Double burden and double duty: Government action required to improve child nutrition

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South Africa is grappling with a double burden of child malnutrition characterised by the coexistence of undernutrition (including micronutrient deficiencies) and overnutrition.[1] Malnutrition and its associated health burdens have significant economic and social costs. For example, under five stunting alone, was reported to cost R62 billion per annum[2], while the estimated budget allocation for nutrition related interventions in the nine provinces under the health budget vote is R320 million. The estimated additional cost of implementing the proposed response to bring about food and nutrition security is R86.8 billion.[3] To deliver on multiple nutrition goals, opportunities for shared actions need to be explored.

The government response to this double burden includes some pioneering successes. For example, the mandatory regulation of the marketing of infant formula (see Case 7),[4] and the KwaZulu-Natal Initiative for Breastfeeding Support (KIBS) improved exclusive breastfeeding (EBF) from under 25% to 50%[5]. On the other hand, there are significant gaps such as widespread marketing of ultra-processed food to children (see chapter 3), and a lack of adequate safety nets for childhood nutrition. For example, the Department of Social Development (DSD) has extensive networks to implement food provisioning at Early Childhood Development (ECD) centres. However, fewer than 10% of South Africa's pre-schoolers have access to ECD centres supported by the DSD.[3] This chapter examines the potential of integrated actions to address the double burden of malnutrition (double-duty actions) and to measure the South African response against a human rights framework.

The chapter considers the following questions:

- Why should South Africa adopt a double-duty approach?
- To what extent do South African policies and programmes support double-duty action?
- How can we use double-duty actions to strengthen policies and programmes?
- What is needed to enhance the delivery of double-duty actions?

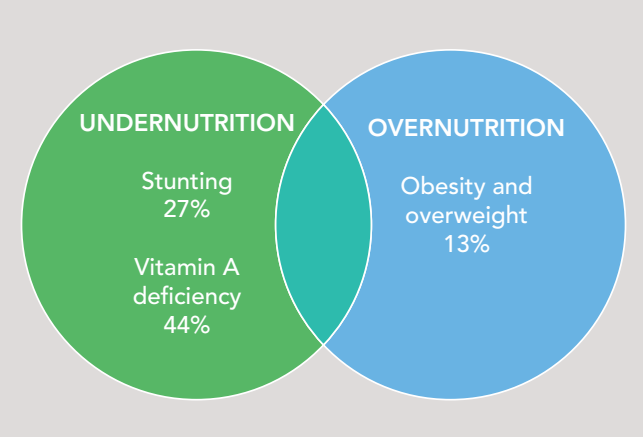
Why should South Africa adopt a double-duty approach?

The concept of a double burden of malnutrition was first introduced in 1992 at the first International Conference on Nutrition[6] which initially referred to the coexistence of undernutrition along with overweight and obesity at a national level. Soon after, it became clear that this double burden existed within communities, households and individuals alike, and that micronutrient deficiencies, known as hidden hunger (such as anaemia) represented an additional threat in many low- and middle-income countries (LMIC)[7], and is sometimes referred to as a triple burden of malnutrition.[8]

The double burden of malnutrition in South Africa

The double burden of malnutrition among children under five has been well-documented.[1] Despite declines in prevalence of wasting and underweight over recent years, Figure 24 shows that children under five are experiencing persistently

Figure 24: Double burden of malnutrition in children under five years in South Africa



Sources: Kruger HS, Swart R, Labadarios D, Dannhauser A, Nel JH 2007. Anthropometric status. In: Labadarios D, ed. National Food Consumption Survey-Fortification Baseline (NFCS-FB): South Africa, 2005. Directorate Nutrition, DOH. Stellenbosch, University of Stellenbosch.
Department of Health, Statistics South Africa, Medical Research Council & ICF (2017) *South African Demographic Health Survey 2016. Key Indicator Report*. Pretoria: DOH, Stats SA, MRC & ICF

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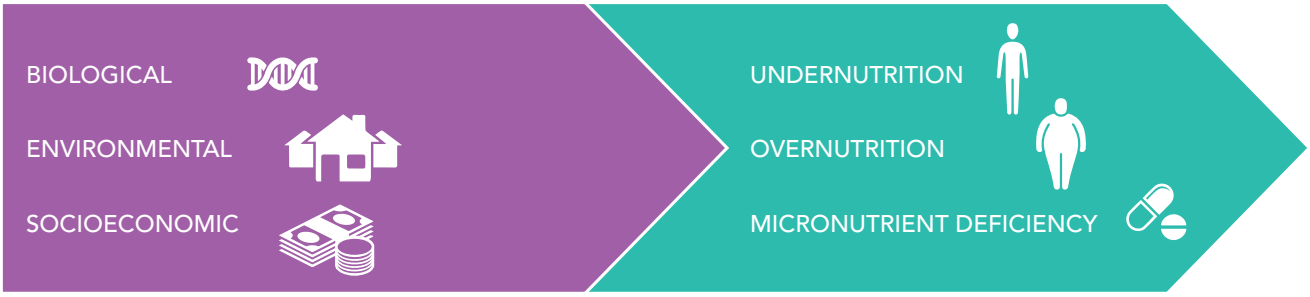
Figure 25: Shared drivers of the double burden of malnutrition



high rates of stunting (too short for age), micronutrient deficiencies (vitamin A, iron and zinc) as well as increasing prevalence of childhood overweight and obesity.[9, 10]

The double burden of malnutrition places children at greater risk of growth faltering and communicable diseases, and simultaneously puts them at risk of developing nutrition-related non-communicable diseases (NCD) as they reach adulthood, including type 2 diabetes, hypertension, and several cancers. As we understand more about the causes and epidemiology of the double burden, we realize these are not separate conditions. These two types of malnutrition overlap and interact in space and time, and have shared biological, environmental and socioeconomic drivers[11] (Figure 25).

Key shared drivers of this double burden of malnutrition include biological factors such as suboptimal EBF. EBF not only prevents undernutrition in early infancy, it also prevents obesity and nutrition-related NCDs in later life.[12] By contrast, exposure to unhealthy food environments saturated with cheap and accessible energy-dense, nutrient-poor foods in the context of South Africa's nutrition transition could lead to excessive weight gain while simultaneously contributing to micronutrient deficiencies.[13] At a fundamental level, the double burden of malnutrition is intimately related to structural drivers, such as inequality and poverty. With 40% of the population living under the poverty line,[14] low socioeconomic status decreases individuals' ability to afford nutrient-rich foods across their life course, predisposing them to undernutrition, and also to overweight and obesity.

Double-duty actions

The double burden of malnutrition offers an untapped window of opportunity for integrated actions, generally termed "double-duty actions" (DDAs) as illustrated by Figure 26. These DDAs include policies, programmes and interventions that have the potential to simultaneously reduce the risk or burden of both undernutrition (including wasting, stunting, and micronutrient deficiency) and overnutrition (overweight and obesity). DDAs should be underpinned by food-based dietary guidelines (FBDG) and, where available, aim to align with context-specific guidelines like the South African Healthy Eating Guidelines.[15]

Figure 26: Potential candidates for double-duty action

Source: World Health Organization, *Double-duty actions for malnutrition: Policy brief*. Geneva: WHO. 2017.

In 2017, the World Health Organization (WHO) published a set of five potential DDAs including:

- interventions to promote and protect EBF in the first 6 months, and continued breastfeeding to two years or beyond;
- the promotion of appropriate and timely complementary feeding in infants from six months old;
- regulations on the marketing of breastmilk substitutes and unhealthy foods;
- maternal nutrition and antenatal care programmes; and
- school food policies and programmes.[16]

The cornerstone of this approach is the concept of "do no harm": addressing one form of malnutrition should not increase the risk of another type of malnutrition.

To what extent do South African policies and programmes support double-duty actions?

Historically, nutrition and food policies have been dominated by issues of food insecurity, dietary diversity, micronutrient deficiency control programmes, breastfeeding, and infant and child feeding practices. Yet nutrition policies have not kept paced with South Africa's rapid nutrition transition towards unhealthy diets[13] and increasing obesity rates[17]. Instead, policies to counteract overnutrition have been developed separately from existing nutrition efforts, despite the potential for integrated actions. In order to monitor these policies, sentinel sites must collect data surveillance for pregnant women and young children, as currently done for HIV.

Table 16: South Africa's nutrition interventions and programmes by focus on the type of malnutrition

Interventions and Programmes	Undernutrition	Micronutrient deficiency	Overnutrition	Potential and actions needed
Humanitarian food assistance (State food distribution, community feeding initiatives, food parcels and food vouchers)	✓	✓	X	• Introduce and establish humanitarian food assistance mechanisms with monitoring at District level • Introduce and establish a standardized food package for children less than five years old, and older children • Introduce standards on healthy foods linked to nutrient profile with front of pack labelling.
Maternal nutrition	✓	✓	✓	• Scale up and promote healthy eating guidance before and during pregnancy • Establish a maternal nutrition working group to keep abreast of nutrition science and developments to inform policy and programmes • Extend social assistance to pregnant women
Breastfeeding support	✓	✓	✓	• Institute paid maternity leave for six months • Strengthen workplace support for breastfeeding mothers • Provide community-based psychosocial support to pregnant women and new mothers with infants and young children • Launch a public awareness campaign to build a positive breastfeeding culture • Provide training and monitor health workers' breastfeeding knowledge and skills

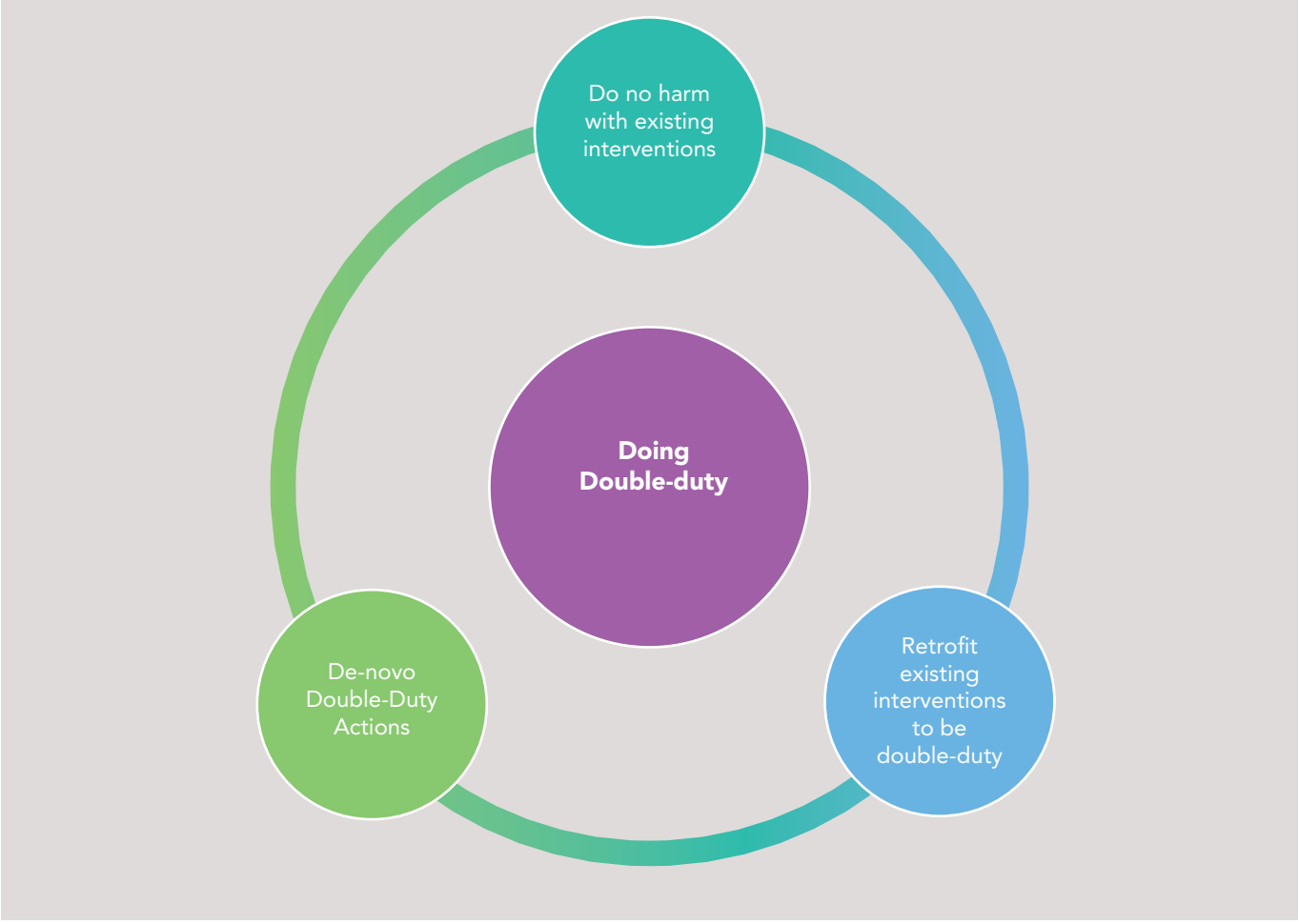
Regulations around breastmilk substitutes	✓	✓	✓	• Launch a public awareness campaign for R991 • Promote and support a public reporting system for R991 violations • Monitor and enforce R991
Complementary feeding support	✓	✓	✓	• Establish and promote Paediatric Food Based Dietary Guidelines for all forms of malnutrition • Include healthy eating guidance in parenting and childcare programmes • Promote and regulate front of pack labelling
Nutrition assessment, education and counselling	✓	✓	✓	• Establish routine and mandatory nutrition assessment at health facilities • Provide training and monitor health worker nutrition skills and competencies
Micronutrient control programmes • Targeted food supplementation • Food fortification • Distribution of multiple micronutrient supplements	X	✓	X	• Institute regular micronutrient surveys to track prevalence and progress towards elimination of micronutrient deficiencies • Establish a reference working group on micronutrient nutrition to stay abreast of the developments in the field and to advise government
Distribution of therapeutic foods or Therapeutic Nutrition Programme	✓	✓	X	• Integrate counselling on healthy diets and snacks for mothers and young children in all therapeutic nutrition programmes
Food security (household and smallholder production)	✓	✓	X	• Integrate smallholder food production programmes with social grant recipients • Support smallholder farmers with agriculture extension assistance.
Restaurants food outlets and retailers	✓	✓	X	• Use incentives and/or regulations to ensure that retail food outlets display the nutritional quality of food on their menu so that consumers can make healthy choices • Remove junk food from checkouts and promote healthy food option aisles
Food provisioning in ECD programmes and schools	✓	✓	X	• Introduce and establish food and meal audits
Food prices	✓	✓	X	• Use taxes and subsidies to subsidize healthy food baskets for low income households and households relying on social grants • Introduce loyalty programme for low income households and households reliant on social grants for selecting high nutrient foods over luxury foods • Provide discounts on healthy foods for the broader public
Social assistance	X	X	X	• Increase the Child Support Grant to the food poverty line so that it covers the cost of a nutritious daily food basket for children
South African Food Based Dietary Guidelines	✓	✓	✓	• Use the FBDGs to promote good nutrition and prevent under- and overnutrition with an emphasis on plant-based foods and low intake of fats, salt and sugar
Marketing of food products to children	X	X	X	• Introduce mandatory regulations to control the marketing and sales of unhealthy food products to children

Table 16 describes and provides an analysis of some nutrition policies and programmes by type of malnutrition and makes recommendations based on the DDA literature[18] to extend their focus to address the double burden of malnutrition.

There are already several double-duty actions in place but scale and intensity to yield results is lacking. For example, breastfeeding protects children from undernutrition and overweight obesity. While the majority of actions in Table 16 were initially introduced as single-duty interventions to address undernutrition, increasing overweight and obesity rates warrant a critical analysis to ensure that these interventions are strengthened and delivered at scale and at the required intensity to address the double burden of nutrition. Health services which provide growth monitoring (GM) represent one of many untapped areas for double-duty actions. GM was originally designed to detect children who are malnourished, by regularly measuring their weight. Now in face of the growing obesity epidemic, the WHO recommends that GM at primary care facilities should include detection of overweight and related counselling.[19] However, this requires the reskilling of health workers to offer nutrition counselling services to promote healthy and diverse diets, and to counsel against feeding young children ultra-processed foods, snacks, and beverages high in energy, sugar, fat and salt. A monitoring framework needs to be put in place to ensure that guidelines for hospitals and clinics are used to promote and model a healthy food environment. To complement and support the health efforts, regulations should be put in place, enforced and monitored to control the marketing of unhealthy foods to children and regulate the nutrient content of foods marketed to and for children.

Interventions concerned with food access also represent a missed opportunity for DDAs on the double burden of malnutrition. Even before the COVID-19 pandemic, the Department of Social Development's food parcels focused on delivering enough dietary energy to prevent hunger and food insecurity, without regard to nutritional guidelines.[3] Despite civil society efforts to respond to hunger, food parcels have been found to include unhealthy processed food items (e.g., sugar-sweetened beverages, chips)[20] which

Figure 27: WHO's Framework for double-duty actions



are deficient in micronutrients. Similarly, food vouchers are often not linked to the purchase of any specific food, and can be used to buy unhealthy foods, which are often more affordable.[3] This highlights the need for the state to step in and provide a subsidized healthy food basket for children. These potential harms could however be easily mitigated through the introduction of standards for healthy food parcels and conditional vouchers aligned to the food-based dietary guidelines and integrating policies to restrict foods, snacks and beverages high in energy, sugar, fat and salt.

Agricultural development programmes are also obvious candidates for the double-duty action by improving household and individual access to nutrient-rich foods and promoting and supporting the food based dietary guidelines. Reorienting policies to this goal must happen with adequate support and with complementary measures that address unhealthy food environments.

Notwithstanding the pressing need for food price policies, applying a double-duty lens when designing taxes and subsidies will help rebalance food environments towards healthier food choices and outcomes. Effective single-duty interventions such as the taxation of sugar-sweetened beverages that was designed to curb obesity levels, should remain an integral part of the nutrition strategy, and should be implemented with complementary actions such as subsidies to encourage healthy diets.

How can we use the double-duty action approach to strengthen policies and programmes in South Africa?

The World Health Organization has recognised that it is possible to address multiple facets of malnutrition through integrated policies and DDAs.[16] When attempting to implement double-duty actions and develop integrated policies, it is helpful to start by building on and leveraging existing policies. As the WHO states, "Double-duty actions are not necessarily new actions. They are often actions that are already used to address single forms of malnutrition but with the potential to address multiple forms simultaneously."[16] This approach to addressing the double burden of malnutrition is particularly useful in promoting efficiency and policy-coherence.

To guide the adoption of double-duty interventions, the WHO has a three-level approach that can be used to develop and practically implement double-duty actions through policies (see Figure 27).[16] These three levels are i) ensuring existing policies are not harmful, ii) retrofitting existing policies and iii) new interventions that simultaneously address both dimensions of malnutrition.[16]

As a first port of call, decision-makers should look at existing interventions and policies that target a single form of malnutrition and ensure that these existing measures do not have a harmful effect or increase other forms of malnutrition. For example, a measure aimed at addressing food insecurity should not provide ultra-processed or unhealthy foods high in salt, fat and sugar that would cause obesity. The next step would be to adapt these existing measures to address other forms of malnutrition. For example, fiscal measures can be adjusted to create additional incentives or disincentives for certain food-related behaviours. Only where an existing policy cannot be leveraged, should new interventions be introduced to address the double burden of malnutrition.

In South Africa's Constitution there is a human rights imperative to address malnutrition and promote good health.[21] This mandate is placed on the legislature, executive, judiciary and all organs of state, which, in this section, we refer to as government. The government is obliged to "progressively realise" the right to sufficient food and water. Though South Africa is a resource constrained setting, the Constitution still requires the government to have acted reasonably in realising these rights. Reasonableness in this context require that the government actors are continually improving access to these rights in as comprehensive and responsive a way as resources permit

To be truly responsive, and to promote underlying constitutional values like democracy the government also needs to ensure that it engages with the public. The rationale for public engagement includes eliciting information about the population's nutrition and health preferences (determining the current level of food and water provision) and informing decision-makers about the extent to which the public's values and or views on solutions differ from their own.[22] This can also assist the government in designing programmes that address the needs of the most vulnerable – an element which is also built into the duty of "progressive realisation".[23] The government's duty to provide basic nutrition to children is even stronger and cannot be delayed. This means that governments cannot justify insufficient state action by relying on resource constraints.

DDAs should also be guided by the same principle of "reasonableness" and the values of democracy. Evaluating and adjusting policies that are potentially harmful serves the purpose of progressing outcomes of existing policies and actions. Similarly, addressing gaps in policy or retrofitting interventions will likely contribute to a more comprehensive and responsive state programme, and ensure that policy goals can be implemented. Where there are stark policy

gaps, the state has an immediate duty to create a plan of action to ensure progressive realisation of rights in a manner that is measurable and appropriate given resource constraints. Where the right is of immediate effect (when it relates to providing basic nutrition to children), the three-level approach can assist to maximise efficacy of resources.

Similarly, promoting public engagement can lead to resource-effective and responsive programmes. For example, qualitative research in Soweto in 2019 on maternal and child nutrition drivers and solutions, revealed that communities' priorities were linked to upstream determinants including unemployment, social inequities, hygiene and sanitation, violence and crime.[24] Recommendations to improve nutrition extended across the spectrum of health systems, social protection, the food system and food environment.[24] If these cross-sectoral solutions were taken into account, decision makers could better tailor interventions to the needs and values of target populations. Fostering open conversations between decision makers and the public enhances transparency of planning and policy making for nutrition as well as educating the public about resource constraints and the need to make difficult trade-offs.[9, 10]

Opportunities to address the double burden of malnutrition

The double-duty approach is underpinned by the idea that it is more efficient to address problems together. However, it does not preclude prioritization. It means simply that priority actions are designed to deliver more. In practice, it requires stakeholders to consider where they are already allocating resources to tackle malnutrition and examine how these policies, programmes can perform DDAs.[25]

As discussed above, the WHO identified five areas where DDAs could be adopted.[16] South Africa has adopted a number of progressive policies which address NCDs, food quality and malnutrition. For example, in 2012, the Department of Health adopted comprehensive regulations on infant formulas and complementary feeding products in R991 that limited the use of sweeteners in complementary foods, restricted marketing of formulas and introduced improved and mandatory labelling requirements.[4]

However, there is still a need to adapt certain existing policies to address additional forms of malnutrition. Using the candidate areas outlined by the WHO, we identified three policies where retrofitting or a "do no harm" principle could be applied to amend the existing policies to address the double burden of malnutrition (Table 17).

More stringent regulation of food retailers

Gauteng has a disproportionate concentration of fast-food outlets and a lack of formal grocery stores in low-income areas.[26] This creates a food environment that promotes consumption of unhealthy foods and limits the ability of low-income individuals to access healthier foods.[26] Currently, the operation of food retailers is regulated through a licensing scheme and businesses are not permitted to operate without a license. In order to obtain a license, retailers are required to submit a copy of their menu and a zoning certificate.[27] Despite the fact that municipalities are aware of the types of food being sold when a business applies for a licence, they have not used their powers to ensure a more equitable spatial distribution of healthy food retailers or to limit the number of unhealthy food outlets. Therefore, very little progress has practically occurred.

Policymakers at a local government level could leverage this system to a) reduce harm by limiting the opening of new unhealthy food retailers in low-income areas and b) promote

Table 17: Areas for the application of double-duty actions

Candidates For DDA	Existing Policies	Adaption needed for DDA
Actions to optimize early nutrition	Regulations relating to foodstuffs for infants and young children, R991	• Introduce nutrition component to licensing requirements • Introduce regulations to limit the calorie contribution from fat and sugar • Introduce front-of-pack labelling
School nutrition policies and programmes	National School Nutrition Programme	• Enforce and monitor the provision of fresh fruit and vegetables as per menu design • Regulate the sale and provision of sugar-sweetened beverages at schools and through school tuck shops and vendors
Restricting marketing of unhealthy foods	Draft regulation relating to the labelling and advertising of foods, R429	• Adopt in order to prohibit the marketing of unhealthy food to children (including the use of celebrity endorsements and promotions)

the availability of healthy food outlets by creating incentives and easier licensing processes for businesses selling healthier foods.[28] Policies would need to be tailored to this goal and health behaviours encouraged as part of the same package. This would improve the overall quality of the food environment and address multiple facets of malnutrition. However, as will be discussed in more detail below, the lack of a national body with powers to comprehensively regulate nutrition and the need to rely on local governments to implement these types of interventions may lead to fragmented and inconsistent policies.

National School Nutrition Programme

South Africa currently has a feeding scheme which aims to provide at least one meal a day to lower quintile schools.[29] The scheme feeds in excess of 9 million children.[29] The scope of the scheme's reach and importance was reaffirmed when the suspension of the feeding scheme during the school closures under the COVID-19 lockdown led to millions of children losing a major source of food and nutrition. This led to a court case being filed against the Department of Basic Education (DBE) to have the feeding scheme be reinstated based on numerous accounts of the impact of the suspension of the scheme.[30] However, even before the feeding scheme was suspended, its implementation was hampered by several challenges including unavailability of necessary infrastructure, delayed or non-delivery of supplies, or misalignment of supplies with those prescribed.[31] The impact of such bottlenecks has been documented, for example, the meal fails to meet the 30% of children's daily energy and micronutrient requirements.[32] Some research has shown that by fortifying school meals or introducing more nutritious foods, the school feeding scheme can be used to address aspects of malnutrition beyond undernutrition.[29, 32] This will require a policy directive to improve the nutrient quality of the school meal. Despite the fact that the school feeding scheme provides a mechanism to improve the dietary intake of many children, the focus of policy action from DBE has been on caloric sufficiency of the meals rather than their nutritional composition. In 2017, the DBE rejected a recommendation that micronutrient fortification or supplementation be used to improve the quality of the meals. The reason provided was that fortification was the domain of the Department of Health, not DBE, highlighting the shortcomings of a siloed approach to nutrition which does not adopt integrated solutions to address multiple facets of the burden of malnutrition. The activation of the proposed multi-sectoral Food and Nutrition Security Council would foster an intersectoral approach that is so needed in South Africa.

The DBE's position regarding the limits of its mandate has meant that much of the policy action related to nutrition is in the form of guidelines and not binding regulations, limiting their implementation. For example there are nutritional guidelines available in South Africa to assist schools in the composition of healthy and varied meals, as well as voluntary guidelines for healthy school tuck shops, however these are not being enforced.[33, 34] These guidelines should be implemented and monitored by the DBE, in order for school-based interventions to serve as double-duty actions to improve the nutritional status of school-age children and adolescents.

Restricting marketing targeted at children

Introducing comprehensive marketing restrictions in South Africa is complicated because there is no centralised regulatory authority empowered to regulate advertising. The most comprehensive body that currently exists is the Advertising Regulatory Board,[iii] which is voluntary, and carries no government-sanctioned mandate related to advertising restrictions. It also funded in part by the food industry which creates a conflict of interest. Consequently, advertising restrictions have been piecemeal, and this will be the case until a national regulator is created. However, municipalities can use their existing powers to regulate advertising and the availability of food products through channels such as billboards and tuckshops, and can thereby shape behaviours that lead to overnutrition and obesity.[36]

Marketing restrictions are considered to be an effective means to prevent obesity and support the development of healthier eating behaviours.[37] Research has shown a proliferation of outdoor advertising for unhealthy food products such as sugar-sweetened beverages near schools or on school grounds in Soweto.[38] Limiting the advertising of unhealthy food products on billboards near schools could provide a mechanism to implement a double-duty intervention. Municipalities could utilise their powers to approve and regulate billboards to operationalise high-level national policies from the Department of Basic Education on advertising in schools.[21] These powers can be used to limit the existing exposure to unhealthy products and prevent the erection of further billboards near schools.

Increasingly companies are shifting away from traditional forms of advertising and moving to below-the-line advertising, like social media. This has accompanied the growth in on-demand content services like Netflix and Spotify

iii A self-regulatory body, previously known as the Advertising Standards Authority of South Africa

Case 24: Lessons from Mexico and Brazil

In Mexico, school breakfasts are regulated by nutrition standards, which limit sugar and fat content. A focus on traditional Mexican foods (rich in micronutrients); along with wholegrain cereal and fresh produce enhances the quality of the meal. This measure is accompanied by nutrition education for both parents and children.[35] Simplified nutrition labelling in the form of front of package warning labels for products high in sugar, fat and salt have been introduced in Mexico.

In Brazil, the national school feeding programme places strict requirements on the meals provided: a weekly minimum of fruits and vegetables, limits on sodium content and sweets and a focus on fresh and traditional food. Local law also limits how much processed food schools can be purchased (less than 30%) and prohibits drinks with low nutritional value (such as sugar-sweetened beverages).[35] The government is also in the process of implementing front of package warning labels for unhealthy foods.

which increases the need to create a mechanism to regulate advertising on both old (TV and radio) and "new" media. The WHO recommends two important steps for governments to take in this regard: first, recognise that they have a duty to protect children online through statutory regulation, and b) second, establish regulatory agencies with appropriate sanction and penalty mechanisms. In October 2020, the Minister of Communications and Digital Technologies published a draft policy framework which proposes the introduction of regulations "in respect of scheduling" on "the advertising of alcoholic beverages and harmful foods that are high in salt, sugars, fat, saturated fats or trans-fatty acids or that otherwise do not fit national or international nutritional guidelines". The policy framework is also aimed at bringing the evolving landscape of audio and audiovisual content into the ambit of government regulation.

What is needed to enhance the delivery of double-duty actions?

Adopting a well-formulated DDA approach is only one side of the equation. The other is the capabilities of the state to deliver and implement DDAs. In order for DDAs to reach their full potential, strong technical and implementation capacity of the state is required. However, South Africa is currently facing a number of resource, skills, political, organisational and management constraints.[39, 40] The state, and especially local government, lacks the necessary mechanisms or instruments such as a professional and highly skilled bureaucracy to dispatch and drive our developmental agenda, including food and nutrition security.[41]

Leadership and coordination

Food security and nutrition does not fall under the mandate of any specific ministry or sphere of government. To address this, the National Policy on Food and Nutrition Security (NPFNS) was approved by Cabinet in September 2013 and published in the Government Gazette, 22 August 2014 (No 37915) by the Department of Agriculture, Forestry and Fisheries. It provides a definition of concepts, a guiding framework, and considers the regional and global obligations of South Africa, as well as the wider role of government. The policy proposes achieving food and nutrition security through five pillars:

- Improved nutritional safety nets, including government run and supported nutrition and feeding programmes and emergency food relief,
- Improved nutrition education,
- The alignment of investment in agriculture towards local economic development,
- Improved market participation of the emerging agricultural sector,
- Food and Nutrition Security Risk Management, including increased investment in research and technology.

Although each of the pillars has DDA potential, moving from policy to programmes of action has been slow. In March 2015, Cabinet directed that an integrated nutrition plan be developed which would guide implementation. A draft of this National Food and Nutrition Security Plan (NFNSP) was prepared by an Inter-Governmental Technical Working Group and first presented in September 2015. It has since been through a consultative process with government departments, a joint meeting of Portfolio Committees (PCs) convened by the PC on Agriculture Forestry & Fisheries and costed.

The immediate goals are focused on governance, coordination, and policy and programme reform with six objectives:

1. Establish a multi-sectoral food and nutrition security council to oversee alignment of policies, legislation and programmes;

Case 25: What does the COVID-19 pandemic mean for the double burden of malnutrition?

The COVID-19 pandemic and its socioeconomic impacts have disproportionately impacted diets, nutrition practices and services. The work on curbing the double burden of malnutrition has assumed even greater significance at the time of COVID-19 when children are at increased vulnerability from:

- **Food insecurity and hunger:** During lockdown, children who were once fed daily were no longer at school, so they relied on parents for providing adequate feeding. With a rise in food prices and disruption in food supply chains, the earnings of the poor and vulnerable fell and many families were unable to afford enough food to last through a prolonged lockdown, despite the government's temporary COVID-19 grants. Mothers milk production is also affected both by poor nutrition and stress. These in turn affect diet quality and health, leading to increases in all forms of malnutrition.
- **Micronutrient deficiencies:** Disruption in essential nutrition services and lack of access to fortified food, that includes iron, iodine, folate, vitamin A, and zinc, is likely to increase already high rates of vitamin and mineral deficiency in children.[12]
- **Unhealthy foods:** Fresh food supplies in particular were more impacted during the pandemic than staples and global cereal stocks. As a result of decreased purchasing power, the public was compelled to eat cheaper, ultra-processed foods that are less nutritious but more easily available. This perpetuates unequal nutrition outcomes and further increases vulnerability to stunting, obesity and associated NCDs, which in turn increases the severity of COVID-19 symptoms.

Rises in double burden of malnutrition can be prevented, now and during other crises. Recommendations for DDA during a pandemic include:

- Maintain and increase coverage rates of essential nutrition services. Service coverage is already poor e.g. vitamin A coverage reaches only 42% of South African children under five.
- Strengthen social safety nets to improve dietary quality, not just quantity. School feeding programs should adopt new modalities to safely distribute food during school closures.
- Food aid through vouchers and price subsidies could stimulate demand for fruits and vegetables, dairy, and other nutrient-rich foods and limit unhealthy food intake.
- National leaders and the media must stimulate demand for protective nutrient-rich foods and encourage appropriate infant and young child feeding practices, including optimal breastfeeding and dietary diversity.

Without deliberate action, the COVID-19 crisis will set us back several years in our efforts to eliminate micronutrient malnutrition. But it doesn't have to.

2. Establish inclusive local food value chains to improve access to nutritious affordable food by increasing production of agricultural products and nutritious crops, stimulating markets for smallholder producers, and establishing and strengthening producer development institutions.
3. Expand targeted social protection measures and sustainable livelihood programmes by expanding a network of feeding and food distribution centres.
4. Scale up high impact nutrition interventions targeting women of reproductive age, pregnant and lactating women and infants.
5. Develop an integrated communication plan to encourage people to make informed food and nutrition decisions.
6. Develop a monitoring and evaluation system including an integrated risk management system for monitoring food and nutrition related risks.

Once again, these objectives can be achieved through a DDA approach in theory, however several constraints should be addressed first if state capacity to prevent malnutrition is to be more comprehensively built. Among others, there is a need to overcome organisational and management constraints in all spheres of government, but especially at the level of municipalities in the poorest regions of South Africa.[41] Departmental and sub-national policies continue to remain uncoordinated and at times incoherent. The impact of this was evident during the lockdown implemented by Government during 2020 in response to COVID-19.[42]

Beyond this, fragmented mandates at the national and provincial levels, and the powers vested in local governments (including zoning, municipal services and trading regulations) create difficulties in bringing together policies at the various points of intervention. During the COVID-19 lockdown, community-based responses emerged as a relatively

effective means to address hunger, although not necessarily adequate nutrition. In this context, DDAs could have usefully been adopted to identify which bodies and sectors had the resources and authority to implement responses to the hunger and nutritional shortfalls experienced during the lockdown. A DDA approach would also have allowed interventions to be more carefully designed to fit within the scope and capacity of the powers across South Africa's multi-tier system of government. In the longer term, South Africa requires improved institutional arrangements across and within departments and spheres to improve delivery both during a crisis such as COVID-19, and as an on-going approach to addressing child food insecurity.

Several options are possible. As noted, the National Food and Nutrition Security Plan for South Africa 2018-2023 (NFNSP, November 2017 version) called for the establishment of a multi-sectoral Food and Nutrition Security Council to oversee alignment of policies, legislation and programmes, and coordination and implementation of programmes and services. Although the Council does not appear to have been established in the form envisaged by the NFNSP[43], there has been some progress towards monitoring food and nutrition security indicators. The objective of this Council is well aligned with a DDA approach. Its mandate includes bringing responsibility for food security and nutrition improvement at the highest political levels under one authority, that includes national, provincial, municipal spheres of government.

While a coordinating committee that could play this role has been put in place, comprehensive implementation strategies are not yet in place at the sub-national level, and common goals, clear objectives, metrics for monitoring and evaluating food and nutrition interventions have not been set in consultation with all stakeholders, particular those in civil society and the private sector. Building effective bureaucracies that take account of food and nutrition security is needed across all spheres of government if the capacity to intervene through DDAs is to be put in place.

In addition, stronger links are needed between food availability driven by the National Department of Agriculture, Land Reform and Rural Development, and other dimensions of food security such as accessibility, utilisation and stability that are driven by other departments and spheres. These are recognised by the NFSNP but will require funding. There are some positive developments at the level of provinces and municipalities with a Western Cape Government Strategic Framework for Household Food and Nutrition Security in place, as well as the Gauteng Integrated Food Security Strategy. For example, the Western Cape Food Relief Forum played a coordinating role that cut across multiple sectors (see case 26), and the City of Cape Town is exploring how to use the food system to support double duty action.

While a central authority at the level of national government is important, municipalities have a critical role to play. Access to water is an important service for the production, processing and preparation of food. The right of access is guaranteed in 27 (1)(b) of the Constitution and municipalities are responsible for water services. In particular, adequate clean water is essential for the hygienic preparation of food for children, as well as preventing the spread of COVID-19. Access to electricity is essential for cooking and the safe storage another critical component of food security that municipalities are responsible for.[44]

Another focus of the NFNSP is to scale up high-impact nutrition interventions targeting women, infants and children. Here, the strategy notes that although the South African government does provide high-impact, nutrition-specific interventions targeting women, infants and children, such as antenatal nutrition and EBF programmes, coverage remains low. Expanding both the depth and spread of these programmes is an obvious candidate for DDA and can significantly contribute towards improved child nutrition. In practice, this would need to overcome severe state capacity constraints including the skills and knowledge deficits of healthcare workers, dietitians and social workers.[45] COVID-19 responses have potentially exacerbated the problem by restricting mobility and by limiting access to facilities providing nutrition and health interventions.

Costing and funding

There is a lot to do so where do we start? Costing and then funding the NFNP is necessary to ensure the prioritisation of key actions by all spheres of government and to determine the optimal sequence in which they should occur. Cost estimates of interventions, as well as their scale up and their impact in terms of morbidity and mortality must be well understood. Assumptions underlying costing must be made explicit in order to appreciate which inputs have been costed. In reality, interventions do not cost the same. Some interventions (e.g. education and marketing) may require higher start-up costs, while the modification of key messages conveyed at nutrition counselling requires minimal supplementary costs. Therefore, information on current investment in nutrition interventions must be available to estimate true costs.[46]

Costing also helps the process of mobilising funding for programmes, as this has not increased since the NFNSP was completed, with social protection grants receiving only

Case 26: Western Cape Food Relief Forum drives cross-sector collaboration

Andrew Boraine[i]

The COVID-19 pandemic and the economic hardship resulting from the lockdown in South Africa vastly increased the need for food aid and resulted in civil society organisations (CSOs), private donors, and the public sector in the Western Cape working together in a structured way to address these needs.

The Western Cape Economic Development Partnership (EDP)[ii] initiated the NGO-Government Food Relief Coordination Forum in April 2020 in response to the food crisis. The Forum consisted of large food NGOs, intermediary food donor networks, faith-based organisations, grassroots community action networks and community kitchens, and public sector representatives, all involved in the provision of food aid within Cape Town and the Western Cape.

A number of key insights have emerged from this process. The first was the pressing need for building intersectoral collaboration. This was complicated by two factors: many institutions were initially acting in isolation of each other, and CSOs varied widely in size, experience, capacity and resources. The Forum, coordinated by an independent entity with a track record of building relationships, was able to give all role-players a voice and facilitated new linkages, collaboration and knowledge exchange between and within sectors.

The impact of the Forum was enhanced through its access (via the EDP) to the Western Cape Government's bi-weekly Humanitarian Cluster Committee, a whole-of-government approach to the crisis incorporating seven provincial government departments, the South African Social Security Agency, the City of Cape Town and five district municipalities. This meant that public sector officials participating in the Forum were able to represent an integrated government approach and not just the views of individual departments.

This process of engagement was supported by an approach that explicitly favoured partnering for joint action, rather than dialogue. Forum meetings were relatively short, with smaller agendas, to allow for faster decision-making and more agile responses to issues. The Forum was constructed and seen as a safe space, particularly for public sector officials to engage constructively with civil society and answer burning questions. It developed into a place of shared purpose with an intentional lack of hierarchy and power dynamics. Pre-existing relationships were leveraged, where appropriate, to broaden networks and fast-track solutions.

The EDP, as Forum convenor, adopted an adaptive governance approach to the process by urging partners to step into action, while at the same time regularly pausing to reflect, learn and, if needs be, adapt and adjust their plans, rather than waiting for the 'perfect' plan or data.

One of the main challenges in providing food relief was the absence of robust data – knowing who is providing food, how much, the calorific content, where, and how often. A subset of Forum members developed data capture platforms to assess existing efforts, prevent duplication and identify areas being overlooked. In this process, some key lessons on civil society food data mapping emerged which have been published in a report.[1] A second set of learnings, on the utilisation of digital vouchers to enhance food relief, is also available.[2]

The most powerful lesson from the Forum was the reminder that the tactics used so effectively during the Western Cape drought applied equally in a different crisis. The call then was to "Connect, communicate and collaborate". This approach, exemplified throughout the Forum's actions, led to the development of new relationships, engagements and effective actions to address an unprecedented crisis.

These new relationships, which include networks of food system researchers and policy advocates, are now being leveraged through a reconstituted Western Cape Food Forum to initiate joint action between different sectors and stakeholders in support of more long-term food and nutrition system change in the Western Cape.

A full report on the activities and lessons of the Food Forum during the crisis is available.[3] For more information on the ongoing work of the Forum in supporting food and nutrition systems change, contact Andrew Boraine at andrew@wcedp.co.za or on 021 832 0200.

i Western Cape Economic Development Partnership

ii The Economic Development Partnership is a collaborative intermediary organisation established in 2012 to help stakeholders from different sectors work together to deal with complex societal issues.

Case 27: Food and nutrition response during COVID-19 – High expectations and great disappointments

Chantell Witten and Maria van der Merwe

In 1994, the first democratic government recognized the need for a national integrated nutrition programme to address malnutrition in South Africa.[53] South Africa, supported by a fraternity of nutrition professionals, research institutions and development partners, has since made progress on several strategic, evidence-based food and nutrition policy developments.[53,54]. The country has been hailed and recognized internationally for its nutrition capacity and programming.[55,56]

The country's political will to address malnutrition is captured in the foreword of the National Food and Nutrition Security Plan for South Africa (2018-2023). Penned by President Cyril Ramaphosa, it states that 'The National Food and Nutrition Security Plan 2018-2023 embodies our collective response to the challenge of food insecurity and malnutrition'.

Despite the demonstrated capacity and political will to address food insecurity and malnutrition, the COVID-19 pandemic exposed the inertia and inefficiencies that limited our national food and nutrition response. The pandemic will be remembered for media images and headlines of people, and children in particular, queuing for food. While chronic malnutrition is well documented in South Africa and is worsening,[5] the long meandering lines of people queuing for food relief should have been sufficient evidence to warrant a humanitarian response to ensure access to food,[58] a basic human right.

Food insecurity, a known global disrupter

Leading up to the lockdown, the President reportedly consulted with key stakeholders, thought leaders and community representatives. One would have a reasonable expectation that food insecurity would have been a priority discussion point given that hunger is a known global disrupter.[59] Yet, months into the national lockdown, there was no sign of a national strategic plan to ensure food and nutrition security, especially for children.

In 2018, an estimated 20 million people experienced hunger or were in precarious positions of food insecurity in the country. As expected, NIDS-CRAM wave one findings reported an increase in hunger following the lockdown due to income shocks and interrupted access to food, including the closure of the school feeding programmes and Early Childhood Development (ECD) centres.[60] The NIDS-CRAM survey findings on hunger reflected positive changes between May/June and July/August 2020, with hunger declining for "anyone in the household" from 22% to 16%, and for children from 15% to 11%.[61] Yet, even as the lockdown levels eased to level 1, household hunger was higher than before the pandemic. Households reported running out of food earlier in the month and feeding lines did not shorten, with many feeding initiatives stretched to the brink of collapse.[10] In October 2020, government stopped the payout of the R500 caregiver grant despite massive job losses among women, increased food prices and the increased indebtedness of many households as a result of loans, advanced sale of labour and credit.[63] As many commentators predicted, the ensuing hunger and food insecurity affected many more individuals than COVID-19. More disheartening was the collateral damage to children. Malnutrition is known to affect children long after the hunger has passed, casting a long shadow into their adult years; negatively affecting their health, cognitive development and earning potential.[64]

Piecemeal responses to the COVID-19 food crisis

Hamelin and colleagues described the experience of household food insecurity in four stages, starting with anxiety about food, followed by diminished parental food quality, household food quantity, and finally compromised child diets.[65] As reported earlier, there were indications of compromised child diets within the first two months of the lockdown period.

Early in the lockdown, civil society actions focused on feeding children,[66] illustrating the narrow space that households had to navigate the abrupt shock to their food security. A significant proportion of households rely on retailers for their food rather than on self-production or subsistence farming. Yet informal trading was initially prohibited, limiting local access to food.[67] While government, in particular the Department of Social Development, fumbled to respond to the overwhelming cries for food, civil society was divided on a strategic response to the crisis – with calls for an increase to the Child Support Grant and the introduction of Basic Income Support versus the immediate and pressing need for

i Division Health Science Education, University of the Free State
ii Independent nutrition consultant

humanitarian food relief.[68] Yet, the additional grant was not allocated per child but per caregiver, and the increase did not keep up with the increase in food prices and the cost to access food.[69] Even with the grant increase, a single mother with one child would not reach the upper poverty line. Not only did the lockdown disrupt income, it also saw the closing of schools and ECD centres and with that, the much-needed feeding programmes provided by them respectively.[70]

Stages of household food and nutrition insecurity and the required appropriate action

Since 1994, the United Nations Food and Agriculture Organization (FAO) has invested in food security, nutrition, and livelihoods analysis, and its relevance for decision-making. The FAO's Integrated Food Security and Humanitarian Phase Classification (IPC) tool allows decision-makers to identify the nature and extent of food insecurity with greater rigour, supported by clear evidence to promote strategic decision-making and stronger linkages between information and action. This improved analysis enables food security and humanitarian interventions to be more needs-based, strategic and timely.[71] For many households, the need for food during the lockdown was dire. It was, therefore, appropriate and imperative to activate a humanitarian response. This was widely provided by civil society,[72] in the absence of a coordinated and appropriately scaled government response.[73]

Even before the COVID-19 pandemic, six million of South Africa's 20 million children lived in households with no employed adults. About one third (6,4 million children) live in households where income is below the food poverty line.[74] Humanitarian food provision, therefore, remains imperative. The emergence of community networks and organized feeding initiatives has brought much-needed relief, but it is all too obvious that these initiatives cannot continue to rely on goodwill and a charity response. A systematic and long-term strategic plan is needed to support food and feeding initiatives.[57]

Increasing the availability of affordable health-promoting food together with livelihood programmes, such as those by the Department of Public Works; income-generation programmes like food gardening initiatives; and entrepreneurial and enterprise development will be needed over the medium to longer term. Given South Africa's negative economic growth, increasing unemployment and persistently high levels of chronic malnutrition, it is time for the food and nutrition fraternity to call on government to activate the proposed food and nutrition coordinating mechanism in the Presidency. Coordinated and adequately funded efforts, as outlined in the National Food and Nutrition Security Plan,[54] are required to address both growing food insecurity and malnutrition and the increasing prevalence of overweight, obesity and diet-related non-communicable disease. There is an urgent need to implement double-duty actions that simultaneously address all forms of malnutrition.[75] Central to addressing the food crisis is a revolution of the food system with clear nutrition outcomes aligned to the United Nations Nutrition Targets of reduced stunting, improved maternal anaemia and no increase in childhood overweight.[76]

While research findings and a myriad of webinars and opinion pieces on food and nutrition have made headlines, without a coordinated national response, children are paying with their lives and their futures for our collective inertia and indifference to the slow violence of child hunger and malnutrition.

minimal increases. Improving the revenue collection capacity and spending effectiveness of local governments must be a component of this. Consideration could also be given to incorporating indicators for food and nutrition security into the determination of a nutrition sensitive division of revenue between local governments. This would ensure that local governments in less resourced areas receive additional funding through which DDAs can be supported.

Finally, in addition to adopting a double-duty approach to policy making, transparent alignment between nutrition outcomes, policies and budgets is essential. This is underpinned by South Africa's commitment to the Convention on the Rights of the Child (CRC) that has made transparent budgeting one of the obligations on states in realizing the right of children to health.[47] The Accountability and Transparency for Human Rights Foundation (2013) has suggested that budget transparency around child nutrition in SA can be enhanced in a number of important ways.[48] While planning for nutrition is part of each department's Annual Performance Plan (APP) at both national and local level, the specific targets and budgets for nutrition are not always evident. Provincial budgets for example, reveal no correlation

between the magnitude of childhood stunting and the amount of nutrition funding.[49] Current line item budgets are not linked to outcomes and can be hard to track at the best of times. For example, within Health, nutrition interventions are integrated into larger budget line items such as primary health care services.

In another sector, the Department of Social Development is responsible for delivering food parcels and monetary food vouchers, without demonstration of separate line items in the annual performance plan.[3] This inability to disaggregate line items makes it difficult to hold departments accountable for spending or budgeting on nutrition and achieving related goals.[3] The importance of doing so has been highlighted by the response by national government to the food and nutrition shortfalls experienced during COVID-19. What is required is transparent strategic purchasing coupled with double-duty policies that makes explicit the alignment between allocated budgets and the multiple outcomes of the spending. This is key not only for nutrition budgets, but for justifying how the public purse is spent toward the realization of Universal Health Coverage in South Africa.

In addition to these opportunities to improve DDAs for child malnutrition, constraints such as staff shortages, insufficient nutrition training, and limited nutrition knowledge across all departments will also need to be addressed. COVID-19 has highlighted the importance of a properly resourced public health system, without which child food and nutrition security will not be possible.

Conclusion

A number of elements are required to meaningfully deliver double-duty interventions and address the double burden of malnutrition in SA. Firstly, it will be essential to ensure alignment among national departments responsible for other issues related to food security, such as climate change, energy, water, food safety, and food marketing. These include the departments of Trade and Industry, Agriculture, Basic Education, Water and Sanitation, together with health and related policies to ensure policy coherence on over and under nutrition. Simultaneously we must develop accountability mechanisms to review, report on and monitor commitments. Thirdly, the COVID-19 pandemic has exposed how new tax and trade policies are needed to both stabilise and or subsidise rising food prices for healthy foods. In their absence a resilient recovery will be challenging, and the double burden of malnutrition will worsen.

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