

SCHOOL FOOD, EQUITY AND SOCIAL JUSTICE

Critical Reflections and Perspectives

Edited by

Dorte Ruge, Irene Torres and Darren Powell

First published 2022

ISBN: 978-0-367-63248-9 (hbk)

ISBN: 978-0-367-63249-6 (pbk)

ISBN: 978-1-003-11258-7 (ebk)

Chapter 10

SCHOOL FOOD AND THE PROMOTION OF A MORE JUST AND EQUITABLE FOOD SYSTEM IN SOUTH AFRICA

*Marc C. A. Wegerif, Thabang N. Msimango and
Nokuthula Vilakazi*

(CC BY-NC-ND 4.0)

DOI: 10.4324/9781003112587-12

The funder for this chapter is DSI-NRF Centre of Excellence
in Food Security



Routledge
Taylor & Francis Group
LONDON AND NEW YORK

10

SCHOOL FOOD AND THE PROMOTION OF A MORE JUST AND EQUITABLE FOOD SYSTEM IN SOUTH AFRICA

Marc C. A. Wegerif, Thabang N. Msimango and Nokuthula Vilakazi

Introduction

South Africa (SA) has one of the most unequal societies in the world with high levels of poverty and hunger although it produces enough food for all. In this context, the National School Nutrition Program (NSNP), that feeds over nine million children a day, is the largest nutrition-specific intervention, and an important social safety net with the potential to make a wider development contribution. This chapter assesses the NSNP in terms of how it contributes to equity and social justice through delivering safe nutritious food to learners and driving agricultural and economic transformation through large-scale food procurement. Social justice in this case primarily involves overcoming intergenerational poverty and inequality by ensuring improved nutrition and learning opportunities for children from disadvantaged neighborhoods and the sustainable creation of more economic opportunities in the food system and local communities to overcome racial and other inequalities.

The chapter is based on a review of existing literature and new empirical research on the NSNP. Observation in schools, assessments of the menus, a food safety analysis and interviews with teachers and ex-students were conducted to provide insights into the organization and value of the NSNP. Assessments of project and tender documents and interviews with suppliers reveal the wider contribution the program makes to social justice.

The chapter proceeds with background information on the program and then explores the nutrition and food safety aspects of the program, before discussing the extent to which the program is driving economic transformation. The chapter ends with a summary of recommendations that emerge and the conclusions.

Background

In 1994, during his first 100 days as the first post-Apartheid President of SA, Nelson Mandela introduced the Primary School Nutrition Program (PSNP). The Apartheid government had ended all previous state funded school feeding schemes in 1958. The program Mandela announced started in 50 schools in each of the nine provinces and evolved into the NSNP of today (Msimango, 2020).

The need for school feeding in SA remains as urgent in 2020 as it was in 1994. Before the impact of Covid-19, 62.1% of children were living in multidimensional poverty despite SA being a middle-income country (Stats SA, 2020). This manifests in 29% of the population being severely food insecure, and more than half (51%) moderately to severely food insecure (FAO et al., 2019). Children are the worst affected with 27.4% of those under five years old stunted due to poor nutrition (FAO et al., 2020). Behind these statistics are millions of children who will not reach their full potential because they were born to families in poverty. The NSNP can contribute to overcoming this injustice and reducing inequality by providing children in poor neighborhoods with the nutrition they need to learn well and progress.

The PSNP began in 1994 under the Ministry of Health, and relocated to the Department of Basic Education (DBE) in 2004 to streamline management within the department responsible for schools (Rendall-Mkosi et al., 2013). The nine Provincial Education Departments (PED) have responsibility for the implementation within their provinces. Later, the program was expanded to include secondary schools and became known as the NSNP.

The NSNP is funded through the national DBE. A budget of just over R7.5 billion (\$500 million) was allocated in 2020 to feed learners in 19,950 primary and secondary schools in disadvantaged neighborhoods (wealth quintiles 1 to 3 out of 5), for an average of 194 school days a year (Sibanyoni & Tabit, 2017; Treasury, 2020). The program uses two procurement models, the decentralized model where schools arrange procurement themselves and the centralized model where the PEDs issue tenders and appoint service providers to supply schools on three-year contracts. This chapter focuses on the centralized model that is used in five of the nine provinces including those where the primary research for the chapter was conducted (Gauteng, Limpopo and Mpumalanga).

The NSNP objectives revolve around providing meals, nutrition education and school gardens. The largest evaluation of the program, completed in 2016, notes that “the NSNP was conceptualised primarily as an educational intervention” and stated that the purpose is “to improve the health and nutritional status of the poorest primary and secondary school learners”. The objectives are to:

1. Contribute to enhanced learning through school feeding;
2. Strengthen nutrition education in schools in order to promote healthy lifestyles;
3. Promote sustainable food production initiatives in schools; and
4. Develop partnerships to enhance the program. (JET, 2016: 4)

No nationally representative studies have assessed the NSNP's impact on children's nutrition status or education outcomes, but some smaller studies have indicated positive benefits. One study in the township of Alexandria, Gauteng Province, found a 4.7% reduction in the rate of stunting among children who received the NSNP lunches (Hochfeld et al., 2013). Another, conducted in the rural Eastern Cape, found that stunting rates among children who got breakfast through the corporate social responsibility program of a private company and the school lunch were 8.7% compared to 14.5% for those who only got lunch (Graham et al., 2015). This compares well to the average stunting rate of 23% for children in that province. This indicates that nutrition interventions in school may be able to assist children affected by stunting in their early years to "catch up" thus reducing overall stunting levels. The findings of these studies on improved learning outcomes are less clear. No consistent patterns have emerged, probably due to the limited size and short time period of the studies (Devereux et al., 2018; Graham et al., 2015; Hochfeld et al., 2013).

The NSNP falls under a wider policy framework that it should give effect to, such as the National Policy on Food and Nutrition Security (NPFNS) which takes its mandate from people's constitutionally enshrined "right to have access to...sufficient food and water". The NPFNS strategy includes using market interventions, leveraging on government's food procurement strategies, to support community-based food production and smallholder farmers (DAFF, 2013). The National Development Plan (NDP) aims to address poverty and inequality, including use of procurement to "stimulate industry and job creation" and through "procurement from small-scale farmers" (NPC, 2011). The NSNP needs to go beyond providing nutrition to poorer learners and also use its procurement to contribute to an equally important economic transformation.

School meals: Food preparation, nutrition and safety

Food preparation and nutrition

The NSNP meals are prepared every school day by a team of volunteer food handlers (VFHs) supervised by a teacher appointed as a nutrition coordinator, in addition to their normal teaching duties. Implementation is guided by a wide range of regulations and specifications for food safety, proper kitchen infrastructure, storage, equipment and utensils set by the national DBE (DBE, 2015). The focus, however, is on minimum safety standards and not on ensuring higher quality. The school principals, together with the school governing bodies (SGB), appoint the VFHs – unemployed mothers of children in the schools – and are responsible for the safe-keeping of foodstuffs, and liaising with the district office of the DBE for payment claims (Mawela & van den Berg, 2020).

The meals are prepared according to a set weekly menu, which is repeated throughout the year. The vegetables are always cooked, leaving the once a week fruit as the only fresh raw food provided. The quantities of each ingredient for the meals are set by the government and the amount delivered to each school is based

on the student numbers (GDE, 2019; LDE, 2019). The most significant difference between provinces is that an additional breakfast snack of instant soft porridge is provided in the Gauteng and Western Cape Provinces – other provinces only provide lunches, unless private sector sponsors provide breakfasts. This difference appears to be due to logistical and budget constraints in the poorer and geographically larger provinces where food has to be distributed to distant rural schools.

The lunch menus are very similar across provinces; below is the example from Gauteng (GDE, 2019):

- Monday: Pilchard (tinned pilchards in tomato) stew with rice and yellow vegetables (often butternut) in season.
- Tuesday: Sugar bean stew with samp (a dish made with boiled whole maize kernels) and green vegetables (mostly cabbage) in season.
- Wednesday: UHT milk or pasteurized amasi (sour milk) with maize pap (porridge) and one fruit in season (normally an apple).
- Thursday: Sugar bean stew with samp and yellow vegetables in season.
- Friday: Soya mince stew with maize pap and green vegetables in season.

VFHs are appointed at a ratio of one to every 200 learners up to a maximum of eight per school. In the research for this chapter, the number of learners per school receiving the NSNP ranged between 560 and 1670. VFHs receive a stipend of approximately R1,300 (\$86) per month. One of the biggest challenges raised by the schools and identified by other researchers is that the VFHs are overstretched, underpaid and undertrained, yet they perform a key role in ensuring quality and safety in food preparation (Mawela & van den Berg, 2020; Rendall-Mkosi et al., 2013). In the past VFHs served for only one year to give others the opportunity of employment. This has since been extended to two years, which provides a bit more stability but still does little to build a skilled workforce.

During the Covid-19 outbreak, government restrictions resulted in staggered teaching times to reduce overcrowding. This created more work and longer working days for the teachers and VFHs. As one nutrition coordinator said about the VFH stipend “I see it as very little, especially now because they work overtime, because now it is Covid time they have to serve the children, go back and wash the dishes, come and dish for other learners”. Increasing the VFH stipends has been recommended but not implemented due to budget constraints (DBE, 2016).

Typically, food is cooked in large pots over portable gas stoves and served outside classrooms under the roof overhang. Students queue to be served and then find a place to eat. The schools do not have proper kitchens, storage space or dining areas. Most schools have to use small storerooms meant for stationery, or office space for food storage. Theft of food and cooking equipment, experienced by all the schools visited, highlights the importance of secure storage. Many schools use temporary structures that do not meet health and safety standards as kitchens.

The food provided is starch heavy and lacks fresh produce and diversity. Yet, dietary diversity at schools is all the more important given that the coping strategies

of the poorest families involve eating starch, mostly maize porridge, with very little else at home. As one student indicated “the meals at home were not as balanced as the meals at school, at home we were just eating so you could not go to bed hungry”. The student elaborated that the situation was even worse near month end, just before her grandmother received her pension, “it would be pap [porridge] and water, go to bed”. Another student explained how “when we faced a financial crisis at home, then I had to depend on the food that I get from school... we would have only tea in the morning then we would eat at school, then later we will see what we will eat, probably pap and milk and sleep”.

In relation to food quality, soya has received particular criticism from students, which has impacted food consumption (JET, 2016). One student stated:

I really didn't like the soya mince stuff... it tastes horrible, it tastes horrible, the cabbage and the fish is fine, but the soya mince it's just... and I mean they never really put any effort in cooking, because they cook in like really big pots anyway so it's just water and the stuff

All teachers and students interviewed reported that fewer students eat when less popular meals are cooked. A student said “I would eat lunches, but I'd choose, I had no problem in going the whole day without eating, it's not a big deal”.

The DBE commissioned evaluation found that only 29.9% of the recommended amounts of vegetables were being served and called for improvements in the food served (JET, 2016). It recommended greater monitoring of compliance with the standards, reducing the frequency with which soya mince is served by substituting it with alternative proteins, including more fresh vegetables and fruit, serving breakfast in all schools, ensuring energy content of each meal meets 30–45% of the recommended daily allowance and improving micronutrient fortification, especially of vitamin A (JET, 2016). Others have recommended improving the protein quality of the meals with animal protein like fresh milk, meat and eggs (Dei, 2014). Although accepted, most of these recommendations haven't been implemented due to budget constraints (DBE, 2016).

Despite the limitations, the teachers interviewed for this study were all adamant about the positive benefits of the program and its value for many of the students, especially the poorest. A teacher with decades of experience, who had taught before the NSNP started and has observed its introduction, said it has assisted poor learners a lot,

some of them are parentless, are raised by their grannies. It makes a lot of difference to the black children, some of them are not getting a proper meal at night or even in the morning, but since this was introduced, attendance has improved and, they can now focus a lot

he explained. Former students were also clear about the benefits of the program. One student felt that

it made a good impact on us including me, because some of the days my parents couldn't give me the money to buy something at school or give me a lunch box so the meals would help me a lot, not only me, including my friends, because I had this one friend who was facing, like a serious poverty situation at home, so meals would help him a lot.

When the country went into lockdown in March 2020, due to Covid-19, schools were closed and there was confusion as to whether the NSNP should continue. Some schools made their own arrangements to continue feeding learners and served other children in their neighborhoods, but lunches stopped in most schools. The challenge was exacerbated by the timing coinciding with the ending of the existing three-year supply contracts. A court case, brought by some SGB and human rights organizations, resulted in a court order instructing the government to restart school feeding to fulfill learners' constitutional rights to food (Nortier, 2020).

With partial reopening, still under Covid-19 restrictions, there were less children in attendance. The nutrition coordinators distributed leftover food to needy children who had not yet returned to school and learners were often allowed to take home extra cooked food in containers. Remaining fresh produce is given out to poorer families weekly and dry goods left at the end of each term are distributed before children go on holiday. Although not included in the initial NSNP plans, these are valuable additional benefits of the program.

Visiting the schools revealed the importance and dedication of the teachers and volunteers. Despite often-limited facilities, most of the schools ran well-organized feeding programs. The buildings, even if not of a good quality, were kept clean and tidy. Many teachers, some with years of experience running the program, and VFHs do their best with limited resources and ingredients to make tasty meals. As one student put it, "I think generally we just liked everything, we just enjoyed the food that they made, the lines were just long every day".

Food safety

Globally, foodborne diseases account for over 400,000 deaths and millions of days of lost productivity due to illness annually. Bacteria are responsible for over 90% of these with diarrheal diseases accounting for 550 million illnesses and 230,000 deaths (WHO, 2015). From late 2017 into 2018 SA experienced the world's largest listeriosis outbreak with over 1,000 cases and 216 deaths reported (Smith et al., 2019). Diarrheal diseases, even in children receiving adequate nutrition, can lead to negative impacts on nutrition outcomes. Other diseases and parasites, often associated with lack of access to clean water and sanitation, also impact on a child's ability to absorb nutrients (Rice et al., 2000). Thus, poor food safety standards and poor hygiene infrastructure in schools in the disadvantaged neighborhoods become an injustice that can perpetuate inequality, despite the NSNP.

From 2013 to 2017, SA recorded 106 institutional (schools, correctional facilities and hospitals) foodborne disease outbreaks (Shonhiwa *et al.*, 2018). In 2016, the

Eastern Cape province experienced the largest foodborne disease outbreak resulting in over 1,000 children from 10 schools being treated in hospital for food poisoning due to eating expired sour milk with crumbed maize (News Desk, 2016). Four deaths from different foodborne diseases have been reported in SA schools since 2013 (Msimango, 2020).

A big challenge for food safety in SA is the lack of potable water and safe ablution facilities. This was reported in 3,600 schools in 2020 during the Covid-19 pandemic (Dlulane, 2020), prompting the DBE to allocate R600 million (\$40 million) for water tanks, although these were still empty in June 2020 (Harper, 2020). Observation and interviews with teachers also revealed water challenges and a shortage of ablution facilities at most of the visited schools, with a shortage of taps and toilets, relative to large student numbers, affecting the implantation of good hygiene practices.

An investigation of the prevalence of foodborne pathogens collected samples from raw fresh produce, water, soil, kitchen counter surfaces, floors and food handlers hand swabs at 12 schools in the Gauteng and Mpumalanga provinces (Msimango, 2020). This revealed the presence of various bacteria exceeding acceptable levels for ready-to-eat food. The pathogens found in fresh produce (coliforms in 86% of samples, with *Escherichia coli* in 31.6% and Enterobacteriaceae in 62.5%) can cause illness if the produce is not properly cooked. Bacteria (extended spectrum beta-lactamase (ESBL) producing *Klebsiella* spp., *Enterobacter* spp. and *E. coli*) were also detected on kitchen counters, floors and the hands of food handlers showing the importance of rigorous cleaning and hygiene routines.

The *E. coli* samples (isolates) analyzed in the study were not found to be diarrhea causing; however, worryingly 53.5% of these were multidrug resistant (resistant to three or more classes of antibiotics). Antimicrobial drug resistance was also seen in over 90% of the bacteria (ESBL *E. coli*, *Enterobacter* and *Klebsiella* spp.) found in the schools and 11% were resistant to the antibiotic imipenem, a resistance identified by the World Health Organization (WHO) as a huge threat to public health (WHO, 2015). The bacteria *Staphylococcus aureus* that was found in samples was also resistant to antibiotics, while one found on food handler's hands was multidrug resistant. Although proper food handling practices can eliminate many food hazards, most of the interviewed VFHs had undergone limited training on food safety. The VFHs displayed a positive attitude toward food safety, but not always best practices in activities such as washing utensils and cleaning kitchen surfaces. Training shortfalls were attributed to the lack of funds and insufficient trainers for VFHs.

Procurement and economic transformation

Home-grown school feeding

Home-grown school feeding (HGSF) has become a common approach to school feeding programs with the dual aims of stimulating local agricultural and economic development, while also delivering on the social protection and education benefits of making food available to learners. The scale referred to as “home” or local in

HGSF varies with some programs prioritizing particular localities, such as municipalities, while others consider “home-grown” to be food produced in the country. In poorer countries, HGSF has largely been in response to school feeding led by international organizations and reliant on imported food (Morgan & Sonnino, 2008; Sumberg & Sabates-Wheeler, 2011).

The agricultural development logic of HGSF is to create a structured and stable demand that stimulates the coordination of farmer’s plans and supply-side agricultural support, including investment, to improve production to meet demand. Wider local economic development also takes off, especially through small-scale family farms that hire local labor and spend in local communities. Without adequate supply-side support, however, the creation of structured demand often doesn’t have the desired development benefits (Sumberg & Sabates-Wheeler, 2011). Government’s support for public procurement has the potential to promote an “economy of quality” that can bring environmental, economic and social benefits (Sonnino, 2009). “The basic proposition is that the immense purchasing power of the state can be used in a strategic, pro-active and innovative manner to favor different suppliers, regions and products – and ultimately transformative outcomes” (Sumberg & Sabates-Wheeler, 2011: 343).

The inequality and agricultural transformation challenge in South Africa

The first democratic elections in SA in 1994 ended centuries of colonialism and decades of apartheid. Nevertheless, equality in this new era remains elusive. From 1994 to 2014, the richest 1% in SA doubled their share of national income from around 10% to over 20%, while the richest 10% increased their share from 46% to over 65%. Meanwhile the share of national income going to the poorest 50% fell from 15.6% to just 6.3%. The richest 10% in SA now own over 85% of all private wealth in the country, while the bottom 50% have a negative 2.5% as many own nothing or have more debts than assets (WID, 2020).

The wider societal inequalities are matched by inequality in the agri-food sector. One of the most brutal interventions under colonialism and apartheid was the removal of black South Africans from their land, depriving them of agricultural opportunities. Simultaneously land was given to white settlers who received substantial state agricultural support. This created a small number of large-scale white-owned commercial farms alongside a similar concentration of ownership in food processing and retailing. An unfortunate consequence of post-apartheid economic liberalization and integration into the global economy was a further concentration of ownership. The number of large commercial farms went from 65,000 in 1994 to around 35,000, mostly still in white hands, 20 years later (DAFF, 2016; Hall & Cousins, 2015). This also resulted in the loss of hundreds of thousands of jobs. Now, just 0.28% of farms produce an estimated 80% of all agricultural value, while after years of land dispossession and exclusion from markets, close to 2.5 million black farmers struggle to support themselves on the limited land they can access (Anseeuw & Baldinelli, 2020).

Procurement practices

Currently most food supplied to the NSNP is produced by South African companies, making it a de-facto HGSEF program (at national level at least) despite no clear commitment to that in the program design. This could change, however, with the increasing takeover of the agri-food sector by foreign corporations. For example, in 2018, one of the largest dairy companies was bought by foreign investors, while in 2019, one of the largest food companies – involved in maize milling, rice processing and bread baking – was taken over by the transnational corporation PepsiCo (Heiberg, 2019).

The potential contribution of the NSNP to agricultural and economic development is mentioned by officials and the policy documents. This is, however, reduced to promoting school gardens, which only supply a tiny fraction of the food required. The need to improve local fresh produce procurement was identified and a national pilot project of local fresh vegetables procurement proposed but is yet to be implemented (JET, 2016). Currently, there is no objective explicitly promoting HGSEF, local or national sourcing, or a strategy for how the NSNP can transform the agricultural sector and create local food systems that build and retain wealth in local communities.

Tender documents for potential suppliers to the NSNP focus almost exclusively on delivering food to schools with no details relating to where and from who the produce should be sourced (GDE, 2019; LDE, 2019). The Limpopo documents, for example, say the primary objective is “providing supplementary nutritious meals to the needy learners in public schools to enhance their learning capacity”. They make no mention of the other two NSNP objectives related to nutrition education and production (LDE, 2019). The Gauteng tender documents focus on food delivery and also mention the NSNP encouraging and supporting “food production projects in and around the school” in order to “encourage sustainable food production, job creation and economic improvement” (GDE, 2019). Nothing is mentioned, however, about using procurement to stimulate agricultural and economic development, or buying local or organic produce from black farmers.

As with all state procurement in SA, black economic empowerment criteria are applied, alongside other criteria, in evaluating tender bids. Bids for contracts below R50 million (\$3.3 million) are scored 80 points for price and functionality and 20 points for their Broad-Based Black Economic Empowerment (B-BBEE) status. For contracts above R50 million, there is a 90/10 split of the points allocated. This preferential procurement policy also requires that no more than 25% be sub-contracted to companies with lower B-BBEE status than the successful bidding company.

The companies that secured the latest NSNP supplier contracts in Gauteng and Limpopo provinces are almost all black-owned small- to medium-size companies, indicating some economic transformation success. The companies interviewed had contracts to deliver meals to between 20 and 60 schools for between 10,000 and 50,000 students. On average, these companies employ around six people full time with up to another dozen contracted temporarily at busy times. They perform

a distribution function, sourcing and distributing the required dry goods – such as maize meal, rice, tinned food and soya mince – once per month and the fresh vegetables and fruits once or twice per week. According to the schools visited, the deliveries are reliable. The depth of the transformation is, however, severely limited as these companies source most food from large, often white owned, bulk food suppliers, who buy from the large food processing corporations and commercial farms that account for the majority of production in the country.

The situation appears to be not very different in the decentralized model, as schools tend to go to supermarkets (Devereux et al., 2018) that are part of large national, even international, retail groups that source through corporate supply chains. The challenge is that SA has few independent local shops and local or territorial markets selling food from small-scale and local farmers. Even in countries where such exist, the atomized procurement in a decentralized model has been found to have little leverage to be able to drive positive food system changes (Sumberg & Sabates-Wheeler, 2011). The centralized NSNP procurement model may, with its concentration of buying power, provide more opportunity for interventions that can drive the emergence of local markets and more inclusive processing and distribution systems linked to them.

The Gauteng NSNP tender to supply schools from 2020 to 2023 specifies that 30% must be subcontracted to small businesses (known as exempted micro enterprises) with majority black ownership and also involving designated groups, such as youth and women. These, however, can be and often are other intermediate suppliers or services providers that are not primary producers. For example, one supplier explained that a black-owned company they buy from is an agent that buys milk in bulk from the corporate manufacturer and repackages it. In such an operation, most value still goes to the same large food processors, even importers, with no change at primary production level either.

In Limpopo, there is no compulsory subcontracting, instead bidders are asked for a “written commitment for procurement of perishables from local farmers or Cooperatives” (LDE, 2019). There is no specified quantity or proportion that should be procured from these farmers and no definition of what “local” means. As a supplier in Limpopo explained, “buying from black farmers is required, but being a requirement as it is, when you go down at the ground, the situation is not conducive for the proper implementation of black economic empowerment”. This supplier has been buying from small-scale local black farmers and shared experiences of being disappointed:

The guys will tell you, ‘I have got enough supply’, you can come this week, next week, next time when you go there, there is nobody. The place is locked, and then he is not answering the phone. When you ask, ‘no, that guy has gone to his uncle’s place, they’ve got a wedding’. He is enjoying some plenty of beer there and you have got the clients to service, and then you cannot go to schools the next day and say, no, you can’t get food because there was a wedding, you see. You will be failing those poor learners.

A Gauteng supplier, who was also positive about buying from black farmers, also focused on reliability of supplies saying “on the fresh produce side, I think there is scope there for using smaller farmers, the only problem would always be the sustainability ensuring they supply on a weekly basis”. Another supplier said:

when you don't deliver who is going to suffer? One is the kids who are going to suffer, that is the first point. The second point is that as a remedy for the non-supply the government will have to punish you as you are the one who is responsible for messing up the things.

The suppliers interviewed, who are all black, indicated a willingness to buy from black farmers, but it has to work from a business perspective. There are greater transaction and transport costs involved in going to larger numbers of small-scale farmers to secure the needed supplies. The large bulk suppliers have the experience and equipment, such as storage and vehicles, to fill large orders on time, in some cases delivering the required produce directly to the schools.

While not yet widely achieved, the potential exists for small-scale black farmers to supply fresh produce to schools. Organizing other staple foods supplies from small-scale farmers is more challenging due to a lack of local processing capacity (Zwane, 2014). A black farmer, growing on six hectares of land in Limpopo, sold butternut and cabbage to two different NSNP suppliers for three years. It is possible and she appreciated these as consistent buyers. The arrangement arose as the farmer knew the contracted suppliers who were local businessmen, indicating the importance of scale and social networks for such arrangements. More such localized purchasing arrangements can create greater economic justice with more economic opportunities for smaller-scale black farmers and food processors.

Recommendations and conclusions

The NSNP is a highly successful school feeding program that delivers reasonably nutritious and generally safe cooked meals to over nine million children a day. While there has been no thorough national and independent impact study, smaller studies carried out indicate the program is improving the nutrition status, school attendance and learning outcomes of children. The agricultural sector in SA is supported as, despite no set requirement for this in the NSNP, most food procured is produced in the country.

The potential of the NSNP to drive food quality improvements (in terms of nutrition content and safety) and food system transformation is underutilized. The main challenges, from food safety to equitable procurement, are rooted in the wider food system. They are not created by the NSNP, but these challenges hamper the program in achieving its full potential and the NSNP could play a pivotal role in addressing them with immediate and longer-term interventions.

Immediate interventions

Food safety improvements can be quickly achieved with improved food safety strategies, coupled with better training of food handlers and more regular food safety monitoring. Food safety training could be more effective if conducted in local languages and reinforced with training manuals kept at the schools. Securing permanent staff and better conditions for volunteers will help to build more stable and experienced teams. The current poor conditions for volunteers, who are almost all women, could be considered a further burden on women who already carry greater responsibility for their children. Improved conditions and better training for volunteers would not only improve the NSNP, but could be an empowering opportunity for unemployed women.

Immediate improvements in the food nutrition content can be achieved by improving the menu to ensure greater dietary diversity and palatability. Implementing existing recommendations, would be a good start if budgets are made available. These include increasing fresh produce in menus, serving a greater diversity of proteins and all participating schools providing breakfast.

The easiest wins in agricultural transformation can be achieved with explicit requirements to buy fresh produce from small-scale black farmers combined with greater support, from agricultural departments and other agencies, for these farmers to be suppliers.

Longer-term systemic change

The NSNP needs explicit objectives and strategies for moving the wider food system to a path of improved food quality, equity and sustainability. First, the NSNP should embrace the HGSF as an explicit strategy to ensure procurement is largely from local small-scale black-owned family farms and small-scale black-owned food processors. Second, food procured must be produced agroecologically, of good quality and rich in diversity of essential nutrients. Third, requirements and monitoring have to cover all stages of production and distribution from farm inputs and primary agricultural production to food preparation in schools. Fourth, water and sanitation infrastructure at schools needs to be improved and maintained to contribute to better hygiene and food safety. Fifth, achieving these objectives requires increasing budgets and collaboration with other government departments and non-government agencies, especially on supply side support to smaller-scale and more localized agriculture and food processing.

Moving the NSNP in this direction needs a holistic but incremental approach that preserves and builds on the successes of the current Program. Wide stakeholder mobilization is needed among students, parents, teachers and others in the food sector to generate an appreciation and demand for the shift to food quality and justice. The NSNP can enhance its key role in reducing intergenerational poverty and inequality through improving child nutrition and education outcomes and become

the core around which a new food culture and inclusive socially and ecologically regenerative food system grows.

Acknowledgments

Research conducted for this chapter was supported by the DSI-NRF Centre of Excellence in Food Security.

References

- Anseeuw, W., & Baldinelli, G. M. (2020). *Uneven Ground*. International Land Coalition. https://www.welthungerhilfe.de/fileadmin/pictures/publications/en/studies_analysis/2020-synthesis-report-uneven-ground.pdf
- DAFF (2013). *National policy on food and nutrition security*. Department of Agriculture, Forestry and Fisheries. <https://www.nda.agric.za/docs/media/national%20policyon%20food%20and%20nutrition%20security.pdf>
- DAFF (2016). *Abstract of agricultural statistics*. Directorate Statistics and Economic Analysis Department of Agriculture, Forestry and Fisheries. <https://www.dalrrd.gov.za/Portals/0/Statistics%20and%20Economic%20Analysis/Statistical%20Information/Abstract%202016%20.pdf>
- DBE. (2015). *Food specifications – for products marketed to the national school nutrition programme*. Department of Basic Education. <https://www.education.gov.za/Portals/0/Documents/Publications/NSNP%20Food%20Specification%20Guidelines.pdf?ver=2015-04-07-161503-357>
- DBE. (2016). *Recommendations and management response on the implementation of the national school nutrition programme*. Department: Basic Education. <https://www.education.gov.za/Portals/0/Documents/Publications/NSNP%20Documents/5.%20Management%20Responses%20and%20Improvement%20Plan.pdf?ver=2018-11-09-083252-317>
- Dei, F. A. (2014). An evaluation of the school feeding programme: a case study of Magog primary school University of South Africa. Pretoria, South Africa. <http://hdl.handle.net/10500/18779>
- Devereux, S., Hochfeld, T., Karriem, A., Mensah, C., Morahanye, M., Msimango, T., Mukubonda, A., Naicker, S., Nkomo, G., & Sanders, D. (2018). *School Feeding in South Africa: What we know, what we don't know*. DST-NRF Centre of Excellence in Food Security. <https://foodsecurity.ac.za/wp-content/uploads/2018/06/CoE-FS-WP4-School-Feeding-in-South-Africa-11-jun-18.pdf>
- Dlulane, B., 2020. Plan in place to provide water to over 3000 schools–sanitation dept. Eye Witness News: <https://ewn.co.za/2020/05/14/plan-in-place-to-provide-water-to3-000-schools-sanitation-dept>
- FAO, I., UNICEF, WFP and WHO. (2019). *The State of Food and Nutrition 2019: Safeguarding against economic slowdowns and downturns*. FAO. <http://www.fao.org/3/ca5162en/ca5162en.pdf>
- FAO, IFAD, UNICEF, WFP & WHO. (2020). *The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets*. FAO <https://www.fao.org/documents/card/en/c/ca9692en/>
- GDE. (2019). *Terms of Reference: Invitation To Service Providers For The Procurement, Storage, Supply And Delivery Of Dry And Perishable Groceries For The Primary, Secondary, Special Schools And Identified Learners In 10 (Ten) Districts In The Gauteng Province For A Fixed Term Period Of Three (3) Years*. Gauteng Provincial Government: Department of Education.

- Graham, L., Hochfeld, T., Stuart, L., & Gent, M.V. (2015). *Evaluation study of the national school nutrition programme and the tiger brands foundation in-school breakfast feeding programme in the lady frere and qumbu districts of the eastern cape*. Centre for Social Development in Africa. <https://www.uj.ac.za/faculties/humanities/csda/Documents/TBF%20Nutrition%20Report%202015%20FINAL%20WEB%20VERSION.PDF>
- Hall, R., & Cousins, B. (2015, 20–21 April). *Commercial farming and agribusiness in South Africa and their changing roles in Africa's agro-food system* Rural transformations and food systems: The BRICS and agrarian change in the global South, ISS, Netherlands. https://www.iss.nl/sites/corporate/files/CMCP_D7_Hall_and_Cousins.pdf
- Harper, P. (2020). Schools have tanks, but no water. *The Mail and Guardian*: <https://mg.co.za/education/2020-06-26-schools-have-tanks-but-no-water/>
- Heiberg, T. (2019, 19 July). PepsiCo to buy South Africa's Pioneer Food for \$1.7 billion. *Reuters*. <https://www.reuters.com/article/us-pioneer-foods-m-a-pepsico-idUSKCN1UE0LV>
- Hochfeld, T., Graham, L., Peters, K., Patel, L., Nyathela, T., & Moodley, J. (2013). *Evaluation of the tiger brands foundation's pilot in-school breakfast feeding programme*. Centre for Social Development in Africa. <https://www.uj.ac.za/faculties/humanities/csda/Documents/Evaluation%20of%20the%20Tiger%20Brands%20Foundation%E2%80%99s%20Pilot%20School%20Breakfast%20Feeding%20Scheme.pdf>
- JET. (2016). *Report on the implementation evaluation of the national school nutrition programme*. Department: Planning, Monitoring and Evaluation and Department: Basic Education. <https://evaluations.dpme.gov.za/evaluations/528>
- LDE. (2019). *Invitation: bid for the supply and delivery of foodstuff primary and secondary: Quintiles 1–3 Limpopo Provincial Government*: Department of Education.
- Mawela, A., & van den Berg, G. (2020). Management of school nutrition programmes to improve environmental justice in schools: a South African case study. *South African Journal of Clinical Nutrition*, 33(2), 30–35. doi:10.1080/16070658.2018.1507208
- Morgan, K., & Sonnino, R. (2008). *The school food revolution: public food and the challenge of sustainable development*. Earthscan.
- Msimango, T. N. (2020). *The Prevalence and characterisation of foodborne pathogens isolated from food from school feeding programmes in South Africa* [University of Pretoria]. Pretoria, South Africa.
- News Desk. (2016). More than 1,000 students in 10 schools hit with food poisoning. *FSN*. <https://www.foodsafetynews.com/2016/10/more-than-1000-students-in-10-schools-hit-with-food-poisoning/>
- Nortier, C. (2020, 17 July). Court orders government to provide all schoolchildren with a daily meal. *Daily Maverick*. <https://www.dailymaverick.co.za/article/2020-07-17-court-orders-government-to-provide-all-schoolchildren-with-a-daily-meal/>
- NPC. (2011). *National Development Plan 2030: Our future - make it work*. National Planning Commission. The Presidency, Republic Of South Africa. https://www.gov.za/sites/default/files/gcis_document/201409/ndp-2030-our-future-make-it-workr.pdf
- Rendall-Mkosi, K., Wenhold, F., & Sibanda, N. (2013). Case study of the national school nutrition programme in South Africa. *University of Pretoria*. <https://www.eldis.org/document/A68505>
- Rice, A. L., Sacco, L., Hyder, A., & Black, R. E. (2000). Malnutrition as an underlying cause of childhood deaths associated with infectious diseases in developing countries. *Bulletin of the World Health Organization*, 78, 1207–1221. [https://www.who.int/bulletin/archives/78\(10\)1207.pdf](https://www.who.int/bulletin/archives/78(10)1207.pdf)
- Sibanyoni, J.J., & Tabit, F.T. (2017). Assessing the food safety attitudes and awareness of managers of school feeding programmes in Mpumalanga, South Africa. *Journal of Community Health*, 42(4), 664–673. doi:10.1007/s10900-016-0303-6

- Shonhiwa, A. M., Ntshoe, G., Essel, V., Thomas, J., & McCarthy, K. (2018). A review of food-borne disease outbreaks reported to the Outbreak Response Unit, National Institute for Communicable Diseases, South Africa, 2013 – 2017. *National Institute for Communicable Diseases Public Health Surveillance Bulletin*, 16(1): 3–8. doi: 10.1016/j.ijid.2018.11.186
- Smith, A. M., Tau, N. P., Smouse, S. L., Allam, M., Ismail, A., Ramalwa, N. R., Disenyeng, B., Ngomane, M., & Thomas, J. (2019). Outbreak of *Listeria monocytogenes* in South Africa, 2017–2018: Laboratory activities and experiences associated with whole-genome sequencing analysis of isolates. *Foodborne Pathogens and Disease*, 16(7), 524–530. doi:10.1089/fpd.2018.2586
- Sonnino, R. (2009). Quality food, public procurement, and sustainable development: the school meal revolution in Rome. *Environment and planning A*, 41(2), 425–440. doi:10.1068/2Fa40112
- Stats SA. (2020). *Child Poverty in South Africa: A multiple overlapping deprivation analysis*. Statistics South Africa. <http://www.statssa.gov.za/publications/03-10-22/03-10-22June2020.pdf>
- Sumberg, J., & Sabates-Wheeler, R. (2011). Linking agricultural development to school feeding in sub-Saharan Africa: theoretical perspectives. *Food Policy*, 36(3), 341–349. doi:10.1016/j.foodpol.2011.03.001
- Treasury. (2020). *Estimates of national expenditure: Vote 16 - basic education*. National Treasury, Republic of South Africa. <http://www.treasury.gov.za/documents/National%20Budget/2020/enebooklets/Vote%2016%20Basic%20Education.pdf>
- WHO. (2015). *Global Action Plan On Antimicrobial Resistance*. [online] Geneva: World Health Organization. World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/193736/9789241509763_eng.pdf?sequence=1
- WID. (2020). *World Inequality Database*. The World Inequality Lab. Retrieved 1 November 2020 from <https://wid.world/world-inequality-lab/>
- Zwane, T. M. (2014). *School feeding programmes as a mechanism to improve market access for small-holder farmers in rural areas of South Africa*. Pretoria, South Africa: University of Pretoria.