs to be protected – industry should not be involved in the policy space ... Health must engage with industry but needs to have very clear rules of engagement and guidelines [Interview 10, Public Health].

Resources: limited influence and capacity for enforcement

Part of the marginalization of health was perceived as due to the lack of Civil Society activity in the nutrition policy space, which is needed to help raise concerns to the attention of policy makers. However, there appeared to be no formal mechanism for their engagement (in contrast to industry actors in the economic policy space). The advantage to the health sector of having Civil Society actors calling for strong food security and nutrition policy, was that it would circumvent the need for the health sector to directly lobby against government policies that they perceived as favouring industry over health. It would also give access to broader expertise than contained within the government.

Health actors need to consider how to strengthen Civil Society, in terms of capacity and education, and to create organized lobbying. Improving food security and nutrition needs multidisciplinary expertise... [Interview 10, Public Health]

The Health coalition also faced a significant challenge in the form of lack of resources. This meant that policies weren't implemented. Two areas of resource imbalance were highlighted in the interviews, which made it difficult for the Health coalition to successfully shape policy agendas. One was the lack of resources for government nutrition promotion, compared to the advertising budgets of industry, resulting in poor quality health promotion interventions.

[There are] huge disparities in resources – the Department of Health doesn't even have 100 million rand/year for prevention... but industry spends 100 million rand on just one ad. [Interview 14, Public Health].

The marginalization of nutrition interests was compounded by an imbalance in resources and influence for lobbying. The resources available to industry to fight policy (for example, in relation to the proposed [at the time] soft drink tax) were much more significant than that available to the Health Coalition actors – primarily government and civil society. The direct access that industry had to economic forums was also seen as giving them a preferential position in food supply policy making.

4 Discussion

4.1 Current policy agendas

Food security and nutrition policy is a political and contested policy space. This study identified three different policy coalitions contributing to policy incoherence regarding food supply and food security and nutrition in South Africa. Drawing on Sabatier's conceptualization of coalitions of actors as influential in shaping policy outcomes in a given policy subsystem, we analysed the framing of food security and nutrition by different actors, the resonance of these frames with policy content, and the evident beliefs and resources that characterized each coalition. Overall, we found recognition across all the coalitions that the government is trying to balance competing agendas in the food security and nutrition policy space. One of the key challenges to policy coherence identified was the very different framing of food and nutrition between the Food Security and Health coalitions, with the problem narrowly (coalition-based) defined as: hunger and economic access to calories; or rising consumption of unhealthy foods; or lack of diversity in diets based on staple foods. There is an implicit incoherence between economic/agricultural policy emphasis on value-adding, which is primarily an avenue for job creation, and health policy emphasis on fresh, unprocessed (healthier) foods.

The dominant policy coalition, whose beliefs we see most clearly reflected in policy documents governing the food supply, we termed the Economic Growth coalition. Actors in this coalition frame food insecurity and malnutrition as primarily the result of a lack of income and a lack of knowledge about healthy eating. This understanding of the problem as primarily deriving from individual level factors, such as being poor (i.e. lack of economic access to food) or personal preference (e.g. for foods high in fat, salt and sugar), is reflected in the focus on personal education and economic growth (to provide employment and income) as core components of the solution. The core beliefs of this coalition are that employment and economic growth, within a neoliberal economic dispensation, are the primary mechanism to improve nutrition and food security, and that industry is therefore key to achieving food security and nutrition in the long term. This coalition is supported by high level political will – these beliefs are reflected in the National Development Plan and other core food supply policy documents. They are also heavily supported by the food industry, which is represented as a resource to achieve food security and nutrition policy goals. Industry has several formal mechanisms to input into policy making; their role is framed as both technical experts in food systems, and their significant contribution to economic growth.

Support for economic growth within a neoliberal, unregulated framework have been documented elsewhere as dominant in food policy making (Pinstrup-Andersen 2013). The food industry has been heavily engaged with developing

policy solutions that focus on individual responsibility and portray the food industry as a key part of the solution (Jenkin et al. 2011; Scott et al. 2017), and in framing food as primarily an economic good and the food industry as a significant contributor to GDP (Friel et al. 2016). The heavy involvement of industry in policy forums in South Africa raises concerns about conflicts of interest in nutrition policy making. The World Health Organization has unequivocally recommended that nutrition policy processes be protected from the influence of vested interests (WHO 2013). However, it is unclear how this can be operationalized when policies shaping the food supply are both nutrition and economic policies.

The second policy coalition is focused on food security, with frames and beliefs resonant with the National Food and Nutrition Security Policy. Actors in this coalition frame food insecurity as primarily a problem of production and accessibility of food. This framing regarding production is reflected in solutions focused on increasing production for local populations, such as through increased investment in local markets. Food security is a political priority, and the Right to Food is enshrined in South African legislation; the planned National Food and Nutrition Security council will be situated under the President's Office. However, there is ambiguity in the use of the term food security in high level policy documents – for example, the National Development Plan and national agricultural policy reflect much more of the framing of the Economic Growth coalition, in contrast to the national food and nutrition security policy, which is much more in line with the framing and beliefs of the Food Security coalition. A key opportunity to increase the resources available to this coalition is the civil society interest in this framing of food security. However, they have had limited participation in policy development to date.

The concept of food as a social good is embedded in a social perspective on food security (Riches 2016), and reflects aspects of the food sovereignty discourse in its focus on smallholder production and the right to food (Jarosz 2014). However, in this context this seems to be core to the marginalization of the Food Security coalition. Food trade and industry-led growth is a tenet of the dominant framing of food security by the Economic Growth coalition, and a focus on smallholder farmers and local markets is marginalized by the privileging of large-scale production and seen as unable to meet overarching policy objectives for economic development. This tension is reflected in recent calls to 'revision' of agricultural and food systems with respect to nutrition, which highlight the need to identify opportunities to achieve both economic and nutritional policy goals through agricultural production and distribution (Jones and Ejeta 2015; McDermott et al. 2015; Pingali 2015). As in this study, recommendations include strengthening incentives for diversification to nutrient-rich crops and strengthening markets. However, the potential of promoting small scale agricultural

production of vegetables, fruit and small livestock to both supply more accessible nutritious food and create livelihoods remains marginalised in policy discourse in South Africa.

The third coalition identified we termed the Health coalition, which frames food security and nutrition from the perspective of malnutrition as a health outcome. Actors in the Health coalition frame malnutrition (undernutrition, micronutrient deficiency and diet-related non-communicable diseases) as primarily the result of an unhealthy food environment, in which unhealthy foods are among the most affordable and heavily marketed. In contrast to the Economic Growth coalition, the solution is thus framed as primarily the responsibility of the food system to deliver healthy affordable foods. A core belief of the Health coalition is the need for food supply policy to support nutrition objectives. Another key belief – particularly in relation to NCD prevention – is that the influence of the food industry on food-related (nutrition related) policy making should be circumscribed. However, the influence of this coalition does not appear to extend far beyond health policy documents and it is characterized by limited resources: in particular, limited engagement by civil society organizations, a low capacity for enforcement, and limited financial resources for raising awareness and exerting influence on policy (particularly in contrast to industry).

The challenges faced by the health coalition in translating their core beliefs into policy action have been observed elsewhere (Roberto et al. 2015). For example, a marked difference in the beliefs and frames between actors in public health and trade/agriculture has also been observed in the EU (Walls et al. 2016). This has often been attributed to resource constraints, including lack of political will and human and organizational capacities, which have resulted in limited policy action on malnutrition in other low and middle income countries (Pelletier et al. 2012). The lack of civil society engagement observed here has also been identified as a barrier to policy action for nutrition globally (Timotijevic et al. 2010; Huang et al. 2016). Recent research has identified strategies to build public support for nutrition policy action such as: improving public information; population-specific framing; strengthening media advocacy; and cultivation of change agents within government (Huang et al. 2016). One argument that has been adopted globally by nutrition policy advocates, but had little presence in the data we collected, was on the economic cost of poor nutrition and NCDs (Batura et al. 2015; Shekar et al. 2016).

4.2 Improving policy coherence

Evident in the understanding of the problem of food insecurity and malnutrition and the solutions identified by these policy coalitions is a tension between overarching policy objectives, as the Government of South Africa seeks to reconcile priorities of economic growth and productivity with health, social

transformation, and the right to food. The renegotiation of investment agreements by the Government of South Africa, and the explicit policy priority for achieving social and development goals in the context of trade agreements indicates that the economic policy paradigm may be changing. This presents a potential policy window for inclusion of public health / nutrition considerations into trade and investment policy, such that policy space for current and future nutrition policy interventions is protected. This changing investment policy space in South Africa and the Southern African Development Community (SADC) reflects wider concerns regarding the potential for investment agreements, including Bilateral Investment Treaties, to constrain national policy space for achieving social, health and other objectives. The United Nations Conference on Trade and Development has recently concluded that “Today, the question is not whether or not to reform [International Investment Agreements], but about the *what, how* and the *extent* of such reform” (UNCTAD 2016).

Policy coherence in this context would mean that food security and nutrition policy objectives are not undermined – and ideally are supported – by economic policy that relates to the food supply. Change in the economic paradigm that has resulted from the social policy subsystem disruption (which led to the significant changes in investment policy described in Findings) might create scope for more positive economic policy in the food system. Leveraging this opportunity to improve food security and nutrition will require acknowledgment of broader development, food security, nutrition and health objectives in economic policy objectives (including economic development, trade, investment, industrial and agricultural policies). It will also require food security and nutrition to be perceived as a domestic policy priority, to be pursued in the protected policy space. With the current dominance of the Economic Growth coalition in framing the issues, it is not clear whether nutrition and food security would be prioritized, even with increased policy space to do so. Previous research in South Africa has documented the tendency for relatively minor policy change with respect to the food supply. Even in response to the significant food security and nutrition crisis engendered by the global food price increases of 2007–09, South African food policy focused on household food access rather than changes to the food supply (Kirsten 2012; Watson 2017). This likely reflects the political expediency of maintaining the status quo, as well as the power of food system actors that benefit from the current policy structure. For example, the strong influence of business interests on South African policy priorities that has been documented elsewhere (Kirsten 2012).

This raises the question of what might incentivize increased policy priority for food security and nutrition with respect to the food supply. The research presented here clearly indicated the influence of whole-of-government policy objectives on policies across sectors, and particularly the dominance lent

to the economic growth coalition by its clear alignment to the overarching government priorities for employment and economic growth. It is possible that agencies with a whole-of-government mandate, such as the Department of Monitoring, Planning and Evaluation, or the 5-yearly African National Conference, which shapes the programme of work for government (Kirsten 2012), may have an increasing interest in improving policy coherence for food security and nutrition with respect to the food supply. In particular, due to the high social costs of food insecurity and malnutrition and the ineffectiveness of current approaches to address these (evidenced by high rates of food insecurity, undernutrition and NCDs), as well as growing global consensus that food supply-oriented policy is part of an effective response. The recent adoption by the Government of South Africa of a soft drink tax, in the face of strong industry opposition, indicates growing recognition of the importance of – and willingness to take policy action for – a food supply that supports good nutrition.

This analysis indicates that the forums for stakeholder engagement in the food policy subsystem heavily favour industry, suggesting that formal mechanisms for capacitating civil society and promoting its engagement might help to improve policy coherence. Interviewees from the Food Security and Health coalitions identified the need for CSOs to engage in more strategic advocacy for consideration of social, environmental and health issues in food security and nutrition policy making. Improving outcomes for food security and nutrition through increased civil society engagement will require increased capacity for CSO lobbying and communication in the food security and nutrition policy space. The capacity of civil society to support public interest, engage with policy issues, and bring key issues to the attention of policy makers has been identified as a significant facilitator of nutrition policy action globally (Roberto et al. 2015; Huang et al. 2016; Ruckert et al. 2016). Further research is needed to investigate the opportunities and challenges to increasing capacity of civil society actors to support more coherent food security and nutrition policy in South Africa.

Addressing the double burden of malnutrition will require a policy focus on rendering foods of *high nutritional quality* accessible geographically and financially to consumers across the income spectrum, to complement the current focus on poverty reduction. The dominant framing and beliefs in the Economic Growth and Food Security policy coalitions focus on production of (and access to) sufficient food, but not on nutritional quality. This is a global challenge; there have been repeated calls for food systems that deliver nutritional quality and not simply calories, such that they would achieve food security and nutritional objectives while not discounting other (economically oriented) food supply policy priorities (McDermott et al. 2015). Taking a nutritional quality and food security lens to the existing policy priorities, content and interests regarding the food supply in South Africa in this study

identified four specific opportunities to strengthen policy for food security and nutrition. First, the opportunity for specific changes to economic policy relating to the food supply that achieve both food security/nutrition and economic objectives, such as incentivizing small scale producers to produce foods of high nutritional value, that also create employment through their high economic value (such as fruit and vegetables). Second, creating links between producers and consumers, through markets and fiscal incentives, that make healthy and fresh foods more accessible and affordable. Third, increasing formal avenues for engagement by Civil Society in nutrition and food security policy making, as well as avenues for food security and nutrition policy makers to engage in economic policy forums that affect the food supply. Fourth, to include consideration of the nutritional quality of the food supply in policy objectives across sectors, to create a framework for policy coherence across sectors relating to the food supply.

South Africa is a co-chair of the global Sustainable Food Systems Programme, which does not currently address nutrition, but this might afford an opportunity to open a broader dialogue about relevant and appropriate policy objectives to address the pervasive nutrition challenges that South Africa faces. Another opportunity may be strategic use of public procurement. In Brazil, local public procurement for schools has played an important role in promoting food security as well as rural development, including through reduction of the costs associated with long supply chains with multiple actors (Sidaner et al. 2013).

4.3 Limitations of the study

The main limitation of this study is the limited number of interviews conducted. The selection of stakeholders is likely to have shaped the coalitions identified. However, complementing interviews with a systematic review of policy content is likely to have balanced out this risk. Further research in this space would be strengthened by including interviews with cross-cutting agencies such as the Department of Monitoring, Planning and Evaluation and the Competition Commission, with retailers, and with civil society actors. Another limitation is our focus only on national level policy. It is also likely that these kinds of policy incoherence also manifest at the provincial and local level.

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Compliance with ethical standards

Conflict of Interest statement The authors declared that they have no conflict of interest.

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References

- Adeleke, F. (2015). *Benchmarking South Africa's Foreign Direct Investment Policy*. South African Institute of International Affairs: Johannesburg.
- Baker, P., Kay, A., & Walls, H. (2014). Trade and investment liberalization and Asia's noncommunicable disease epidemic: a synthesis of data and existing literature. *Globalization and Health*, 10.
- Baker, P., Friel, S., Schram, A., & Labonte, R. (2016). Trade and investment liberalization, food systems change and highly processed food consumption: a natural experiment contrasting the soft-drink markets of Peru and Bolivia. *Globalization and Health*, 12(1), 1.
- Batura, N., Hill, Z., Haghparast-Bidgoli, H., Lingam, R., Colbourn, T., Kim, S., Sikander, S., Pulkki-Brannstrom, A.-M., Rahman, A., & Kirkwood, B. (2015). Highlighting the evidence gap: how cost-effective are interventions to improve early childhood nutrition and development? *Health Policy and Planning*, 30(6), 813–821.
- Bennett, C. J., & Howlett, M. (1992). *The lessons of learning: Reconciling theories of policy learning and policy change*. *Policy Sciences*, 25(3).
- Brooks, J. and Matthews, A. (2015). *Trade Dimensions of Food Security*. Paris, Organization for Economic Cooperation and Development (OECD) Publishing.
- De Schutter, O. (2009). The right to food: fighting for adequate food in a global crisis. *Harvard International Review*, 31(2), 38.
- Food and Agriculture Organization of the United Nations and World Health Organization. (2014). Second International Conference on Nutrition. Conference Outcome Document: Rome Declaration on Nutrition. *ICN2, 2014*(/2).
- Friel, S., Ponnampereuma, S., Schram, A., Gleeson, D., Kay, A., Thow, A.-M., & Labonte, R. (2016). Shaping the discourse: What has the food industry been lobbying for in the Trans Pacific Partnership trade agreement and what are the implications for dietary health? *Critical Public Health*, 1–12.
- Government of South Africa. (2010). *Bilateral Investment Treaty Policy Framework Review: Government Position Paper*. Pretoria: Department of Trade and Industry, Republic of South Africa.
- Government of South Africa. (2014). *National Policy on Food and Nutrition Security for South Africa*. Pretoria: Department of Agriculture, Forestry and Fisheries.
- Greenberg, S. (2017). Corporate power in the agro-food system and the consumer food environment in South Africa. *The Journal of Peasant Studies*, 44(2), 467–496.
- Hawkes, C. (2005). The role of foreign direct investment in the nutrition transition. *Public Health Nutrition*, 8(4), 357–365.
- Hawkes, C. (2015). Enhancing Coherence between Trade Policy and Nutrition Action: Implementing the Framework for Action of the Second International Conference on Nutrition, United Nations Standing Committee on Nutrition.
- Huang, T. T. K., Cawley, J. H., Ashe, M., Costa, S. A., Frerichs, L. M., Zwicker, L., Rivera, J. A., Levy, D., Hammond, R. A., Lambert, E. V., & Kumanyika, S. K. (2016). Mobilisation of public support for policy actions to prevent obesity. *The Lancet*, 385(9985), 2422–2431.
- Igumbor, E. U., Sanders, D., Puoane, T. R., Tsolekile, L., Schwarz, C., Purdy, C., Swart, R., Durão, S. and Hawkes, C. (2012). “Big Food,” The Consumer Food Environment, Health, and the Policy Response in South Africa. *PLoS Med* 9(7): e1001253.
- Jarosz, L. (2014). Comparing food security and food sovereignty discourses. *Dialogues in Human Geography*, 4(2), 168–181.
- Jenkin, G. L., Signal, L., & Thomson, G. (2011). Framing obesity: the framing contest between industry and public health at the New Zealand inquiry into obesity. *Obesity Reviews*, 12(12), 1022–1030.
- Jenkins-Smith, H., Norhrstedt, D., Weible, C. M., & Sabatier, P. (2014). *The Advocacy Coalition Framework: Foundations, Evolution, and Ongoing Research. Theories of the Policy Process*. C. M. Weible and P. A. Sabatier, Westview Press.
- Jones, A. D., & Ejeta, G. (2015). A new global agenda for nutrition and health: the importance of agriculture and food systems. *Bulletin of the World Health Organization*, 94, 228–229.
- Kirsten, J. F. (2012). The political economy of food price policy in South Africa. *Food Price Policy in an Era of Market Instability: A Political Economy Analysis*, 407.
- Labonté, R., Schram, A. and Ruckert, A. (2016). The Trans-Pacific Partnership: Is It Everything We Feared for Health? *International Journal of Health Policy and Management*.
- Margulis, M. E. (2013). The Regime Complex for Food Security: Implications for the Global Hunger Challenge. *Global Governance: A Review of Multilateralism and International Organizations*, 19(1), 53–67.
- Mashigo, K. (2014). *OECD-South Africa investment policy dialogue: Self-assessment of South Africa's investment regime in relation to the OECD Codes of Liberalisation and the principle of National Treatment*. Paris: Organization for Economic Cooperation and Development.
- McDermott, J., Johnson, N., Kadiyala, S., Kennedy, G., & Wyatt, A. (2015). Agricultural research for nutrition outcomes – rethinking the agenda. *Food Security*, 7(3), 593–607.
- Mihalache-O'keef, A., & Li, Q. (2011). Modernization vs. Dependency Revisited: Effects of Foreign Direct Investment on Food Security in Less Developed Countries. *International Studies Quarterly*, 55(1), 71–93.
- Mossallam, M. (2015). *Process matters: South Africa's experience exiting its BITs*. Oxford: The Global Economic Governance Programme, University of Oxford.
- Muzigaba, M., Puoane, T. and Sanders, D. (2016). The Paradox of Undernutrition and Obesity in South Africa: A Contextual Overview of Food Quality, Access and Availability in the New Democracy. *Food Poverty and Insecurity: International Food Inequalities*. M. Caraher and J. Coveney. Cham, Springer International Publishing: 31–41.
- National Planning Commission. (2012). *Our future - make it work: National Development Plan 2030*. Department of The Presidency, South Africa: Capetown.
- OECD (2016). *Better policies for sustainable development 2016: A new framework for policy coherence*. Paris, Organization for Economic Cooperation and Development (OECD) Publishing.
- Pelletier, D. L., Frongillo, E. A., Gervais, S., Hoey, L., Menon, P., Ngo, T., Stoltzfus, R. J., Ahmed, A. M. S., & Ahmed, T. (2012). Nutrition agenda setting, policy formulation and implementation: lessons from the Mainstreaming Nutrition Initiative. *Health Policy and Planning*, 27(1), 19–31.
- Pingali, P. (2015). Agricultural policy and nutrition outcomes – getting beyond the preoccupation with staple grains. *Food Security*, 7, 461.
- Pinstrup-Andersen, P. (2013). Nutrition-sensitive food systems: from rhetoric to action. *The Lancet*.
- Popkin, B. M., Adair, L. S., & Ng, S. W. (2012). Global nutrition transition and the pandemic of obesity in developing countries. *Nutrition Reviews*, 70(1), 3–21.

- QSR International. (2018). *What is NVIVO?*. Retrieved 31 May 2018, from <http://www.qsrinternational.com/nvivo/what-is-nvivo>.
- Reich, M. R., & Balarajan, Y. (2012). Political Economy Analysis for Food and Nutrition Security. *Washington, DC, World Bank and SAFANSI, the South Asia Food and Nutrition Security Initiative*.
- Republic of South Africa Department of Health. (2013). *Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2013–2017*. Pretoria: Department of Health.
- Republic of South Africa Department of Trade and Industry. (2014). *South Africa: Investor's Handbook 2014/15*. Pretoria: Department of Trade and Industry & Deloitte South Africa.
- Riches, G. (2016). *First world hunger: Food security and welfare politics*. Springer.
- Roberto, C. A., Swinburn, B., Hawkes, C., Huang, T. T. K., Costa, S. A., Ashe, M., Zwicker, L., Cawley, J. H., & Brownell, K. D. (2015). Patchy progress on obesity prevention: emerging examples, entrenched barriers, and new thinking. *The Lancet*, 385(9985), 2400–2409.
- Ruckert, A., Schram, A., Labonté, R., Friel, S., Gleeson, D., & Thow, A.-M. (2016). Policy coherence, health and the sustainable development goals: a health impact assessment of the Trans-Pacific Partnership. *Critical Public Health*, 1–11.
- Said-Mohamed, R., Micklesfield, L. K., Pettifor, J. M., & Norris, S. A. (2015). Has the prevalence of stunting in South African children changed in 40 years? A systematic review. *BMC Public Health*, 15(1), 1–10.
- Schram, A., Labonté, R., & Sanders, D. (2013). Urbanization and International Trade and Investment Policies as Determinants of Noncommunicable Diseases in Sub-Saharan Africa. *Progress in Cardiovascular Diseases*, 56(3), 281–301.
- Schram, A., Labonte, R., Baker, P., Friel, S., Reeves, A., & Stuckler, D. (2015). The role of trade and investment liberalization in the sugar-sweetened carbonated beverages market: a natural experiment contrasting Vietnam and the Philippines. *Globalization and Health*, 11(1), 1.
- Scott, C., Hawkins, B., & Knai, C. (2017). Food and beverage product reformulation as a corporate political strategy. *Social Science & Medicine*, 172, 37–45.
- Shekar, M., Dayton Eberwein, J., & Kakietek, J. (2016). The costs of stunting in South Asia and the benefits of public investments in nutrition. *Maternal & Child Nutrition*, 12, 186–195.
- Shiffman, J., & Smith, S. (2007). Generation of political priority for global health initiatives: a framework and case study of maternal mortality. *The Lancet*, 370(9595), 1370–1379.
- Shisana, O., Labadarios, D., Rehle, T., Simbayi, L., Zuma, K., Dhansay, A., Reddy, P., Parker, W., Hoosain, E., Naidoo, P., Hongoro, C., Mchiza, Z., Steyn, N. P., Dwane, N., Makoae, M., Maluleke, T., Ramlagan, S., Zungu, N., Evans, M. G., Jacobs, L., Faber, M., & the SANHANES-1 Team. (2014). *South African National Health and Nutrition Examination Survey (SANHANES-1)*. Cape Town: HSRC Press.
- Sidaner, E., Balaban, D., & Burlandy, L. (2013). The Brazilian school feeding programme: an example of an integrated programme in support of food and nutrition security. *Public Health Nutrition*, 16(6), 989–994.
- Thow, A. M., & McGrady, B. (2014). Protecting policy space for public health nutrition in an era of international investment agreements. *Bulletin World Health Organization*, 92, 139–145.
- Thow, A. M., Sanders, D., Drury, E., Puoane, T., Chowdhury, S. N., Tsolokile, L., & Negin, J. (2015a). Regional trade and the nutrition transition: opportunities to strengthen NCD prevention policy in the Southern African Development Community. *Global Health Action*, Vol. 8.
- Thow, A. M., Snowdon, W., Labonté, R., Gleeson, D., Stuckler, D., Hattersley, L., Schram, A., Kay, A., & Friel, S. (2015b). Will the next generation of preferential trade and investment agreements undermine implementation of the Global Action Plan for Prevention and Control of Noncommunicable Diseases? A prospective policy analysis of the Trans Pacific Partnership Agreement. *Health Policy*, 119, 88–96.
- Timmer, P. (2016). *The transformation of food supply chains: implications for food and nutrition security*, *Routledge Handbook of Food and Nutrition Security*. B. Pritchard, R. Ortiz and M. Shekar. London: Routledge.
- Timotijevic, L., Raats, M. M., Barnett, J., Brown, K., Shepherd, R., Fernandez, L., Domolki, L., Ruprich, J., Sonne, A. M., Hermoso, M., Koletzko, B., Frost-Andersen, L., & Timmer, A. (2010). From micronutrient recommendations to policy: consumer and stakeholder involvement. *European Journal of Clinical Nutrition*, 64(S2), S31–S37.
- UNCTAD. (2016). *Taking stock of IIA Reform*. Geneva: United Nations Conference on Trade and Development.
- United Nations. (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. New York: United Nations.
- Walls, H., Baker, P., & Smith, R. (2015). Commentary: Moving towards policy coherence in trade and health. *Journal of Public Health Policy*, 36(4), 491–501.
- Walls, H. L., Cornelsen, L., Lock, K., & Smith, R. D. (2016). How much priority is given to nutrition and health in the EU Common Agricultural Policy? *Food Policy*, 59, 12–23.
- Watson, D. D. (2017). The political economy of food price policy during the global food price crisis of 2006–2008. *Food Security*, 9(3), 497–509.
- WHO (2013). *Follow-up to the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases. SIXTY-SIXTH WORLD HEALTH ASSEMBLY WHA66.10 Agenda item 13.1, 13.2, 27 May 2013. Annex: Global Action Plan for the Prevention and Control of Noncommunicable diseases 2013–2020*. Geneva, World Health Organization.
- Woolfrey, S. (2014). *The SADC Model Bilateral Investment Treaty Template: Towards a new standard of investor protection in southern Africa*. Stellenbosch, tralac Trade Law Centre.



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