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Trade, food and nutrition security in South Africa: The cases of sugar and poultry

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PLAAS Working Paper 46: Trade, food and nutrition security in South Africa: The cases of sugar and poultry

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1. INTRODUCTION

The purpose of this paper is to consider the role that trade plays in food and nutrition security in South Africa. Despite an established commercial food system, South Africans experience high levels of food and nutrition insecurity – both under-nutrition and rising rates of diet-related non-communicable diseases (NCDs). The Food and Agriculture Organization of the United Nations (FAO) defines food security as ‘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’¹. This paper considers three dimensions of food security – availability, access and nutrition – and unpacks the role of trade across these dimensions at policy level and in practice in sugar and poultry, two key commodities in the food basket of resource-poor South African households.

According to the South African National Health and Nutrition Examination Survey (SANHANES-1) (Shisana et al., 2013:10), 26% of households surveyed nationally reported experiencing hunger, with another 28% of households at risk of hunger. Households in ‘urban informal’ contexts, followed by those in rural formal and then rural informal settings experienced the highest levels of food insecurity. Eastern Cape and Limpopo are the provinces with the highest proportion of food insecure people. The 2005 National Consumption Survey showed that 18% of children in South Africa were stunted, with rural and then urban informal areas most severely affected. ‘Wasting’ (from poor nutrition quality, rather than insufficient food) affected 4.5% of South African children, with 9.3% of children being underweight (DAFF, 2014:9).

At the same time, diet-related NCDs are a growing burden in South Africa. Overweight and obesity affect women disproportionately; combined these NCDs were reported to occur in 51.5% of women (DAFF 2014:9). Almost one-fifth of the population (18%) have a high fat intake, most prevalent in urban formal areas (Shisana et al., 2013:13). In 2000, an estimated 36,504 deaths (7% of all deaths) in South Africa were attributed to excess body weight, and in 2004 NCDs linked to dietary intake – cardiovascular diseases, diabetes mellitus, cancers— together with respiratory diseases contributed 12% of the overall disease burden (Igumbor et al., 2012:1). Evidence is that poor nutrition is higher in urban informal areas (DAFF, 2014:9). Low dietary diversity is very significant in rural informal areas, where 60% of the population has a low dietary diversity score (Shisana et al., 2013:13). According to DAFF (2014:15), ‘health risk factors such as obesity, high blood pressure, and high cholesterol are strongly associated with dietary intake. Five of the leading causes of death – heart disease, stroke, atherosclerosis, some cancers and diabetes – are linked to nutrition’. In South Africa, individuals and households may be affected by hunger and simultaneously suffer from diet-related NCDs.

The role of trade in food and nutrition security is a complex issue and cannot be reduced to a binary of either good or bad. There will be differential effects across countries, commodities and consumer categories. Corinna Hawkes, Professor of Food Policy at City University London, highlights that trade is not a magic bullet to achieve food and nutrition security, and that it can have both positive and negative impacts. Hawkes proposes that instead of asking whether trade is good or bad for food and nutrition security, the question should be reframed to ask what are the specific food and nutrition challenges facing a specific country, and how can trade help in realising food and nutrition security objectives².

At the same time, we must acknowledge the highly skewed global agricultural and food trade regime, which is designed to balance the various complex and competing interests of major trading countries, in particular the so-called Quad, consisting of the United States (US),

¹ www.fao.org/hunger/glossary/en

² Corinna Hawkes, presentation at workshop on ‘Interface between trade/investment policy and nutrition policy-making’ at World Public Health and Nutrition Association (WPHNA) conference, Cape Town, 1 September 2016.

European Union (EU), Canada and Japan. In the Uruguay Round (the eighth round of multilateral trade negotiations), which led to the formation of the World Trade Organization (WTO) in 1995, smaller countries were railroaded into adopting what was decided behind closed doors by a few stronger countries. The dawning of awareness of this reality led to a stalemate in the following Doha Round, as developing countries refused to accept these apparent power imbalances (Beierle, 2002; Keating, 2015). The South African government itself said that 'many concessions were made during the Uruguay Round to agricultural lobbies in developed countries ... South African producers and exporters are left at a distinct disadvantage as are a number of other less developed agricultural exporting countries' (MALA, 1998:27). Despite the negotiation deadlock, existing WTO commitments remain in place. However, the trade regime has moved on, with a shift to more bilateral economic partnership agreements (EPAs) and regional free trade areas (FTAs).

Agriculture has, at times, been used by South African negotiators as a bargaining chip in wider trade agreements, historically with the EU, as well as in more recent negotiations with the US on renewal of the African Growth and Opportunity Act (AGOA), where the poultry sector was compromised for the benefit of the automotive sector (Pressly, 2016). These power imbalances in the global trade regime may present obstacles to the realisation of national food and nutrition security objectives. They must be borne in mind as we proceed to consider what challenges face South Africa, what the objectives of food and nutrition security policy are in the country, and what room for manoeuvre exists to adapt the trade regime to meeting these objectives.

The paper starts with an overview of the global trade regime within which South Africa operates. It then looks at how trade is situated in current agricultural, food and nutrition security policy, with an overview of agro-food trade in South Africa and trends over the past decade. The core of the paper focuses on sugar and poultry, for more detailed investigation, providing an overview of: commodity specific trade and regulatory regimes; trade and production impacts on availability; employment and livelihoods in relation to trade dynamics; trade impacts on nutrition and health in the specific commodities; and reflections on the role of trade in these selected commodities.

Why focus on sugar and poultry? To look at the specific effects of trade, it is necessary to get down to specific commodity level, rather than remaining at the aggregate level. Sugar and poultry are two very significant products in the typical food basket of South African households across income categories, but especially for resource-poor households (BFAP 2016; Smith and Abrahams, 2016). Both of these products have been in the public eye in recent times: sugar for a government decision to impose a tax on consumption, starting with sugar-sweetened beverages (SSBs); and poultry for the pressure the industry has come under in the face of cheap imports of frozen cuts. More detailed analyses of these sectors and the role of trade reveal a lot of complexity, with no easy resolution.

Methodology

The research is based on a combination of a review of published works and government documents, and primary data from interviews with key stakeholders. Fourteen semi-structured interviews, each 1–1.5 hours in length, were conducted with 22 actors in the South African food policy space in August and September 2016, in Cape Town, Johannesburg and Pretoria. Participants included 12 national-level government food policy actors from agriculture (n=6), economic policy (n=3) and health (n=3); and 10 food industry stakeholders, including food company executives, food industry consultants and food science technicians. Participants were recruited through formal letters of invitation to the heads of agencies. Interviews were requested with three investment banks, as the largest source of investment in food supply in South Africa, but they declined the opportunity.

The semi-structured interviews were conducted by the authors, who sought primarily to elicit key stakeholders' opinions on the relationships and areas of overlap in food security, nutrition

and economic/trade policy-making. Questions included: who are the actors involved in setting policy agendas? What are the current policy priorities? What contextual factors influence food security, nutrition, health and economic/trade policy-making? What are the perceptions regarding opportunities for policy coherence between food security, nutrition and economic/trade sectors?

We complied with University of Western Cape (UWC) ethics procedures and have kept respondent identities confidential. This is one of three related papers, based on the same interview material but from different angles. Hara et al. (2017) consider South Africa-Southern African Development Community (SADC) formal/informal fish trade, investment and market dynamics, with reflections on the implications for food and nutrition security. Thow et al. (2017) focus on coherence between economic policy, nutrition and food security in South and Southern Africa.

2. AGRO-FOOD TRADE REGULATORY FRAMEWORK IN SOUTH AFRICA

South African agro-food trade policy framework is shaped by its membership of the WTO. The WTO creates a framework for trade policies with five key principles³:

- **Non-discrimination:** This includes the most favoured nation (MFN) rule and the national treatment policy. The MFN obliges WTO members to treat imports from any other member equally to the way they treat imports of their 'most favoured' trading partner. National treatment policy means imported goods should be treated no less favourably than domestically produced goods, once they arrived in the country. This is to prevent the use of non-tariff barriers to trade.
- **Reciprocity:** Concessions offered in trade agreements should be fairly equal between the parties. This principle aims to limit free riding from unilateral liberalisation.
- **Binding and enforceable tariff commitments.**
- **Transparency:** Publication of trade regulations and provision of defined information on request.
- **Safety values:** Trade may be restricted in the basis of environmental or health threats.

As part of its membership, South Africa ratified the WTO Agreement on Agriculture (AoA) which came into force in 1995. This was the first time agriculture was systematically included in the rules governing multilateral international trade. The AoA has three main parts: market access, export competition and domestic support. The AoA required countries to convert non-tariff barriers into tariffs and to reduce those tariffs over time. It set reduction commitments for export subsidies and certain kinds of domestic support, and it established a set of reduced commitments and exemptions under the heading, 'Special and Differential Treatment' for developing countries (Beierle, 2002:iii).

It is generally recognised that the AoA was structured to favour the interests of the world's four largest trading entities; the US, EU, Canada and Japan (Madeley, 2002; Tilzey, 2006; Keating, 2015). It allowed the US and EU, in particular, to maintain the essence of their producer subsidies in their domestic farm programmes: the Common Agricultural Policy in the EU and the Farm Bills in the US. The AoA simultaneously forced open markets in other countries through minimum market access requirements. For industrialised countries, trade plays a very important role in removing surpluses and thereby maintaining stability in their domestic markets. Production and prices in global agricultural markets are, therefore, determined by surpluses of the largest producers, who are subsidised, directly or indirectly, to maintain this system (Bruinsma, 2003; FAO 2015).

³ https://en.wikipedia.org/wiki/World_Trade_Organization#Principles_of_the_trading_system

The result of the AoA was a limited decline in the overall aggregate measure of support to agriculture in Organisation for Economic Cooperation and Development (OECD) countries⁴ over the period of implementation, from 37 to 30%, where it stagnated (OECD, 2005). In the US, subsidies to the value of US\$322 billion were paid between 1995 and 2014.

Most subsidies have gone to the largest and most financially secure operations, with the top 1% of recipients getting 26% of commodity payments and the top 10% receiving 77% of payments⁵. Maize producers received by far the largest amount of commodity specific subsidies (US\$94 billion between 1995 and 2014), followed by wheat, cotton and soya bean⁶. Public information on EU farm subsidies is fragmented but subsidies are at around 58 billion Euros per year and 80% of subsidies go to 20% of agribusinesses and large landowners⁷.

At the same time, developing countries experienced uneven impacts, with a general tendency towards increasing imports and stagnating exports (FAO, 2015). Agricultural exports from developing countries were mainly destined for saturated markets in developed countries, with little responsiveness in demand. Rising output for tropical products, such as coffee, tea and cocoa met with inelastic demand in developed countries, resulting in persistent downward pressure on prices, and export earnings increased only modestly, if at all. Simultaneously, agro-food imports increased.

Until the 1980s, developing countries tended to have an overall agricultural trade surplus. But since the mid-1980s, this has turned into a deficit, which has widened and is expected to continue doing so. A declining agricultural trade balance is not necessarily an indicator of a deteriorating economic situation, but may be the case where scarce resources are channelled into food imports and per capita consumption is not increasing.

Summary of South African WTO agricultural commitments

Export subsidies to be reduced by 21% in quantity terms and 36% in value terms from 1986–90 base period. In 1997 the government ended the General Export Incentive Scheme, reducing export subsidies to zero.

Domestic support with a potential impact on production and trade to be reduced by 20% from 1986–88 base period.

Tariffication – conversion of all non-tariff border measures (e.g. import permits) to tariffs and bound against increases. Bound tariffs to be reduced by 36% and at least 15% per tariff line over the implementation period. Applied tariffs brought down to levels generally lower than requirements.

Market access – minimum market access opportunities equal to 3% of domestic consumption, growing to 5% over the implementation period, provided at a lower in-quota tariff rate. Fifty-three product categories had minimum market access requirements.

Source: MALA, 1998:26

⁴ The OECD is an international organisation of 30 of the wealthiest countries.

⁵ <https://farm.ewg.org/progdetail.php?fips=00000&progcode=totalfarm&page=conc®ionname=theUnitedStates>

⁶ <https://farm.ewg.org/region.php?fips=00000®ionname=theUnitedStates>

⁷ <http://www.debatungeurope.eu/focus/arguments-for-and-against-the-common-agricultural-policy/#.WXRjnulLfIU>

According to a senior official in the Department of Agriculture, Forestry and Fisheries (DAFF) International Trade Relations Directorate, 'trends show that developing countries' imports are increasing, and developed country exports are increasing. These are partly the result of structural internal issues, and partly due to the dominance of developed countries in trade fora, for example the WTO'⁸.

South African agricultural trade policies and agreements must comply with the WTO AoA. Within this framework, South Africa has negotiated a number of regional and preferential trade agreements. Key trade agreements are the Southern African Customs Union (SACU)⁹, the Southern African Development Community Free Trade Area (SADC FTA), and the SA-EU Trade, Development and Cooperation Agreement (TDCA); now revised as part of the EPA that was signed in June 2016 between the EU, the SACU countries and Mozambique (known collectively as the SADC EPA group) (European Commission 2016). South Africa, as part of SACU, also has agreements with the European Free Trade Association (EFTA)¹⁰ and Mercusor¹¹, and is in the process of finalising a preferential trade agreement with India. SADC is in the process of negotiating a Tripartite FTA with the East African Community (EAC) and Common Market for Eastern and Southern Africa (Comesa). Finally, South Africa benefits from the Generalised System of Preferences (GSP) and the US African Growth and Opportunity Act (AGOA) (Vickers, 2014). The GSP is a formal system of exemption from the more general rules of the WTO, in particular the MFN principle. The GSP exempts WTO members from MFN to allow for differential tariffs for least developed and most developed countries¹².

According to an official in the DAFF Trade Directorate, 'These agreements are permanent. We can renegotiate, but there are opportunity costs ... Decisions on liberalisation were not particularly foresighted, for example the tariff concessions in the WTO and TDCA. There wasn't the thinking that agriculture could lose, because we thought it was very competitive. We thought that we were 'invincible' in domestic production of poultry and sweets, now domestic production is struggling. It lasted for 10 years and then we were swamped ... There wasn't thinking of the future agriculture in the negotiations. At the time, agriculture wasn't seen as an economic priority, we were willing to trade it off'¹³. This should, however, be placed in the context of negotiations taking place at a time when the newly democratic government was showing its openness to the world and to investments¹⁴, and where white commercial agriculture had lost significant influence in the transition (Bayley, 2000).

Overview of SA agricultural trade

South Africa is food secure at the macro (national) level, with a positive agro-food trade balance. This means more is exported than imported across products/commodities. Different products have a different trade profile. Fruit and wine are the leading exports. But a significant portion of what people consume daily has an imported component. The Pietermaritzburg Agency for Community Social Action (PACSA) tracks 36 items in its food basket, based on what people currently eat and used for monitoring prices (Smith and Abrahams, 2016:70). At present, at least half these products are mostly or partly imported, including rice, wheat and flour for bread, pasta, canned beans, canned fish, chicken parts, polony and miscellaneous processed products (such as beef stock, soup, curry powder, coffee and palm oil for Cremora).

⁸ Interview, official in DAFF Trade Directorate, Pretoria, 7 September 2016

⁹ SACU, formed in 1910, is the oldest existing customs union in the world, between South Africa, Botswana, Lesotho, Namibia and Swaziland.

¹⁰ Switzerland, Iceland, Norway and Liechtenstein

¹¹ Argentina, Brazil, Paraguay and Uruguay

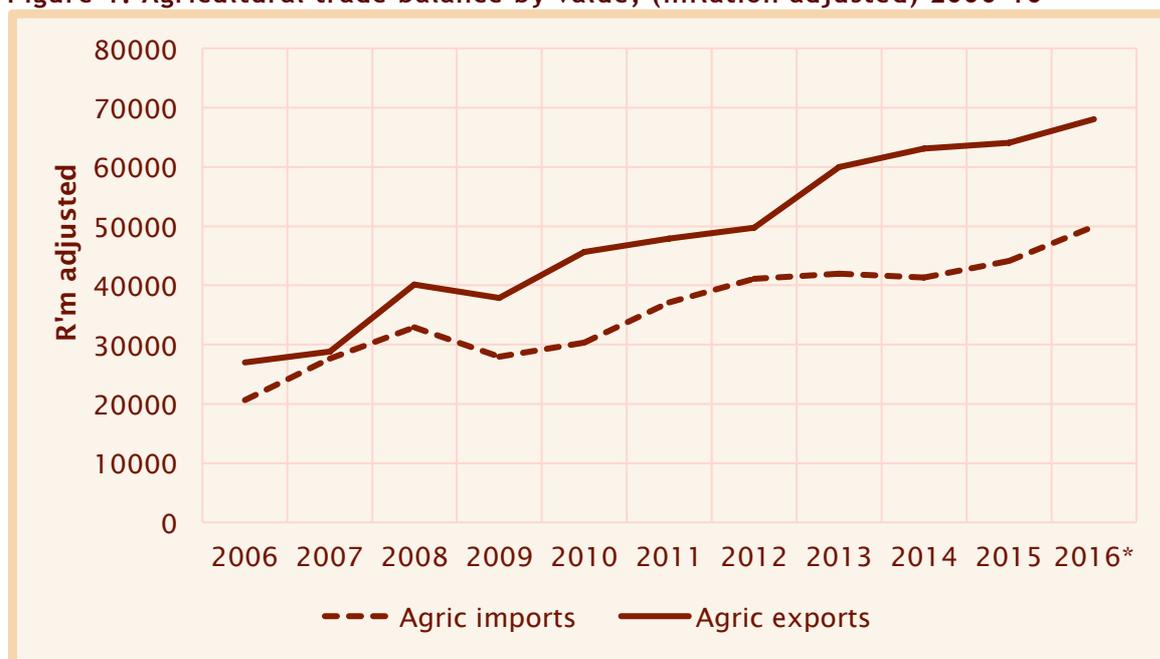
¹² https://en.wikipedia.org/wiki/Generalized_System_of_Preferences

¹³ Interview, official in DAFF Trade Directorate, Pretoria, 7 September 2016

¹⁴ Interview, official in DTI International Trade and Economic Development Division, Pretoria, 7 September 2016

Since 2006 there has been fairly rapid growth in both imports and exports, even after inflation is taken into account¹⁵ (Figure 1). During this time, agricultural imports have fluctuated between 66 and 96% of the value of exports. Since 2007, there has been a gradually widening positive trade balance in agro-food products. In the past ten years, processed exports as a share of total agricultural exports has declined from over 40% to around one-fifth, although no data has been provided since 2013 (DAFF, 2017:80). Primary agricultural products have a strongly positive trade balance, while secondary (processed) products have had a negative balance, more often than not, since 2007 (Purchase, 2015:38–43).

Figure 1: Agricultural trade balance by value, (inflation adjusted) 2006-16



Source: DAFF, 2017:80; inflation rates <http://www.inflation.eu/inflation-rates/south-africa/historic-inflation/cpi-inflation-south-africa.aspx> adjusted to 2006 prices. *preliminary

There are some problems with comparing exports and imports of agricultural products in isolation from other parts of the economy. In particular, successful agricultural exports often rely on a high import component of inputs. These include chemicals for fertilisers and pesticides, machinery, packaging and proprietary genetics. Exchange rates are an integral part of market liberalisation, with a weaker rand favouring exports.

SACU exports are led by horticulture¹⁶ and wine (43% of total value of agricultural exports in 2016). Other main exports are maize, wool, undenatured ethyl alcohol¹⁷ and products, and sugar and sugar confectionary. None of these were more than 4% of total agricultural exports in 2016 (DAFF, 2017:81). Major export destinations in order are the EU and the United Kingdom; Zimbabwe, Mozambique and Zambia; and the US, with Hong Kong rising (DAFF, 2017:81).

Major agro-food imports are rice, poultry (meat and edible offal), wheat and palm oil, with maize the largest import in 2016; maize is generally not a major import, but has become so because of the drought. Apart from the unusual maize imports in 2016, imports of particular products are not higher than 7% of total imports in a given year.

¹⁵ In official statistics, agricultural imports are not separated into processed and unprocessed products. Exports were disaggregated until 2013, after which only combined information is provided (DAFF, 2017:80).

¹⁶ Citrus; grapes; preserved fruit and nuts; fruit and vegetable juices; apricots, cherries, peaches, plums and sloes; dates, pineapples, avocados, figs, guavas and mangoes.

¹⁷ Produced from fermentation of sugars by yeasts, or via petrochemical processes.

3. TRADE DIMENSIONS OF AGRICULTURAL, FOOD AND NUTRITION SECURITY POLICY

South Africa's ratification of the WTO precedes and provides the framework for post-1994 trade-related dimensions of agricultural policy. South Africa does not have a formal, ratified agricultural policy. The 1998 agricultural policy (MALA, 1998) is labelled as a discussion document and was never officially released in final form even though it is presented as the policy on the DAFF's website. However, it does provide an enduring policy framework within which programmes have been developed.

The 1998 policy discussion document indicates a strategy based on an outward-looking approach, with the global arena 'seen not only as a market for output, but as a tool for effecting efficiency by exposing our producers to international competition' (MALA, 1998:23). The policy document is based on the Growth, Employment and Redistribution (GEAR) macroeconomic framework that was adopted by government in 1996, and which emphasised an export-led growth strategy with foreign direct investments. The agricultural policy document proposes using the WTO framework to eliminate market access barriers for South African exports, and to protect local agricultural industries against unfair trading practices.

The policy document recognises that in seeking improved market access for exports, South Africa will be required to offer concessions in terms of improved access to the domestic market for imports, in line with WTO requirements. Tariffs are considered to be the main tool for the protection of local industries within the WTO commitments. The policy document proposes tariffs be limited to protection against dumping and other unfair trading practices; tariffs should not protect industries from 'ordinary' competition.

The documents states that variable import duties within the bound rates will be used to reduce price variability on certain commodities, rather than to increase protection (MALA 1998:31). There is some room in the WTO commitments to impose additional tariffs on products over and above bound levels to deal with a surge in imports, but only if ordinary tariffs and anti-dumping duties are not justified (this latter is not clear but this is how it is stated in the document, MALA 1998:31). Overall, the policy document focuses on expanding South African agricultural exports, and imports are viewed as a necessary concession to enable this export-led growth. Imports may also widen supply options and may be cheaper than domestic products.

Despite this policy not being formally concluded, it has provided the framework for agricultural programming since then, with no fundamental change in policy direction. The National Development Plan (NDP), launched in 2011 and meant to be an overarching policy framework for the whole country and all sectors, continues in this vein. The NDP is not evenly accepted or applied, although it does have some influence as government departments begin selectively to integrate its ideas into their plans and budgets.

The NDP does not consider the role of trade in agriculture in much detail, although it proposes that South Africa's national food security goal should be 'to maintain a positive trade balance for primary and processed agricultural products and not to achieve food self-sufficiency in staple foods at all costs' (NPC, 2011:210). The NDP also proposes investigation into integrated regional food security strategies that can contribute to greater supply and price stability (NPC, 2011:211).

The Agricultural Policy Action Plan (APAP) 2015–2019, which is aligned with the NDP, identifies key crops and targets for investment: poultry/soybean/maize integrated value chain, red meat, wheat, horticulture, biofuels and forestry (DAFF, 2014a). With regard to trade, the focus is on finding ways to increase export market access for smallholder farmers. The aim is to provide training and technological upgrading to enable these farmers to meet export market

requirements (DAFF, 2014a:89). However, the plan does not consider the role of imports in relation to these or other agricultural sectors.

On trade, DAFF's 2014 National Food and Nutrition Policy proposes strategic use of market interventions and trade measures, which will promote food security (DAFF 2014:6), although these are not defined explicitly in the policy. DAFF defers to the Department of Trade and Industry (DTI) on trade policy. According to the food and nutrition security policy, household food security is threatened by globalisation and the international trade regime, amongst other things (DAFF, 2014:3), but this is not elaborated on in the analysis. The policy says one determinant of food availability is the country's ability to import food (DAFF, 2014:12).

It indicates that agro-food imports are growing: 'South Africa has always relied on imports to meet its wheat and meat requirements but is currently importing significantly more agricultural products than it did just five years ago' (DAFF, 2014:12). Possible negative impacts of the trade regime are, therefore, alluded to, but not elaborated on or integrated into the analysis of food and nutrition security. The policy suggests that subsidies and tariffs could be used to protect and support domestic production (DAFF, 2014:16) but this is counter to the thrust of current agricultural trade policy.

The DTI's Trade Policy and Strategy Framework indicates that 'trade policy is an instrument of industrial policy. It must support industrial development and upgrading, employment growth and increased value-added exports' (Vickers, 2014:2). It says labour intensive production has contracted due to imports, with a bias towards capital and high-skill intensive growth (Vickers, 2014:4). Developmental trade policies will encourage and upgrade value-added, labour-absorbing industrial production (Vickers, 2014:4). Tariffs will be assessed on a case-by-case basis and this is the role of the International Trade Administration Commission (ITAC). There is therefore no *a priori* position on tariffs. Tariffs on mature upstream input industries could be reduced or removed to lower the costs for downstream, labour-creating manufacturing. This could include agricultural products for manufacturing. Downstream tariffs could be raised to protect employment and value addition (Vickers, 2014:5).

The Department of Health (DoH) does not deal with trade or food supply issues, even though under-nutrition is a key challenge for the department. Issues of food supply and availability are left to DAFF. DoH interventions to reduce under-nutrition are limited to medical support in severe cases and community nutrition programmes (DoH 2013).

Overall, then, the focus of trade policy is on exports and a positive agro-food trade balance. There are trade-offs between actual food production and income generation to enable purchase of food produced everywhere. There is logic to this but there is an assumption that export-oriented industries will continue to create new labour, and that this option carries the lowest opportunity cost amongst the available alternatives.

There are, therefore, risks associated with making this decision. This is not to say the decision is wrong in principle, but it requires a counter-balance, with the maintenance of domestic production capability and the protection and development of essential/strategic sectors, which can be defined, based on a nutritious and diverse diet accessible to the whole population, according to their requirements. While trade is considered in policy to have positive benefits for food security, especially by generating incomes, the nutritional quality of traded products is not directly considered. Two assumptions underpin this:

- The primary issue for South Africa is availability of and access to carbohydrates for basic energy, with micro-nutrients a lesser factor at present;
- Health and safety standards are adequate to ensure nutritional aspects of food are regulated.

These will be interrogated in the context of specific commodities, viz. sugar and poultry.

4. SUGAR CASE STUDY

Background

White sugar – along with maize meal, rice, cake flour and cooking oil – is one of the ‘big foods’ that are an essential in the food basket of poor households. Sugar constituted about 7.4% of the cost of PACSA’s food basket in September 2016 (Smith and Abrahams, 2016:20). The average per capita consumption of sugar in South Africa has risen more than 10% from 1990–94 to 2012–16, although per capita consumption reached a peak in 2002 before dropping back and has been more or less stagnant since 2011 (DAFF, 2017:97). These figures refer only to consumer purchases and consumption of packaged sugar.

But sugar is also ubiquitous in packaged food products. The South African market for SSBs¹⁸ is huge, valued at R61.7 billion in 2015 (Euromonitor, 2016). Sugar confectionery, and other products containing high amounts of sugar, including baked goods, biscuits and snack bars, breakfast cereals and ice cream had a combined value of R37 billion in 2015 (Euromonitor, 2014; 2015a,b,c,d).

The sugar industry is a complex one. It operates in a global environment of chronic overproduction, supported by producer subsidies in some of the major producing regions, including Brazil and the EU. It is highly regulated by special agreements, both globally and domestically, that have enabled domestic producers to maintain production and have facilitated regional production and market integration. Article 2 of the SADC Sugar Agreement states that one of the objectives of the agreement is ‘to promote, within the region, production and consumption of sugar and sugar-containing products’ (SADC, 2011:92).

Three big millers – Tongaat Hulett, Illovo and TSB – dominate the South African sugar industry with an estimated 85% of the market between them (Chisanga et al., 2014; Dubb, 2015). It is recognised as the most concentrated food processing sector in South Africa (Stats SA 2011:23). In rejecting a merger between Tongaat Hulett and TSB in 2000, the Competition Tribunal characterised the industry as oligopolistic, with collusion and market segmentation (Dubb, 2015:14). As a result, although South Africa’s cost of production is low, the domestic sugar price exceeds the world sugar price (Ziba et al., 2017:vi).

This policy of seeking increased sugar consumption and production is based on considerations of wider economic growth and the benefits which flow from that in the form of employment and incomes. In this approach, sugar is viewed without question as a contributor to food security. Sugar is a form of food in the sense that it contributes – as indicated above – to the carbohydrate pool available to households, including resource-poor households.

On the other hand, sugar is widely recognised as a form of ‘empty calories’, which provide energy but limited additional nutrients (Joubert, 2012:143). Government health policy recognises this and a tax on sugar has been proposed to reduce consumption.

This section considers the role of the sugar trade in structuring access to sugar to South African households, as a cheap source of carbohydrates, and the implications for food and nutrition security. It starts with an overview of the trade regime and the regulatory framework governing the sugar industry in South Africa and the region, and looks at trends in production and trade within this regime. It then reviews employment and livelihood trends and trade-offs in the context of a liberalised trade regime. The issue of the nutrition and health dimensions of increased availability of sugar is considered in the context of sugar as a cheap source of food energy for resource-poor consumers.

¹⁸ Including carbonates (75% of the total), sports and energy drinks, concentrates and ready to drink tea, but excluding bottled water and juice (Euromonitor, 2016).

Regulatory and trade regime

Since the beginning of the modern sugar industry globally, producer subsidies have led to overproduction. Longstanding efforts have been made to control sugar prices globally. The International Sugar Agreement (ISA), to which South Africa was a party, was established in the 1930s in an effort to limit sugar exports, but it was not entirely successful and was eventually disbanded in 1985 (Dubb, 2015:5). The national agricultural regulatory system as it developed in South Africa was governed by the 1937 Marketing Act. Control boards, statutory roles for cooperatives, and marketing schemes all emerged from this Act. However, sugar cane and products were controlled under sector-specific legislation, separately from the Marketing Act (World Bank, 1994:64). The Sugar Act of 1936 established the South African Sugar Association (SASA) and private interests were granted statutory regulatory powers. A Sugar Industry Agreement (SIA) covered quantitative control over production through quota allocations to growers, regulation of cane supply to mills, a two-price pool system for domestic and export sales proceeds, cost responsibility for transport of cane from farms to mills, disposal of sugar exports, pooling of proceeds and a revenue-sharing formula between growers and mills (the 'division of proceeds'), determination of sucrose content, and levies to cover administrative costs (World Bank, 1994:77).

The sugar industry managed to avoid the wholesale agricultural deregulation of the 1980s and 1990s and was excluded from legislative reforms that covered most agricultural sectors (World Bank, 1994), including the Marketing of Agricultural Products Act of 1996, which deregulated agricultural marketing as a whole. The sugar industry was able to prevent the dismantling of the regulatory structure through arguing that the global conditions for treating sugar as a special case remained: large global price distortions, due to subsidies would produce dumping and destroy the domestic industry. The argument was framed as one of cheap food from imports versus jobs and production. This had additional traction because the industry could point to their longstanding role in establishing a viable small-scale¹⁹ black outgrower sector (McIntosh and Vaughan, 1996; Dubb, 2015; and see below).

The sugar industry launched a pre-emptive strategy of limited 'self-deregulation' by amending the SIA in 1994 and replacing it with a new agreement in 2000. Government price controls were abolished and the sugar pricing system was adjusted. However, this was structured in such a way that it dampened price competition between the big millers, who also benefited from retaining all by-products for their own use (Dubb, 2015). Single-channel export marketing continued (through the South African Sugar Export Corporation), with millers exposed to the world market, based on their production and not the destination of their product (Dubb, 2015:14). Tariffs shifted from import parity with domestic prices to prices tied to the world market but adjusted upwards, to account for subsidies in other countries. In practice, these reforms led to greater power to the millers and a collapse of smallholder production (Dubb, 2015). More detail is provided in the section on employment and livelihoods below.

Key legislation specific to sugar include the Sugar Act No 9 of 1978, as amended, and the SIA of 2000. These provide statutory powers of self-governance by industry, and empower SASA to export bulk raw sugar through a single channel export mechanism (Conningarth Economists, 2013). The Sugar Act falls under DTI, while other agricultural products fall under DAFF. A sectional review of the Sugar Act and SIA has been underway for the past 13 years and it remains unclear when amendments may be published for public comment (Sikuka, 2017:13). The review may decentralise industry-wide governance into vertical 'slices' comprising particular mills, their supplier growers and downstream processing, thus dismantling the miller-grower division and accentuating the monopsony that exists in millers' bargaining power with growers. South Africa will be 'carved out' as a specialised enclave of production and consumption (Dubb, 2015:19–20).

¹⁹ 'Small-scale' is used here in Cousins' sense of business enterprise size, which can be measured in turnover, as distinct from 'smallholder', which refers to land holdings (see Cousins, 2014).

As indicated above, sugar in South Africa is exempted from most standard trade agreements and has its own special dispensation to deal with chronic global overproduction and producer subsidies in a number of countries, although the SACU and SADC regional trade agreements do include sugar. SACU operates as a single trading bloc and sugar tariffs are set according to a dollar-based reference price (DBRP) for the whole customs union (see below). Trade between SACU members is tariff and duty free, but with safeguard provisions available. Swaziland and South Africa are major sugar producers within SACU.

The SADC Protocol on Trade has a separate dispensation for sugar under Annex VII (the Sugar Cooperation Agreement) (SADC, 2011:91–94). It allows for the imposition of tariff and non-tariff barriers to protect domestic industries and to regulate sugar trade within SADC. The Agreement aimed for full trade liberalisation of sugar by 2012, but depending on a review of global market conditions. SACU's market is opened up to minimum access for SADC surplus sugar producers (including SACU producers), allocated according to each country's share of total net surplus production in the region. Minimum market access to SACU started at 45,000 tonnes in the first year, going up to 138,000 tonnes in the third year and beyond. Over and above this, non-SACU SADC surplus sugar producers are allocated an additional 20,000 tonnes per year duty free into SACU.

Trade agreements with the EU do include some lines of sugar and sugar products for phased tariff reduction. However, a number of product lines for cane and beet sugar in solid form (HS1701) and 'other sugars' (HS1702) were excluded from tariff reductions in the original SA-EU TDCA²⁰ and these exclusions were carried over into the new EU-SADC EPA agreement signed in 2016 (European Commission, 1999; European Commission, 2016).

Trade and production trends

The area planted to sugar cane in South Africa has gradually declined since the initial industry-driven processes of deregulation, and in 2016/17 stood at around 86% of the area planted in 1997/98. The amount of cane produced in 2016/17 was just 66% of that produced in 1997/98, indicating declining farm productivity. There is a fairly consistent overall rising trend in real producer prices and gross value (DAFF, 2017:27).

A key feature of the sugar economy in this period is regionalisation, with the big South African producers expanding into Mozambique, Malawi, Swaziland, Tanzania and Zambia and dominating the regional sugar economy. For example, in 2014 Illovo (now a wholly-owned subsidiary of Associated British Foods) accounted for 100% of sugar produced in Malawi and 93% in Zambia (Illovo, 2014).

²⁰ See Annex IV List 7 and Annex VI List 4 for products that are excluded from tariff reductions and which are to be periodically reviewed (European Commission, 1999).

Table 1: Key characteristics of selected sugar products markets and trade

	Sugar	Sugar confectionary	Sugary carbonated beverages	Ice cream
Domestic market size value (R'bn) 2015	14	5.3	46.5	2.8
Domestic market size volume (t) 2015	1,334,600	60,890	4,032,400 (kl)	45,622
Domestic vol. % growth 2010-15	6% 2009-14	13%	12%	8%
Corporate concentration in domestic market, 2015	TSB 29-35% Illovo 24-30% Tongaat Hulett 25-26%	Tiger 49% Premier 8% Candy Tops 7%	Coca Cola 72% Pioneer 5%	Unilever 43% R&R 34%
Top 5 corporate share by value % 2015	87 [2011]	71	84	80
Import value (R'm) 2015	4,149	719	941	100
Import value as % share of domestic market 2015	29.6	13.6	3.2	3.7
Trends in import value share, 2006-15	Sharp rise from 2009	Peak at 22% in 2013, then drop back to lower than 2006 levels	Gradual increase	Consistent growth
Import volume (t) 2015	608,176	32,224	82,328 kl	3,334
Trends in import volume	Sharp sustained rise after 2006	Sharp rise after 2002, plateau from 2007 at around 3x pre-2002 levels	Gradual growth to 2011 then sharp rise	Gradual growth to 2010 then sharp rise
Main source of imports and sourcing trends	Americas and Africa both growing; drop in Americas since 2013	Europe sharply to 2004, then drop back, Asia and Africa rise (from 2008 for Africa)	Europe, with jumps 2004 and especially 2011	Asia from 2003, plus Europe from 2011
SA exports to SADC volume (t) annual average (years)	438,657 (2009-15)	31,099 (2009-15 ex 2010 outlier)	141,421 (2010-15)	7,489 (2010-15 ex 2011-12 outliers)
SA exports to SADC volume trends	Volatile but gradual upward trend from 1990s	Sharp growth after 2008	Gradual growth to 2012 then sharp rise	Gradual growth to 2008 then very sharp rise

Sources: Composite from Euromonitor reports and DTI trade statistics database; Stats SA 2011 (on sugar)

In South Africa, the three big sugar millers, plus a few smaller ones, produce bulk and packaged sugar for domestic and export markets. Retailers and other manufacturers tend to stay out of the packaged sugar market, instead focusing on value addition on bulk sugar. Sugar is ubiquitous in processed products. In these markets, Tiger Brands is dominant in sugar confectionary, Coca Cola in SSBs and Unilever in ice cream. In addition, Pioneer Foods and Tiger Brands hold a combined 55% of the breakfast cereals market and 40% of the baked goods, biscuits and snack bar markets (Euromonitor, 2015a,b,c). These products also generally contain high levels of added sugar. Table 1 provides market and trade information for sugar, sugar confectionary, sugary carbonated beverages and ice cream.

The sugar industry is characterised by chronic overproduction, with exports to remove surpluses. Typically about 25–40% of production is exported, with quite a lot of volatility based on year-to-year changes in production volumes. Linked to declining production volumes, there has been a very sharp decline in export volume since 2006 (albeit uneven, from year to year); 2011/12 was a historic low for sugar exports from South Africa, with a slight increase since then, but generally still lower than the period prior to 2011/12 (DAFF, 2017:27). Since 1996, sugar's share of total agricultural exports declined from 10 to 4%, moving it from the largest single agricultural export to the fourth largest (Williams, 2014:9).

Export profits are lower than in domestic markets, as a result of subsidy-induced oversupply on global markets. EU sugar sector reforms have resulted in a significant drop in prices. These reforms continue and have the dual effect of reducing export earnings for southern African and other countries that export to the EU, as well as potentially increasing imports from the EU as prices for EU producers in external markets become relatively better in comparison with internal EU prices. While the EU is currently a major export market for Swaziland (SSA 2016:8), Swaziland is likely to prefer to sell into the SACU market, rather than into the EU, as prices decline in the latter. Exports are built into the regulatory structure of the sugar industry, allowing the industry to continue overproducing. South Africa will always export sugar surpluses, regardless of world prices, because domestic regulations determine the price paid to cane growers, based on a revenue formula derived from domestic and export markets in a given season (Sikuka, 2017:5).

South African raw sugar exports are presently mainly into SACU (Namibia, followed a long way behind by Botswana and Lesotho), although in particular years the US, Indonesia, Japan, Bangladesh and other distant countries have been significant buyers. Refined sugar exports are overwhelmingly into SADC (Sikuka, 2017:6-7).

On the import side, domestic production of refined sugar is protected by a tariff system centred on the DBRP²¹, which sets the level of the South African/SACU tariff on sugar (Figure 2). The DBRP is based on the long-term (10-year) average No 5 (London) refined white sugar²² price adjusted for protectionist policies and import freight costs (Conningarth Economists 2013:44). The DBRP is the lowest price an importer will pay for sugar imports. If import prices are lower than the DBRP, the importer will have to pay a levy of the difference between the import price and the DBRP.

The DBRP was increased in 2008 and 2014, and in 2015 there was an increase in sugar customs duty for non-SACU imports, including from SADC, EU and EFTA (Sikuka, 2015:6–7). Figure 2 shows that the domestic retail price closely tracks the world price. If there is a consistent downward move in world sugar prices, the tariff will be adjusted downwards. In this way, the domestic retail price is determined by the global price (albeit a skewed and rigged price because of high subsidies).

²¹ Thanks to Alex Dubb, researcher at the Institute for Poverty, Land and Agrarian Studies (PLAAS) for discussions on understanding these processes.

²² Raw sugar is traded through the No. 11 contract on the Inter-Continental Exchange (ICE) in New York.

Figure 2: World sugar prices, South African domestic retail prices and tariff level 2006-15



Sources: tariffs - ITAC; world prices, <http://www.investing.com/commodities/london-sugar-historical-data>; domestic prices constructed from Euromonitor market value and volume data and US\$/ZAR exchange rate, <http://www.usforex.com/forex-tools/historical-rate-tools/yearly-average-rates>

As indicated, there is a fairly wide gap between the world price of refined sugar and the domestic retail price. In 2015 the gap was more than 100% of the world price. This is partly accounted for by the costs associated with bringing sugar to the market. However, since most domestic consumption is of domestic products, local retail prices appear to be higher than necessary to cover transport and logistics costs. A number of downstream value chain actors must account for this wide gap. The millers, themselves, sell at high prices into the industrial market, which accounts for around 18% of the total market²³ (Conningarth Economists, 2013:39).

Table 2: Retail distribution market share by value (%) of selected processed products 2015

Product	Modern grocery/ mixed retailers	Traditional retailers
Sugar and sugar-based processed products		
Sugar	70.0*	*
Sugar confectionary	72.4	22.0
Carbonated sugary beverages	77.1	11.8
Ice cream	74.9	25.1
Cereal-based processed products (except maize)		
Breakfast cereals	90.5	8.0
Baked goods	65.3	33.0
Biscuits and snack bars	83.7	15.2

Source: Euromonitor reports

*No detailed information on market share for sugar; 70% is total retail share of sugar market in 2015.

Industrial buyers (such as Coca Cola, Nestlé, Tiger Brands, Pioneer Foods) exert an influence on prices (FAO, 2009), though no work has been done to look at this in South Africa.

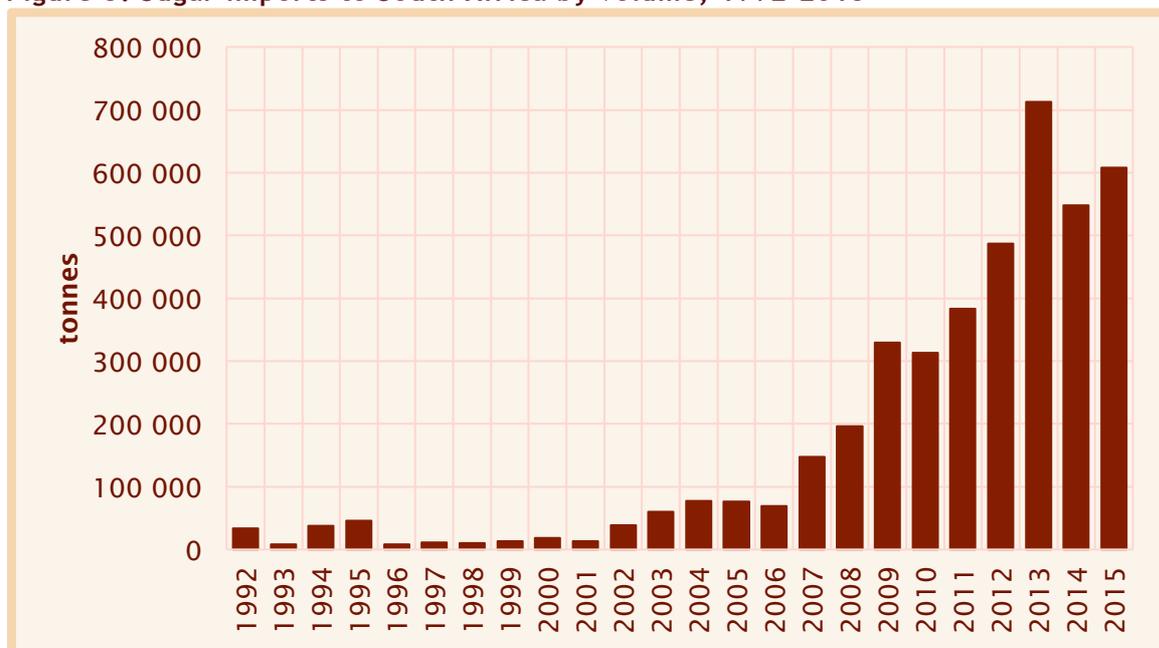
²³ Refined sugar to households was 42% of the total market, and exports were around 40% in 2012, but all fluctuating from year to year depending on volumes produced.

Corporate retailers, who account for a significant share in the distribution of sugar and sugar-containing products (Table 2), also take their cut.

Despite the tariffs and domestic overproduction, imports have risen rapidly, especially since 2007 (Figure 3). The dip in imports in 2014 can be directly associated with the increase in the DBRP in the same year. Brazil is a major importer, but since 2009 imports from Africa have grown rapidly, from almost zero to 400,000 tonnes a year (DTI trade statistics database). Swaziland, which is a member of SACU, is currently by far the largest source of raw sugar imports into South Africa, with around 80–90% of imports in recent years. This is partly because of the drop in EU prices, as a result of the sugar sector reforms there (although preferential access offsets this, to some extent), resulting in a switch to the South African market.

Imports from Swaziland are also a response to lower production in South Africa, due to the drought over the past two seasons (SSA, 2016). Imports of raw sugar from Brazil have dropped sharply since 2014; Argentina and Brazil combined constituted around 12% of total raw sugar imports in 2016/17 (Sikuka, 2017:8). However, Brazil is the source of just under half of refined sugar imports, with United Arab Emirates the source of just under 30% in 2016/17 (Sikuka, 2017:9).

Figure 3: Sugar imports to South Africa by volume, 1992-2015



Source: DTI trade statistics database

This growth in sugar imports from the region has resulted in a rapidly increasing share of imports in the total sugar market from 2008 (Table 3), from under 10% of the value of the domestic market to over 20% and rising to over 30% in recent years. Manufacturers are likely to be the main importers in their search for cheaper raw materials for processing. Millers may want to import to increase the use of capital in their operations, especially in conditions of chronic over-capitalisation, with high levels of excess capacity. For example, Tongaat Hulett has excess milling capacity of 700,000 tonnes per annum and is thus seeking to increase cane supplies into its mills (Tongaat Hulett, 2014:13).

This is almost double the capacity it requires at present. However, there are technical barriers to importing cane, since it rapidly loses quality after harvesting and must be processed as quickly as possible. This means production and processing facilities have to be close together.

As production moves outside South Africa into the region, it is likely that processing facilities will follow, with implications for manufacturing and employment in South Africa.

Table 3: Value of total market and imports, sugar, 2006-15

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Domestic market (R'm)	7,581	7,890	8,471	9,490	10,356	10,856	11,438	12,211	13,062	14,013
Imports (R'm)	239	530	727	2,044	2,108	2,644	3,140	4,126	3,481	4,149
Imports as % of total	3.2	6.7	8.6	21.5	20.4	24.4	27.5	33.8	26.7	29.6

Source: Total market – Euromonitor reports; Imports – DTI trade statistics database

According to the United States Department of Agriculture (USDA), sugar imports to South Africa are, at times, the result of opportunistic trading. Importers may acquire sugar below the DBRP, wait until world prices rise and then ship the sugar duty free (Sikuka, 2017:11). Proposals to reduce customs duties on sugar from the current 63.63c/kg to 28.10c/kg may result in a further increase in imports (Sikuka, 2017:12).

Sugar confectionary is a comparatively smaller market than refined sugar, and was valued at around R5.3bn in 2015 (Euromonitor, 2015d). Imports constitute a fairly significant share of the market; they have more than tripled in volume since 2003, in comparison with the period before then. Imports of sugar confectionary range from 12–22% of the domestic market. This is mainly driven by retailer imports, leading to a ‘cluttered’ local market.

According to an industry consultant, ‘in the past, imports tended to be top end, niche products. But in the last three to four years there has been a spike in imports of minimal value-added stuff that used to be produced here. Importers are finding it viable to bring these products in and undercut the local market. The main ones include confectionary and biscuits and some beverages ... Retailers go for price. They have enormously more power than previously’²⁴. An executive of one of the big food manufacturers says, ‘Cheap imports can flood the market. This is a retailer decision. Retailers import and then use their own brand. This is especially an issue for confectionary’²⁵. Shoprite, for example, is importing cheaper brands from countries in the Middle East, and these are competing with local players, due to their low prices (Euromonitor, 2014).

In contrast to sugar confectionary, SSBs is a very big market, but imports are a relatively small proportion of the total market. This is partly because of multinational dominance of local production, specifically Coca Cola. Imports of waters containing added sugar or other sweetening matter (H2202) are less than 2% of the market, and were valued at less than R1bn in 2015 (DTI trade statistics), compared to a total domestic market value of R61.7bn (which excludes juices). Coca Cola is by far the largest producer in the domestic market, with a 41% market share of off-trade value in 2015 and over 70% share of the carbonated beverages market, which constitutes the bulk of the SSB market (Euromonitor, 2016).

Employment and livelihoods

The NDP identifies agriculture as one of the priorities for employment creation in South Africa. Within this, sugar is not a priority sector. However, a significant number of people are economically active in the sector, through farming and employment in agriculture and

²⁴ Interview, food industry consultant, Cape Town, 31 August 2016

²⁵ Interview, executive at a large food manufacturer, Johannesburg, 5 September 2016

processing, and through allied services. As indicated above, regulatory reforms driven by the big sugar millers have resulted in increasing power for the millers, as well as regionalisation of production. This section is not directly related to sugar as a food but considers the sugar sector as an employment generator that will contribute to people being able to buy food. This is pertinent in considering proposals for restructuring the industry to benefit the broad population of South Africa.

Employment statistics tend to come from industry, which will benefit from presenting higher figures. There was a sharp drop in farm employment in the early 1990s, but employment was fairly stable (with a slight increase) since 1993/94 (SACGA, 2014:11). A 2006 study commissioned by SASA estimated 137,000 direct jobs from the industry (Blom, 2010). In 2012 the sugar industry was estimated to have created 93,990 direct jobs throughout the value chain. This includes: 1,438 large-scale growers with 70,010 workers (permanent and seasonal); 13,871 small-scale farmers; 7,000 mill jobs; and 1,671 industry support jobs. This total constitutes 18% of total agricultural employment and 5% of total employment in KwaZulu-Natal (KZN) and the Mpumalanga Lowveld (Conningarth Economists, 2013:18). The South African Cane Growers' Association (SACGA) indicated there were 1,383 large-scale farmers in 2013/14 (SACGA, 2014), while Trix Tikam (then executive director of SASA) indicated there were 1,730 large-scale farmers including 323 black farmers in 2013²⁶. There were around 1,300 black medium-scale commercial growers on 40,000 ha of freehold land (11% of freehold land under cane) in 2012 (DAFF, 2013:5).

The industry boasts the largest black small-scale farmer base of any agricultural sector. Black small-scale farmers first emerged in the sugar industry in the 1970s, when apartheid consolidation of 17,000 ha of cane land for incorporation into the bantustans, coupled with a temporary rise in global prices, led the millers to expand into communal lands and begin work with small-scale growers. Dubb (2015) provides an excellent overview of the rise in small-scale production to a peak of 51,000 growers in the mid-1990s, followed by a sharp decline as industry restructuring took its toll on the smaller growers.

Although the material basis of small-scale production became less important to the millers, this did not lead to an immediate collapse of small-scale growing, since these growers remained politically important, especially to prevent drastic deregulation or liberalisation. However, there was a net decrease in material support to small growers, who remained vertically subsumed in relations of monopsony with miller processors (Dubb, 2015:18). This produced differentiation, with a relatively small number of producers generating a large amount of output. There was a 'bubble' of growth until the drought in the early 2000s, followed by a sharp decline in small-scale grower numbers and share of production (Dubb, 2015:19).

Despite their numbers, small-scale growers never produced a large portion of total cane output: around 15% in 2000, decreasing to 8% in 2013 (Dubb, 2015:3). Small-scale growers produce on average land sizes of 1-4 ha (Dubb, 2015:18) and produced on around 70,000 ha of mainly communal land in 2012/13 (DAFF, 2013:5; Conningarth Economists, 2013:30). There is a long-term decline in the area under cane farmed by small-scale farmers, from 20% of the total in 2000 to 13% in 2012. This has come mainly from the expansion of new freehold growers (NFGs), black medium-scale commercial farmers whose share of the area under cane rose from 3 to 15% in the period 2000-2012 (Dubb, 2015:3). Hence, we see concentration of landholdings and the exit of smaller growers. Small-scale growers have been reconstituted as 'independent capitals' and now compete directly with highly capitalised large-scale growers (Dubb, 2015:20).

Large-scale growers produced 83% of total cane output, and milling companies with their own estates produced 7.5% of the crop (Conningarth Economists, 2013:19). Area under cane for

²⁶ 'Cheaper imports affect supply and demand in South African sugar industry', *Engineering News*, April 26, 2013 <http://www.engineeringnews.co.za/article/imports-affecting-south-african-sugar-industry-2013-04-19>

large-scale growers is relatively stable, while the miller estate portion of the area under cane also declined from 2000–12 (Dubb, 2015:3). Illovo procured 54% of its cane requirements from local suppliers in 2014 (Illovo, 2014:12) and has three rain-fed sugar cane estates of its own in South Africa (Illovo, 2014:5). For Illovo, 90% of production in the region, excluding South Africa, is irrigated, but this figure drops to 60% when South Africa is included (Illovo, 2014:56).

Statistics South Africa (Stats SA) indicated 20,000 employees (of whom one-third were women) in sugar sector manufacturing in 2011 (Stats SA 2011:79). It is not clear whether this figure includes secondary/industrial processing by other manufacturers outside of milling (e.g. general food and beverage manufacturers). The big three millers reported employment across all operations in South Africa of 9,350 permanent and 3,410 seasonal workers in 2014 (annual reports). Tongaat Hulett had 4,932 (of whom two-thirds were fixed term or permanent) South African employees in 2014 (Tongaat Hulett, 2014:50). Illovo's South African operations had 2,224 permanent employees and 1,804 seasonal agricultural workers at peak season in 2014 (Illovo, 2014:26).

The miller-led restructuring processes coupled with trade liberalisation (that is leading to displacement of local sugar production with imports) are inducing other changes in the agrarian economies of the sugar-producing regions of KZN and Mpumalanga. South Africa has a chronic excess in milling capacity and it may be that mills will close. In 2015, the Umzimkulu and Darnell mills did not open, and in 2016/17 the Umzimkulu and Amatikulu mills were mothballed (BFAP, 2016:74). Already, regional operations employ far higher numbers than South African operations for the big sugar companies. In 2014 Tongaat Hulett employed 30,133 people (including seasonal and casual) in five countries in the region – Botswana, Namibia, Swaziland, Mozambique and Zimbabwe²⁷. Of all employees (including in South Africa) 83% were in Mozambique and Zimbabwe (Tongaat Hulett, 2014:40). In 2014 Illovo had a total of 10,276 employees with another 17,196 seasonal workers, with agricultural and manufacturing operations in Malawi (Illovo), Mozambique (Maragra Acucar), Swaziland (Ubombo Sugar), Tanzania (Kilombero Sugar) and Zambia (Zambia Sugar) (Illovo, 2014:4). In light of efforts to construct an integrated regional economy based on equity and cooperation, to what extent does regional employment growth compensate for South African employment losses?

An associated trend as production moves into the region is the transfer of land out of cane production in South Africa towards higher-value, non-agricultural uses. Already 45% of Tongaat Hulett's operating profit comes from planning and development of serviced land for residential, commercial, industrial, resort and mixed use purposes, including the expansion of settlement for high-value areas like Umhlanga²⁸. The objective is to make land 'shovel ready' (agricultural release; spatial policy framing; and environmental, zoning and sub-divisional approvals) (Tongaat Hulett, 2014:24). In 2014 the corporation developed and sold land valued at R1.1 bn (Tongaat Hulett, 2014:26). The company owns 20,000 ha of land, of which 8,200 ha is identified as having high potential for conversion from agriculture to other uses over time (Tongaat Hulett, 2014:48).

Access to land is a major issue in terms of planning for a transition to a more diversified production base incorporating a range of production unit sizes and products. Land redistribution is taking place in the production area. A total of 70,627 ha of freehold land was transferred up to 2014 (28,643 ha redistribution, 41,983 ha restitution), which is around 21% of freehold land under cane. Up to 2014 government had spent in excess of R2 billion on land acquisition in the sugar sector, but approximately 130,000 ha (39%) of freehold land is still under claim (SACGA, 2014:9). Illovo indicates that 52% of its agricultural land holdings have been transferred to black owners through restitution but also through its own programmes prior to the government's land reform programme (Illovo, 2014:73). TSB indicates it has

²⁷ <http://www.tonga.co.za/au/history.asp>

²⁸ <http://www.thdev.co.za/>

transferred 12,000 ha through restitution (RCL Foods, 2014:33). Given the sharp decline in the feasibility of small-scale cane growing, and a reduction in material support from the millers, it is probable that much of this transferred land will fall out of small-scale sugar production.

Related to this is a trend towards consolidation of land and the growth of medium-scale black farmers at the expense of small-scale farmers. The area under cane for medium-scale black commercial farmers has risen substantially from 3% in 2000 to 15% in 2012 (Dubb, 2015). The NFG programme, a partnership between Ithala Development Finance Corporation, Illovo and Tongaat Hulett, supports land redistribution and support for black commercial growers, with 120 medium-scale farmers supported in 2013 (68 supported by Illovo, 52 by Tongaat Hulett) (DAFF, 2013:62).

Sugar and nutrition

So far, the nutritional aspect of sugar consumption has been set aside in the discussion about the role of sugar in food security. As quoted above, the SADC Protocol on Trade states as an explicit objective the expansion of regional production and consumption of sugar and sugar-containing products. The trade regime is constructed to make sugar more easily available to the population. Growth in consumption of any food product is considered to have a positive food security effect. Growth in production is also considered to have unmitigated benefits in the form of employment and incomes, regardless of what is being produced. This jars very heavily with the concerns being raised about the health effects of sugar consumption, at a global level as well as in South Africa.

As stated in the introduction, sugar provides a relatively cheap form of carbohydrates and is an important part of the food basket of resource-poor households. The negative health and nutritional effects of sugar consumption are a secondary consideration amongst policy-makers and in the sugar and food manufacturing industries. In interviews we conducted, people in both industry and government considered access to staples to be the primary food security concern in South Africa. According to one DAFF official, 'rather people are less healthy and well fed'²⁹. An official at DTI said, 'Developed countries are talking about sustainable diets. But if people do not have enough to eat, their first concern is food, nutritional value is secondary.'³⁰ According to another DAFF official, 'The Department of Health has bigger things to worry about, like HIV/AIDS and the health care system. They need to prioritise, they are understaffed. Food-related health is marginalised.'³¹ This approach signifies a degree of 'calorie fundamentalism' (Thow et al., 2016; Headey et al., 2012).

Scientific evidence indicates a strong relationship between over-consumption of sugar and diet-related NCDs (WCRF, 2014). As a result, the World Health Organisation (WHO) has recommended the regulation of the content of food products, including sugar, and the South African government has taken up these recommendations. According to the DoH, the most cost-effective interventions tend towards regulation of consumption. In order, these are fiscal measures (such as taxes) and food advertising regulation, followed by a middle category of interventions (food labelling, worksite interventions and mass media campaigns), and then the least cost effective interventions (school-based interventions, physical counselling) (DoH, 2015:28).

The DoH's obesity strategy points to taxes on SSBs, and developing norms and standards on sugar content of ultra-processed products to guide product reformulation with implementation planned for 2017 (DoH, 2015:35). In line with this, in 2016 the Minister of Finance announced a decision to introduce a tax of 2.29 cents/gram of added sugar on SSBs from April 2017 to help reduce excessive sugar intake (National Treasury, 2016). One hundred percent fruit juice

²⁹ Interview, official in DAFF International Trade Relations Directorate, Pretoria, 7 September 2016

³⁰ Interview, official in DTI Agroprocessing, Pretoria, 9 September 2016

³¹ Interview, official in DAFF International Trade Relations Directorate, Pretoria, 6 September 2016

(which also contains high levels of sugar but not added sugar) and unsweetened milk and milk products, where there are non-added sugars, were excluded from the tax³². For imports, the SSB tax will be collected at the port of entry. Following industry pressure, in April 2017 the proposed tax was reduced from 2.29c/gram to 2.1c/gram, and implementation was delayed to allow for further consultation (Arthur, 2017).

The tax itself is not a trade issue, as long as there is national equivalence, that is, imports and domestic products are treated in the same way. It is not about the formulation of the product but simply a tax on the sugar content. However, there is policy incoherence between a tax that seeks to increase the price of sugar (even if only SSBs for now) with the aim to reduce consumption, and trade policy that allows the import of cheaper sugar.

Concluding comments on sugar

Taken together, these trajectories suggest that the sugar industry is likely to play a lesser role in employment and production in future. Corporations are moving their operations into the region and converting land to other uses. This suggests the sugar industry will employ fewer workers in South Africa over time. There is some transfer of land to small- and medium-scale farmers, but many of these farmers will be unlikely to have the opportunity to make a living from production of sugar cane in future. Rising imports can be anticipated as sector restructuring in the EU and elsewhere will have knock-on effects on the South African industry, including diversion to the SACU market of a portion of European production and third country exports currently going to Europe. Manufacturers and retailers are under pressure to reduce sugar content in the products they formulate and sell. Sugar in South Africa should, thus, be considered to be a twilight industry and appropriate planning is required to reallocate a share of the resources that have previously gone to sugar into alternative uses. This includes support to small- and medium-scale farmers who are gaining access to land to diversify production out of sugar in KZN and Mpumalanga, and planning for farm workers, which can include land redistribution and production support. This plan should not be left up to corporate agribusiness on its own, but should include other stakeholders, such as government, workers, farmers and consumers.

5. POULTRY MEAT CASE STUDY

Background

As with the sugar industry, the poultry industry has been in the public eye in recent times: first when poultry was used as a trade-off in the US AGOA negotiations, and more generally as the sector has come under pressure from a flood of imports, which threatens the viability of domestic production. The trade-off is between the need to secure broader economic interests, on the one hand, and the need for livelihoods, on the other hand, which may require some protection of the poultry industry.

The poultry industry is one of the largest suppliers of protein in South Africa (DAFF, 2014a:35). Chicken is the most commonly consumed animal protein across all income groups (BFAP, 2016:26). According to the CEO of one of South Africa's big food companies, protein is mainly supplied through offal and chicken feet at the lower end of the market; tinned fish, followed by chicken in the middle to higher bands; and after that red meat (cattle, sheep and goats)³³. All income groups also consume a range of non-meat protein sources (especially dried and canned beans). Per capita consumption of poultry meat has risen almost 150% from 1993 (16.11 kg/year) to 2017 (40.01 kg/year) (DAFF, 2017:66). In the same period, per capita red meat consumption declined by 11%. Chicken prices have risen slower than red meat prices and this

³² Interview, executive at Consumer Goods Council of South Africa, Johannesburg, 8 September 2016

³³ Interview, executive at food manufacturer, Cape Town, 30 August 2017

certainly contributes to this shift in consumption (DTI, 2017:11). Chicken necks, feet and mixed portions constituted 16.6% of the cost of PACSA's monthly food basket (in comparison, canned beans were less than 1.5%) in September 2016 (Smith and Abrahams, 2016:20).

Poultry outstrips maize and cattle as South Africa's most valuable agricultural sector, with slaughtered fowls and eggs combined contributing around 20% of total agricultural gross value in 2016 (DAFF, 2017:76). Similarly to the sugar sector, the commercial poultry sector is concentrated, with 7 large broiler producers holding 75% of the market. The sector is divided into poultry meat (broilers) and eggs (layers). This case study only deals with broilers. There is a strong link to feed with vertically integrated corporations covering both feed and poultry operations. Poultry is one of the largest consumers of animal feed in South Africa, and there is a significant import component of feed, mainly oilcake.

This section considers the role of poultry trade in structuring access to poultry as a cheap source of protein for South African households, and the implications for food and nutrition security. It starts with an overview of the trade regime and the regulatory framework governing the poultry industry in South Africa, and looks at trends in production and trade within this regime. It then reviews employment and livelihood dimensions in relation to trade. Nutrition and health of commercial poultry is considered, with a reflection on the trade-offs contained in opening trade in poultry products.

Regulatory and trade regime

Poultry meat was one of only a few agricultural products that were not controlled by marketing legislation under apartheid. Therefore the deregulation of agriculture, sealed with the Marketing of Agricultural Products Act of 1996, did not have any significant impact on the sector. South Africa's WTO commitments are for a bound rate of 82% on frozen chicken, whether cut in pieces or not. Ordinary customs duties cannot rise above this bound rate (DTI, 2017:16). Ordinary duties are currently set at 82% for whole birds, 31% for carcasses, 12% for boneless cuts, 30% for offal and 37% for 'bone-in' portions (DTI, 2017:17). These duties are applicable to all states except EU and SADC member states, as a result of trade agreements (Viljoen, 2017:15). EU and SADC have duty-free entry of poultry products into the South African market. The EU EPA makes provision for safeguard duties where an industry may be under threat, and, as with all sectors, anti-dumping duties can be imposed, where the WTO accepts evidence of dumping of products below cost into other markets. There is, therefore, some room for manoeuvre to increase tariffs.

Trade and production trends

Until around 1994, domestic production and consumption more or less balanced out. After 1994, with the opening up of trade, consumption of poultry meat began to outstrip domestic production and South Africa became a net importer. Per capita consumption has risen steadily since the mid-1990s, indicating that imports have supported consumption growth. In this sense, trade has facilitated rising consumption of protein, which is a positive development. However there is also a correlation between rising imports and stagnation of domestic production, indicating that imports of cheap products have a role in restricting domestic growth. South African production costs are not excessively high, and are, in fact, significantly lower than those of EU producers (though not US and Latin American producers) (BFAP, 2016:87).

As indicated, the market is quite concentrated, with Rainbow (RCL Foods) (24%) and Astral (22%) sharing close to half the total market, followed by Country Bird (7%), Tydstroom (6%), Fouries (6%), Daybreak (5%), Rocklands (5%) and hundreds of small- or medium-scale producers constituting the remaining 25% of the market (DAFF, 2014b:8). Processing plants have old assets (over 20 years old) with limited capacity for production of mechanically deboned meat (DTI, 2017:3), a major category of imports (see below).

Commercial breeding stock comes from two multinationals: the Ross breed from Aviagen (Europe) and Cobb from Cobb-Vantress (US). These companies licence the rights to use the breeds, with RCL Foods currently holding the licence for Cobb and Astral Foods holding the licence for Ross (Ncube et al., 2016:15–16). More recently, Country Bird has started importing another breed called Arbor Acres (also owned by Aviagen), but this is still a relatively small part of the market (BFAP and NAMC, 2016:11).

The poultry sector is the largest consumer of animal feed in South Africa, at around 41% (AFMA, 2015:53), and animal feed constitutes 50–70% of total input costs to poultry (Ncube et al., 2016:15). Three large commercial millers – Meadow (Astral), Epol (RCL) and Afgri – hold 75% of the animal feed market and there are 24 other mills outside this core (DAFF, 2014b:27). The main ingredients of animal feed are maize (52%) and soya oilcake (14%) with another 50 lesser ingredients (AFMA 2015:42–43). For the large vertically integrated poultry companies, feed is a major source of profit and in recent years has even offset losses in poultry production. Between them, poultry, yellow maize and soya constituted around 28% of total gross value in agriculture in 2015 (DAFF, 2017:76). The animal feed and grain milling sector has had several anti-competitive fines and investigations over the past few years (DTI, 2017:3).

Poultry meat exports are negligible; currently at 1.4% of production³⁴ (DTI, 2017:25). Exports are primarily into the region (mainly Mozambique and Zimbabwe) and increased significantly after 2008 (when the SADC FTA started operating), but off a very low base (DAFF, 2014b:11). Countries are using sanitary and phytosanitary measures as barriers to trade, which is limiting South African access to export markets (DTI, 2017:4). These include various issues, such as South African brining practices (the injection of a salt water solution with flavourants into the chickens before they are frozen), the use of growth stimulants, and health, certification and packaging requirements. Brined chicken cannot enter the EU as chicken meat but only as poultry preparations, which do not fetch the same price premium (Viljoen, 2017:10). South Africa currently does not have an independent meat inspection service, or a formal residue monitoring plan to test for chemical contaminants, such as veterinary drugs and pesticides. These are requirements for export into the EU and other countries (BFAP and NAMC, 2016:31). South Africa produces around 80% of total broilers in Southern Africa (DAFF, 2014b:3) but poultry benefits from being close to markets and so developing production in the region is a more likely route than exporting from South Africa.

Imports have a significant influence on the market. Imports of meat and edible offal of poultry were valued at R5.6 billion in 2016 (DAFF, 2017:82). Poultry imports have grown in absolute terms as the market has grown, but the import share has remained stable as a proportion of overall consumption (Ncube et al., 2016:18). Imports stand at around 27% of the domestic market. Mechanically deboned meat (a cheap product used in polonies and patties, mainly imported from Brazil) and frozen quarters (mostly EU and more recently US) accounted for around two-thirds of imports in 2015 and 2016 (DTI, 2017:8). In 2015 imported mechanically deboned meat was priced at R4.10/kg compared with domestic poultry meat at R20/kg and EU and US quarters at R14/kg (DTI, 2017:10). The retail mark-up on chicken is over 50% (cold chain and packaging add to overheads) (DTI, 2017:10).

Half of imports are from Brazil, but the surge in imports in 2015 and 2016 were almost entirely from Europe (DTI, 2017:5). Currently imports are from Brazil (43%) and the Netherlands, Britain and Spain combined (around 35%) (Allix, 2016). Imports are mainly to meet shortfalls in domestic production, although APAP argues that dumping and/or oversupply of imports from EU and South America constitute a challenge for the sector (DAFF, 2014a:36). Excess imports in 2012 and 2013 actually led to an oversupply in the market (DAFF, 2014b:8), resulting in a collapse in operating margins across all the big domestic poultry companies (Ncube et al., 2016:29).

³⁴ Exports are 4% of domestic production, according to BFAP and NAMC (2016:11).

There have been concerns about unfair trading practices. Competition authorities judged a spike in imports from Brazil in 2011 and 2012 to be unfair, and anti-dumping duties of between 12 and 82% for different products were imposed on Brazil in 2013. This resulted in a slight drop in imports. In 2015 anti-dumping duties were placed on imports from Germany, the Netherlands and the UK (Ncube et al., 2016:18–19). The EU agreement has safeguard provisions, and ITAC has placed a provisional safeguard duty of 13.9% on EU imports (DTI, 2017:20).

The demand structure in South Africa, in comparison with the large importing economies, adds to the complexity of imports. In AGOA negotiations, the US argued there is a shortfall in the South African market, but this is due to a shortage of certain cuts, not a shortage of total chicken. In South Africa, consumers prefer the bone-in product and there are white meat surpluses at times. In the US and EU in comparison, white meat (the breast) fetches premium prices and there is a surplus of bone-in product. In the EU, drumsticks are even converted into animal feed. As a result, bone-in product is exported to South Africa at below cost as a by-product. South African industry is arguing that these should be characterised as a waste product (DTI, 2017:20). There are also distortions in global markets. Several countries provide subsidies (especially of feed costs) to producers, which lower prices and makes their exports more competitive (DTI, 2017:20). Officials at DAFF acknowledge that the TDCA was too generous in offering duty-free entry for agricultural products, including poultry, and that this has a far greater impact on the poultry sector than the AGOA agreement will, despite the recent media focus on the latter³⁵.

US imports have been under anti-dumping duties for the past 15 years, but the most recent round of AGOA negotiations saw these being eliminated and a quota of 65,000 tonnes per year of bone-in US chicken being allowed into South Africa without anti-dumping duties imposed. However, US importers must still pay the 37% standard tariff after landed costs. The result is that US importers are not yet importing the full quota and currently contribute around 5% of total imports, far behind Brazil and European countries (Allix, 2016). However, imports from the US are expected to rise over time (BFAP and NAMC, 2016:28).

Feed is the main cost driver of poultry, at 65–70% of production costs. Yellow maize (for energy) and soya or sunflower oilcake (for protein) are the two main ingredients in commercial animal feed. South Africa is a net importer of raw materials for animal feeds, especially soya oilcake (AFMA 2015:32). South Africa imports more than double the domestic production of soya oilcake (DAFF, 2014a:35). Despite the persistent soya shortfall, there are tariffs on imports. Soya bean tariffs are currently 8% of free on board (fob) value, and soya bean cake has a tariff of 6.6% of fob value (BFAP, 2016:15). The Animal Feed Manufacturers' Association (AFMA) applied for tariff removal in order to reduce prices, but DAFF has opposed this, opting rather for a soya production strategy (see also DAFF, 2014a:36).

Soya production has more than tripled since 2007/08 in response to demand (DAFF, 2017:19). Crushing capacity has expanded and domestic production of processed soya oil and oilcake used for feed has risen sharply, from 32,500 tonnes in 2004 to almost a million tonnes in 2015/16 (DAFF, 2017:20). However, less than ideal agro-ecological conditions mean that production is unlikely to meet demand (AFMA, cited in Ncube et al., 2016:22). South African yields are relatively low in comparison with major (subsidised) producers in the US, Brazil and Argentina (BFAP, 2016:11). Demand remains high, prices are at import parity, and soya bean oilcake remains one of the larger agricultural imports, valued at around R2.3 billion in 2016 (DAFF, 2017:82). Yellow maize constitutes about half of all maize consumed and is used primarily for animal feed. Domestic production of maize is usually enough to meet demand, and there are often surplus years, but in drought years grain is imported to meet supply shortages.

³⁵ Interview, official in DAFF Trade Directorate, Pretoria, 7 September 2016

DTI (2017:13–4) argues that lower price increases for poultry, compared with other food products, including red meat, is a direct result of cheaper imports. However the country faces the risk of deindustrialisation, and dependence on imports constitutes a level of risk to national food security, especially given exchange rate volatility. It may be time to consider a regional strategy, where trade internal to the region is opened up but protected from broader global imports. However, we must note that the terms of regional trade can favour large multinational corporate traders who exert significant control over grain value chains. Cargill is active in the region, and South Africa's large multinational grain traders have either been acquired by global interests (for example, Afgri) or are in partnership with global transnationals (for example, NWK with Louis Dreyfus in Zambia, and Senwes with Bunge). In light of this, a progressive regional strategy would require tempering the power of these corporations to enable a more diverse base of producers and traders to participate in building the regional economy.

Employment and livelihoods

The poultry industry directly employs an estimated 48,000 people: broiler hatcheries and rearing (14,471 people), processing (27,500) and distribution (6,069) (DAFF, 2014b:6). Large-scale contract farmers are integrated into corporate value chains. There are 265 formal abattoirs, mostly under the control of the vertically integrated corporations, which mainly sell directly to retailers (corporate and small/informal) (DAFF, 2014b:6).

Imports are contributing to consolidation in an already concentrated industry. The large integrated feed and poultry producers have announced plans to restructure and cut back on their production, threatening employment in the sector. With the industry under pressure, retrenchments are under way (DTI, 2017:3). Thabi Nkosi, chief economist for commercial farming association AgriSA says there is no point in trying to curb imports, and that the way forward is through 'creating economies of scale', alongside greater competitiveness and reducing feed costs (Allix, 2016a:25). Astral Foods has 'indicated a willingness to play a lead role in consolidating the big six players in the local poultry sector' (Hasenfuss, 2016). Country Bird is on the acquisition trail. Takeover attempts on Sovereign Foods, in which it currently has a 37% stake, were rebuffed, but it could also seek an acquisition of Quantum Foods (currently owned by Zeder) or parts of Rainbow Chicken (Hasenfuss, 2017).

Small-scale and backyard poultry production is estimated at 6–12% of the total value of the poultry meat market (DAFF, 2012:3,30), with an estimated 1,745 'subsistence farmers', identified as selling about 500 live chickens a week (DAFF, 2012:8). More recently DAFF has a list of 2,264 identified small-scale poultry producers, although it is unclear how these producers were selected (BFAP and NAMC, 2016:48). The South African Poultry Association (SAPA) considers small-scale commercial production to be anything less than 40,000 broilers per cycle. However, 50–60% of small-scale producers produce fewer than 500 chickens a week (BFAP and NAMC, 2016:50). Small-scale producers who are not integrated into corporate value chains mostly sell live birds through informal channels, or may slaughter birds on demand. An estimated 32% of the national flock, mostly indigenous fowls, is held by small producers (DAFF, 2012:26).

BFAP (2016:88) indicates that, in order to break even with a minimum wage for a farm worker, a small-scale producer must produce 400–600 birds per cycle³⁶. To reach the equivalent of an entry level mine worker's wage, this will increase to 1,000–1,400 birds per cycle. These small-scale producers are not likely to be incorporated into support models SAPA may design, which will mostly be outgrower schemes for corporate value chains. A few such schemes are being implemented in parts of the country (DAFF, 2014b:29; BFAP and NAMC, 2016:65) and these smaller contract growers account for the largest share of production by small-scale producers

³⁶ This depends on the number of cycles per year - usually 2 to 2.5 months per cycle - which, in turn, depends on whether winter production is possible.

(BFAP and NAMC, 2016:51). But scale of production and tight quality controls are required. Large insulated poultry houses are used for mass production, but these are not labour intensive.

Imports do have an impact on small producers, to the extent that they offer an alternative product to live birds, but generally these are distinct markets and there is diverse market demand, especially around non-metro towns, including for live birds. Small-scale production costs are relatively high, although there is a fairly good profit margin on small-scale sales of live birds, and small-scale production has an important role to play in the market (BFAP, 2016:12). From a price point of view, on a 'per kilogram' basis frozen chicken is cheaper than fresh chicken. But once frozen prices are inflated to account for brine content (only recently regulated down to 10–15% of total weight), a 'meat-for-meat' comparison shows that frozen chicken pieces are more expensive than fresh chicken (Ncube et al., 2016:23). Elsewhere, BFAP and NAMC (2016:56) indicate that prices for live chickens from small-scale producers marketing directly to consumers are lower than retail frozen prices, and include offal, whereas shop birds do not. This indicates a definite market niche for small producers, even in conditions of corporate domination in the sector and a high level of imports. Public procurement is an additional market option that is being considered (DTI, 2017:25).

However, there are some challenges. There are limits to the number of birds that can be marketed at once. Producers will need to keep feeding the birds until sale, even once they are of marketable size, adding to costs. Producers could sell live chickens to abattoirs but will then compete directly with large-scale producers and receive lower prices, which could wipe out the profit margin. Slaughtering is another possibility, but the question of selling in numbers remains. The producer would then need cold storage facilities, which are expensive (BFAP and NAMC, 2016:59). Egg production is another option. Small-scale producers will face some similar challenges as for broilers, but there is also market demand.

Day-old chicks and feed are the main production costs, and are high for small producers who only purchase in small volumes (DAFF, 2014b:29). Availability of chicks is also a constraint. Interventions could focus particularly on bringing chick and feed costs down. Following the corporate sector, links could be built to local sources of feed. As indicated above, there is a corporate duopoly on commercial breeds. Effort could be put into developing indigenous breeds for small-scale use. These are more suited to the prevailing climatic conditions and can cater for local preferences.

The Comprehensive Agricultural Support Programme (CASP) already provides corrugated iron broiler houses that can accommodate 1,500 birds per cycle. However producers will also need heating, lighting and feeding fixtures (BFAP, 2016:90) (as well as water) to reduce mortality rates and make production profitable. These producers can then grow organically. Some may rise into medium-scale production, either in 'niche' markets or through entering into contract farming in corporate chains. Small-scale production won't be the high-yield system of the corporations, but will bring people into economic activity and diversify wealth creation. This has additional benefits of product freshness. Half of nutrients are lost in the first 24 hours of harvesting or culling, and there is a loss of nutrients in long storage³⁷.

Nutrition and health dimensions of poultry trade

The industrial poultry sector faces a number of food, health and safety challenges, including brining, the use of antibiotics and the spread of avian influenza, as a result of production methods. As indicated above, these are obstacles to South African exports but also raise health concerns for domestic consumers.

Domestic producers are in a weak position, when it comes to quality of poultry products. South African producers have long practised brining; however, there is no good reason for brining

³⁷ Interview, official in DAFF Trade Directorate, Pretoria, 6 September 2016

apart from increasing company profits, so that, in the words of James Sumner of the US Poultry Exporters Council, 'South African consumers are being sold water at the price of chicken' (Allix, 2016:38). Individual quick frozen portions account for around 90% of commercial sales. Until recently, proportion of brine to chicken was 30–40% of total mass, with regulations just passed limiting this to 15% for portions and 10% for whole birds (Allix, 2016a). The Nutrition Society of South Africa (NSSA) backs the regulations, arguing that they are in line with efforts to reduce sodium in food products (Pitso, 2016:26). Brazil has banned brining entirely, and others countries limit it to 8% of weight. In the US, brining is capped at a maximum of 15% of weight but is mostly below 2% (Allix, 2016:38). This places the South African poultry industry on a back foot, since imported chicken generally has less brine and additives than domestically-produced chicken.

Additionally, antibiotics are applied to intensively-farmed domestic poultry, because high-density production promotes rapid spread of bacterial respiratory and intestinal bacteria. Growth promoters – such as ionophores, macrolides, quinoxalines, polypeptides, streptogramins, glycolipids, oligosaccharides, phosphonic acids and polymeric compounds – which are in frequent use in South African poultry production have been banned from use in the EU (Henton et al., 2011). The use of antibiotics in animals for food raises the danger of antibiotic resistance developing in humans over time. Again, this suggests that the quality of imported poultry products may be better than the domestic product.

At the time of writing, there is a temporary ban on poultry product imports from Denmark, France Germany, Hungary, Israel, the Netherlands, Poland and the UK, due to highly pathogenic avian influenza outbreaks in these countries (DTI, 2017:22). South African producers have also been hit with avian flu outbreaks, due to industrial production techniques, where thousands of birds are squeezed into small spaces and diseases can spread quickly. Overall, the picture is of an industry with questionable health standards.

6. COMMENTARY - IMPACT OF THE TRADE REGIME ON FOOD SECURITY

The case studies pose challenging questions for progressive social and economic transformation; by which is meant a redistribution of resources and opportunities, and broad economic and social inclusion in socially and ecologically sustainable and just systems. These questions are not for South Africa in isolation, but for South Africa in an integrated regional economy, with implications for food security and health at a regional level (Thow et al., 2015).

In the current arrangement, there are country-level trade-offs between the immediate need for cheap food products and developing and broadening economic activity. To an extent, the trade regime shapes this choice. Minimum market access, tariffication and caps on tariffs all point to the decision that availability of cheap food is the first priority, even over the development and maintenance of domestic (and regional) production capability. It is a framework that anticipates inexorable globalisation and ever-deepening and permanent links between countries based on comparative and competitive advantage.

However, some of these advantages are the product of a historical construction of relations, based on the use of power and force. These widening imbalances in competitive advantage are entrenched in the current global trading regime overseen by the WTO. Acceptance of this unequal model poses long-term risks of loss of capability to produce goods and services; a capability that may be needed in future, whether at national or regional level. In the South African case, comparative and competitive advantage has led the country to orient towards the production of relatively high-value agricultural products, fruit and wine for export. South Africa is becoming overly dependent on this narrow export sector, currently at 43% of agricultural exports and rising. In the region, raw materials still dominate the agricultural export economy.

Strengthening intra-regional value addition and trade may take advantage of the trade regime to build the regional economy, but, as indicated earlier, this tends to be dominated by global corporations. A strategy of developing intra-regional economic links, including the use of tariff protection where this can serve to allow the construction and nurturing of strategic regional activities, will require a simultaneous restriction of the activities of global corporations that extract wealth on unfavourable terms for the regional economy.

The WTO framework was not imposed; the South African government agreed to it. It is difficult for countries that are integrated into trading systems to resist membership, since their trading partners are members who require reciprocity in their trading agreements. Countries have, therefore, locked themselves into this framework for now. But the framework imposes constraints because countries are compelled to operate within the context of import competition for its own sake. In South Africa, the mandate of the democratic government after apartheid was not merely to ensure everyone had enough food to eat, but also to redress past injustices, redistribute resources and create opportunities for economic participation beyond poorly paid wage labour. The question is not only whether there is enough food to eat, but also who produces that food and how it is produced. These are social and economic questions, not simply technical. A regional perspective will widen this beyond South Africa's borders, and poses additional difficult questions about national autonomy and priorities in relation to regional integration and the differential priorities for different countries.

In reality, the global trade regime channels efforts away from answering these questions. Public action is reduced to the blunt instrument of raising or lowering (restricted) tariffs. A transformation agenda is abandoned in favour of technocratic management of supply and demand within the existing highly imbalanced system. In the sugar and poultry sectors, as elsewhere in the food system, the real result is the entrenchment of corporate power, a marginal role for small- and medium-scale producers throughout the system, and access to 'cheap', low-quality products as the basis of food security. This is the case nationally and regionally. The corporate food system in South Africa is held up as a regional leader to be emulated. However, the idea that the corporate food system in South Africa is delivering food security should be debunked. It is clearly not doing so, despite the concentrations of wealth and expertise. Millions of people go to bed hungry every night, and most of those who do have something to eat must accept the indignities of cheap, low quality, unhealthy processed products.

Sugar

Sugar is produced in South Africa in a context where there is domestic and foreign multinational corporate domination and regional expansion, and a system of self-regulation and legalised price rigging. The sugar industry in South Africa and regionally has a large employment footprint (although maybe not as large as claimed) mainly in agricultural production, with a smaller portion in processing/manufacture. The main base of employment is farm labour on large-scale commercial farms, with seasonal labour a big component. This is followed by small- and medium-scale farmers.

Sugar in South Africa is a twilight industry, with no-one talking about growth at this time. The indications are that the workforce and number of smallholder farmers have declined over the past 20 years. Temporary mill closures will eventually become permanent. The national industry will shrink in importance as regional integration deepens. There may still be per capita consumption growth, but this will increasingly be met by imports, especially from SADC, as market logic dictates it will over the coming years.

Sugar as an edible product is of questionable value. It does produce calories, but so do many other products that have added nutritional benefits. There is no reason not to support a shift in production in South Africa to other products with greater all-round nutritional benefit. A striking feature of the policy environment is the incoherence between trade policy, which allows

the import of cheap sugar, and taxation/health policy, which seeks to increase the price of sugar (even if limited to SSBs at present) in an effort to reduce consumption. Health and taxation policy recognises the negative impacts of excess sugar consumption, while trade policy is blind to health issues and concerned only with increasing bidirectional trade in any product.

DTI's approach to tariffs is to build downstream industry and to open markets to the cheapest raw material for manufacturing, which is seen as the main site for long-term employment creation in South Africa. What is the role for DTI's strategy in the sugar sector? The target is small- and medium-scale, black-owned, agro-processing. In the sugar industry, three smaller millers have a relatively stable, small market share. The market is carved up by the millers through self-regulation. They have been given the authority to determine the structure of the market. There may be competition between the companies, but it is a managed competition by the players. Capital intensity means the barriers to entry into processing in sugar are too high for smaller enterprises, the market is already congested and there is chronic overcapacity in milling. In short, there is no role for small- or medium-scale agro-processing in sugar. This leaves the country with no plan but to see the gradual exodus of the corporations into the region and the conversion of agricultural land to other uses in a process managed by the corporations in their own interests. Even at the regional level, sugar production is completely dominated by the large corporations emanating from South Africa.

South Africa needs to come up with alternatives for the use of the good agricultural land currently under sugar cane and in the hands of the sugar corporations. The regulatory review of the sugar sector is long outstanding; 13 years and counting. The scope of the review and participation in the process should be expanded, with a view to considering the future of the sugar industry and land use. Farmers (small, medium and large), farm workers and dwellers, agro-processing and service workers (for example, transport and logistics), traditional authorities, private companies and government (including Department of Rural Development and Land Reform and provincial Departments of Agriculture) need to sit together to consider land use and the evolution of the sugar industry in relation to their areas of operation in KZN and Mpumalanga. There are always questions of unequal relations of power in such conditions. The only solution to this is for smallholder farmers, farmworkers and other workers throughout the supply chain to organise themselves to participate effectively.

Some suggestions have come up for a shift within the sector. One is to redirect sugar cane into bioethanol production and electricity co-generation. Some manufacturing facilities already exist that can switch between uses. BFAP indicates that government is not interested at this time, due to perceived cost to the fiscus (BFAP, 2016:75), although APAP to 2019 has identified biofuels as one priority for investment (DAFF, 2014a). More fundamentally, however, a switch in production based on the same basic model will merely perpetuate the existing inequalities, both in the food system as a whole and in the sugar sector.

There is need to think beyond this system: how to diversify production, how to redistribute resources, including access to land and water, how to widen the base of producers, how to support organic growth of small- and medium-scale enterprises (whether for profit or not), and how to support and facilitate diverse links between these producers and their neighbours.

To answer these questions for the sugar industry, we need to move out of the commodity frame and into the specific contexts of coastal KZN and Mpumalanga. Ultimately, it is more a land use issue than a specifically sugar issue. While the sugar industry is the big landowner in the area, ownership of that land is contested. At the outset, there should an immediate moratorium placed on farm dweller evictions and the sale of any land owned by these companies, pending a wider, inclusive review, and development of a transition plan. This could include deliberation on the use of tariffs to facilitate restructuring and transition from sugar.

The sugar industry should be part of that discussion, but not as the controlling stakeholders. Otherwise their power will dictate the future of these areas of the country, which have broader strategic importance, because cane production currently occupies valuable and scarce arable, high potential agricultural land that has accessible water. Individual private companies should not be permitted to make decisions about the use of these scarce resources without wider engagement with others. At the same time, it would be a disaster to destroy the sugar industry, without having anything to replace it. So it must be a phased and negotiated transition process.

There is some land redistribution happening in these areas. There is also a base of experience amongst smallholder farmers of outgrower production, and certainly some enterprise skills. There is, thus, a potentially productive smallholder base. The next stage is to look at markets and possibilities for farmers to engage in profitable economic activity, and the role sugar may play. This should be negotiated by a plurality of agents.

Poultry

The poultry and sugar sectors share some similarities. As with sugar, concentrated corporate power characterises the poultry sector – in integrated feed and poultry production, processing and distribution. Production is based centrally on contract growers supplying corporate value chains, although there are a few small-scale suppliers into these chains. In the case of sugar, small-scale production is aggregated and channelled towards the mills. In poultry, small-scale production tends to be for distinct ‘niche’ markets for live birds. This provides opportunities for small-scale production, but also imposes limits on the scaling up of such production.

The poultry sector is undergoing difficulties as a result of imports. But, whereas the sugar corporations are in control of the regionalisation process and the trade dynamics, the poultry sector is a victim to forces larger than itself, viz. bilateral and multi-lateral trade agreements. Poultry has been used as a bargaining chip (under pressure) as a trade-off for other economic interests in the EU trade agreement, as well as AGOA, more recently. This is not necessarily because the sector is uncompetitive by global standards. A regional strategy of soya production for South African feed markets may lower input costs. But an uncritical approach to this can also strengthen the hand of the large poultry and grain trading corporations and lead to greater concentration of wealth, rather than balanced and equitable economic growth. A regional value chain strategy must consider how to diversify economic activity in the process.

The pressures mounting on poultry will certainly lead to corporate consolidation in South Africa and the region. Competition authorities are unlikely to oppose consolidation, as long as there remains competition in each major product category. We can expect regional expansion to continue, and should not be surprised if these corporations are delisted and taken private, or acquired by larger foreign multinationals in the next few years. Consolidation usually also means job cuts to increase shareholder returns, unless this is delayed for a few years by the competition authorities.

Poultry imports pose challenges. While cheap imports allow for cheap protein for those who cannot afford more, and are currently serving to fill a supply shortfall, there is some evidence that the very presence of cheap imports is restricting the ramping up of domestic production to meet that shortfall. The market is complicated by an excess of certain cuts (filleted breasts) and a shortfall of others (bone-in products). In order to increase domestic and regional production of the latter, domestic or export markets should be found for the former. However, adequate certification and sanitary and phytosanitary processes are not in place to facilitate exports. SADC's market profile is similar to South Africa's and therefore cannot serve as an export market for surplus cuts.

Again, how might DTI's strategy of using tariffs to support downstream industry, as well as opening raw materials markets to downstream industry, work in the poultry industry? This may be an option for regional soya, with current excess processing capacity in South Africa as well as

the region. However as with sugar, the sector is dominated by a corporate core and this is liable to consolidate on a regional level between feed manufacturers and grain traders. On the other hand, poultry slaughtering and processing also has a potentially wider periphery of smaller economic agents. Sugar is limited by high capital intensity to build and run a mill, which requires very large economies of scale. In contrast, poultry production and processing do not necessarily need a lot of capital and barriers to entry are low. Poultry production can be profitable at small scale and abattoirs are a possible area for consideration.

The current structure is capital intensive and dominated by corporations, but it is possible to move down a path of smaller, decentralised slaughtering facilities for local markets. The main issue is to manage food health and safety, but there are also tricky questions about access to markets. This small-scale, decentralised model has benefits over the industrial production and distribution of frozen pieces through supermarkets in terms of freshness and convenience (physical access), and also supports inclusive local economic development. BFAP and NAMC indicate that prices in South Africa are competitive, even compared with frozen portions sold through supermarkets. DTI, DAFF and other government departments have already identified public procurement as a route to securing a market for small- and medium-scale agricultural and agro-processing enterprises. This needs to be implemented. DTI's strategy could, therefore, potentially be more effective in poultry than in sugar, based on decentralised, small-scale poultry production and processing.

Unlike sugar, poultry is not a twilight industry. It has growth potential, but imports need to be controlled and decentralised small- and medium-scale production and processing supported. Tariffs could be increased as required to protect these developments. Greater use could be made of anti-dumping and safeguard duties, especially for imports from the EU. Tariffs may be used as a tool to support a transformation agenda, albeit a very limited and blunt tool. But on their own they will not achieve much. They need to be coupled with detailed transformation plans. Currently, the country is just relying on corporate activity and imports, without having a good plan, which is more about managing the existing system than making systematic efforts to transform.

Cheap imports may generate immediate, current 'benefits' for resource-poor households in the form of cheaper carbohydrates and protein. But, as a country, we cannot allow ourselves to be locked down into a narrow view emphasising only cheap food and waged employment, which is the hegemonic development narrative in South Africa at present. There are also questions about national (and regional) sovereignty in food production and the forms of food that are produced, as well as equity, redress and distribution of resources and opportunities. The discourse of formal jobs and cheap food as the be-all and end-all of food security and economic development locks us onto a trajectory of deepening entrenchment of inequality and dependency, where corporations feed passive or choice-constrained citizens with whatever is cheapest and most profitable to produce. Issues of inequality and redress of past injustices disappear as feasible objectives in policy formulation and implementation.

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