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Early and young child feeding in South Africa: expert assessment of public policy using food-EPI

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ABSTRACT

Stunting under the age of two years remains a significant public health problem in South Africa. This study used data from the 2023/24 Food-EPI assessment to benchmark implementation of public nutrition policy related to undernutrition to develop recommendations for priority policy action. The assessment included ratings by an expert panel including academics, civil society, and government representatives (n = 13). Implementation of food fortification was rated as high, and access to water, sanitation, and hygiene in public areas was rated as low. Policies on breastfeeding and restrictions on the marketing of breast milk substitutes need to be updated and/or enforced. Breastfeeding in public and workplaces needs to be supported, the informal sector regulated, and breastfeeding and complementary feeding targets and growth monitoring attended to. The need to address stunting requires a systems approach to tackle undernutrition, as suggested by the UNICEF Nutrition Strategy 2020-2030.

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Stunting; Food-EPI;
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1. Introduction

Stunting under the age of two years is a risk marker of poor childhood development, predicting reduced cognitive and educational outcomes through childhood into adolescence. Beyond these developmental consequences, stunting has a significant economic impact across individual, household, and community levels. It constitutes an enormous drain on economic productivity and growth, with estimates pointing to reductions in a country's gross domestic product (GDP) of up to 3% (World Bank 2006). Per capita income losses due to stunting range between 5-7% in low- and middle-income countries (LMICs) (Galasso & Wagstaff 2019), and reductions in stunting are projected to improve economic productivity by increasing GDP by 4–11% across African and Asian regions

(Horton & Steckel 2013; Shekar et al. 2017). Returns to nutrition interventions hence clearly indicate that there is an economic case to be made for investing in childhood nutrition (Wellesley et al. 2020).

In 2012, the World Health Assembly adopted Resolution 65.6, endorsing a Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition (WHO 2012). The Plan specified six global nutrition targets for 2025, including a 40% reduction in the number of children under-5 who are stunted. To achieve this goal, policymakers were urged to improve identification, measurement, and scale up of stunting prevention activities; enact policies and/or strengthen interventions to improve maternal nutrition and health; implement interventions for improved exclusive breastfeeding and complementary feeding practices; and improve water, sanitation and hygiene (WASH) activities, to protect children from infectious diseases and environmental causes of subclinical infection.

Despite global improvements in addressing stunting, as illustrated by Sustainable Development Goal (SDG) 2.2 indicators, a high rate of stunting continues to exist in many low – and middle-income countries (LMICs), including South Africa (Simelane et al. 2023). Several policies have been enacted, such as mandatory large-scale food fortification of staple foods to increase the availability of micronutrients; marketing restrictions on breast milk substitutes; tax exemption on healthy food; and early childhood development policies. Despite these regulations, around 12% still experience chronic hunger, and the rate of stunting in children under 5 has remained relatively stagnant for the past 20 years, at around 27% (FAO et al. 2022). At the same time, South Africa has witnessed a sharp increase in the prevalence of overweight and obesity and features one of the highest rates in Africa (Statista 2025). This coexistence of multiple forms of malnutrition in individuals and populations across the lifespan is named the double burden of malnutrition (DBM) (WHO 2017), and comprehensive policy actions are needed to create healthier food environments to reduce the DBM.

To achieve this goal, it is important to take stock of current government policies as well as their level of implementation. The Healthy Food Environment Policy Index (Food-EPI), developed in 2013 by the International Network for Food and Obesity/NCDs Research, Monitoring and Action Support (INFORMAS), is the gold standard for assessing national food environment policy compared to international best practices (Swinburn et al. 2013). Created to evaluate food environment policies and action for preventing overweight, obesity, and diet-related non-communicable diseases, the tool consists of two components (Policies, Infrastructure Support), 13 domains, and 47 good practice indicators. The tool has been implemented in more than 40 countries, including South Africa (Vandevijvere et al. 2019), but studies in sub-Saharan Africa indicated that the tool lacked indicators to assess undernutrition and the DBM. Hence, in 2020, Food-EPI was adapted to include policy areas of relevance to under – and malnutrition, which resulted in the addition of 12 new indicators to benchmark breastfeeding, growth monitoring, food safety, and water, sanitation, and hygiene (WASH) (Santos et al. 2024).

The updated Food-EPI tool was used to benchmark healthy food environment policies in South Africa in 2023/2024 in a project aimed to address the drivers of DBM (Food-SAMSA), described elsewhere (Holliday et al. 2025). In this secondary analysis, we assess the implementation of healthy food environment policy related to undernutrition, benchmark these policies compared with international best practices, and discuss priority

policy actions. The analysis is based on original Food-EPI study data and complemented by comments offered by the expert panel, who rated indicators during the benchmarking and priority-setting workshops. The results were mapped on the UNICEF conceptual framework on determinants of maternal and child nutrition, which was found useful to provide context for the analysis in sub-Saharan Africa (Zembe-Mkabile 2023).

2. Methodology and data

Data were collected from the list of Food-EPI indicators that related to early infant and young child feeding and were added to the original Food-EPI tool in 2020 and implemented in South Africa. Five indicators related to undernutrition were found in the following *policy* domains: Food Composition (COMP 1.3); Food Promotion (PROMO 3.5); Food Provision (PROV 5.5-5.6); and Food Retail (RETAIL 6.4). Within *infrastructure support*, four indicators were found under Leadership (LEAD 8.6-8.9) and three under Monitoring and Intelligence (MONIT 10.7-10.9) (Table 1).

The process of implementing the expanded Food-EPI tool, as reported elsewhere (Holliday et al. 2025), consisted of a stepwise approach including adaptation of the tool to the local context; extensive review of the implementation of good practice *policy* and *infrastructure support* indicators; evidence validation by key stakeholders; identification of international best practice examples; benchmarking of policies against these best practice examples which resulted in a draft list of recommended policy actions; discussion of this list of recommended actions; and online rating to develop a final list of recommended priority policy actions (Figure 1).

The benchmarking workshop included a delegate from the National Department of Health and local government, academia, and civil society, consisting of experts in nutrition, public health, and food-related policy ($n = 13$). Experts were identified through stakeholder mapping within the FoodSAMS project and recruited via email and phone (8 academics, 3 government, 1 civil society and 1 research council representative). The workshop was held in early 2023 and comprised a discussion of healthy food and nutrition-related public policy indicators, as well as assessing their level of implementation compared with international best practice. Participants individually rated their level of implementation on a 5-point Likert scale, whereby the average rating for each indicator was used to categorise the level of implementation against international best practice as very high (80-100%), high (60-80%), medium (40-60%), low (20-40%) or very low, if any (less than 20%). The spread of responses is shown in Figure 2.

Based on the indicators rated at the lowest level of implementation (<20%), the research team developed a preliminary list of policy actions to be discussed at the priority setting workshop, indicating areas with potential for improvement. The workshop, in which 14 experts reviewed and edited the list of proposed actions, was held in early 2024 and was followed by an online rating of these actions based on their perceived importance and achievability. For policy actions, participants could allocate up to 22 points to each dimension, with no more than five points assigned to any single action (reflecting both importance and achievability). For infrastructure-support actions, up to 12 points could be allocated per dimension, again with a maximum of five points per action. For each criterion, the average of points assigned to each recommendation was calculated and summed to obtain an overall ranking of recommendations.

Table 1. Domain & good practice statements of Food-EPI indicators related to undernutrition.

Domain	Good practice statements
<p>Food Composition: <i>Government systems are implemented to ensure that, where practicable, (ultra)-processed foods minimise the energy density and the nutrients of concern (salt, fat, saturated fat, trans fat, added sugar)</i></p>	<p>COMP1.3: The Government implements mandatory large-scale food fortification programmes to increase the availability of micronutrients in staple foods (e.g. iron, folate, vitamins, zinc) already available to all population groups.</p>
<p>Food Promotion: <i>There is a comprehensive policy implemented by the government to reduce the impact (exposure and power) of promotion of unhealthy foods to children (<16years) across all media</i></p>	<p>PROMO3.5: Effective policies are implemented by the government to restrict the marketing of breast milk substitutes through broadcast and non-broadcast media.</p>
<p>Food Provision: <i>The government ensures that there are healthy food service policies implemented in government-funded settings to ensure that food provision encourages healthy food choices, and the government actively encourages and supports private companies to implement similar policies</i></p>	<p>PROV5.5: The government ensures that there are clear, comprehensive policies and/or regulations on the provision of time, spaces and resources for breastfeeding in the workplace and in public places and spaces.</p>
<p>PROV5.6: The government implements national-level policies to promote access to safe drinking water and optimal environmental hygiene and sanitation (WASH) in public places and spaces as a strategy to address/reduce all forms of malnutrition.</p>	
<p>Food Retail: <i>The government has the power to implement policies and programmes to support the availability of healthy foods and limit the availability of unhealthy foods in communities (outlet density and locations) and in-store (product placement)</i></p>	<p>RETAIL6.4: The government has set incentives and rules/regulations for informal retailers and traders to ensure a safer neighbourhood food environment in terms of all components of food safety: This includes sanitation (providing a clean water supply and for informal food vendors to use, covering open sewers in and around food markets); hygiene (microbial food safety); physical contamination (e.g. sand, dust, vehicle fumes); adulteration of food and beverages, (e.g. adding margarine to milk to increase shelf life).</p>
<p>Leadership: <i>The political leadership ensures that there is strong support for the vision, planning, communication, implementation and evaluation of policies and actions to create healthy food environments, improve population nutrition, and reduce diet-related inequalities</i></p>	<p>LEAD8.6: A national policy on breastfeeding has been officially adopted/approved/implemented by the government, accompanied by an action plan to implement and promote the policy (e.g. Baby Friendly Hospital Initiative, Baby-Friendly Community Initiative, maternity leave).</p>
<p>LEAD8.7: A national policy on complementary feeding has been officially adopted/approved/implemented by the government, accompanied by an action plan to implement and promote the policy.</p>	
<p>LEAD8.8: Country-level targets, including specific timeframes, for exclusive breastfeeding and complementary feeding have been set at the national level.</p>	
<p>LEAD8.9: There is strong, visible, political support for actions to address all forms of malnutrition over the life course (wasting, stunting, underweight, overweight, obesity, micronutrient deficiency, diet-related NCDs) at the national level.</p>	
<p>Monitoring & Intelligence: <i>The government's monitoring and intelligence systems (surveillance, evaluation, research and reporting) are comprehensive and regular enough to assess the status of food environments, population nutrition and diet-related NCDs and their inequalities, and to measure progress on achieving the goals of nutrition and health plans</i></p>	
<p>MONIT10.8: Growth monitoring (GMP) programmes have been developed and include measurement and regular monitoring of both childhood overweight/obesity and undernutrition.</p>	<p>MONIT10.7: Country-level indicators for breastfeeding & complementary feeding are regularly monitored, including the desired average rate and country-level baselines.</p>
<p>MONIT10.9: Country-level targets for food safety indicators and standards, such as microbial safety, mycotoxins, such as aflatoxin levels and chemical components such as preservatives, additives, pesticides, and hormone levels in food have been set and are regularly monitored at the national level.</p>	

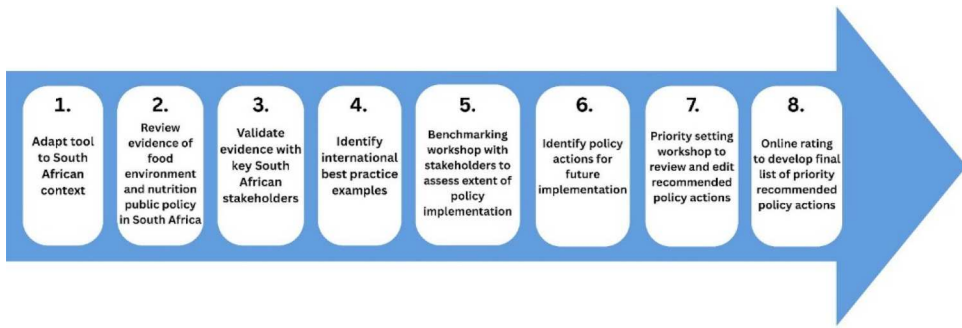


Figure 1. Expanded Food-EPI implementation in South Africa, 2023–2024. Note: MBFI = Mother-Baby-Friendly Initiative; IYCF = Infant and Young Child Feeding Policy.

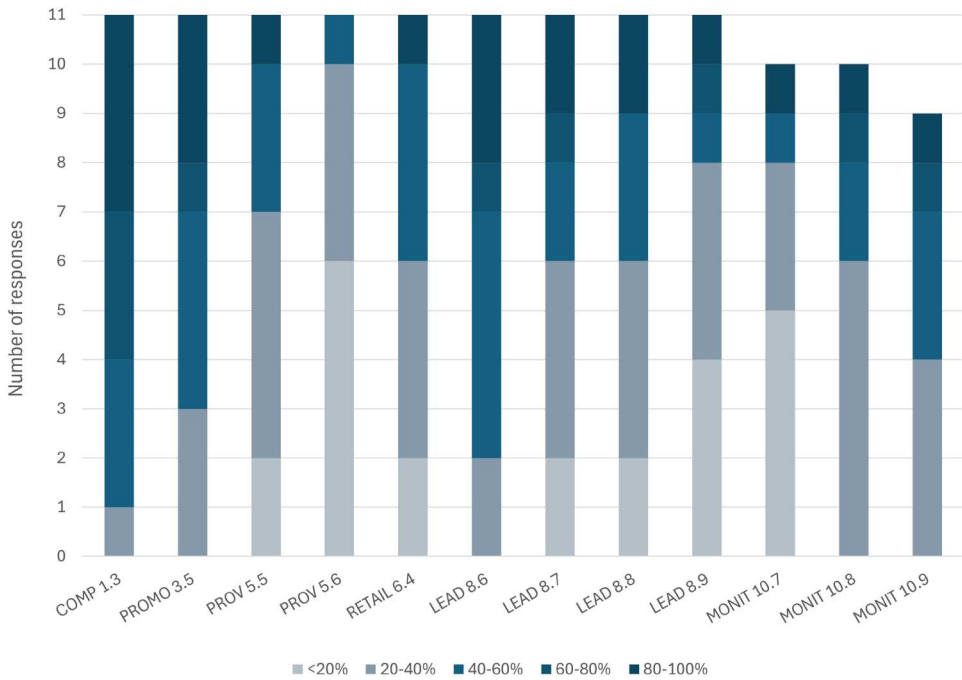


Figure 2. Rating of Food-EPI indicators related to undernutrition (n = 12).

3. Results

3.1 Benchmarking policy implementation

Of the indicators targeting undernutrition, food fortification policy was rated highest in terms of its implementation (60–80%), and the lowest rating (<20%) was allocated to access to water, sanitation and hygiene (WASH) in public areas. In the *policy* component, restrictions on the marketing of breast milk substitutes (broadcast/non-broadcast media) were rated as ‘medium’ (40–60%), while provisions for breastfeeding in public and workplaces and support systems for food safety for informal retailers were rated as ‘low’ (20–40%). In the *infrastructure support* component, breastfeeding policy and targets for food

safety indicators were rated as ‘medium’ (40-60%), and breastfeeding targets, complementary feeding and growth monitoring were rated low (20-40%) in their respective leadership and monitoring and evaluation domains (Figure 2).

Qualitative comments from experts in the benchmarking workshop related to these indicators referred to gaps in policy development and implementation, including the need to amend and enforce the Regulations relating to the fortification of certain foodstuffs (R7634); Regulations relating to foodstuffs for infants and young children (R991); the Code of Good Practice on the protection of employees during pregnancy and after childbirth (Section 87(1) (b) of the Basic Conditions of Employment Act (BCEA) 75, 1997); the Foodstuffs Cosmetics and Disinfectants Act 54 of 1972 (incl. R146) and Regulations governing general hygiene requirements for food premises and the transport of food (R918 of 1999; updated R638/2018). Other comments were related to the National Food & Nutrition Security Plan (NFNSP) 2018-2023; Infant and Young Child Feeding Policy 2013 (IYCF); the Mother-Baby-Friendly Initiative (MBFI); the National Strategic Plan for the Prevention & Control of Non-Communicable Diseases (NSP) 2022-2027; and the Strategy for the Prevention & Control of Obesity in South Africa 2015–2020 (Table 2).

As regards the *National Food Fortification Program* (NFFP) implemented in South Africa in 2003 (COMP1.3), existing regulations (R7634) include mandatory fortification of maize meal and white and brown bread flour with six vitamins and two minerals (Vit A, Vit B1, Vit B3, Vit B6, folic acid, iron, zinc). Motivation was made to extend these regulations to include white cake flour and bring out levels in line with WHO recommendations from 2016, but this process is still ongoing. Compliance with the regulations is also difficult to ascertain, but overall, the implementation of the NFFP was rated highly by the expert panel (60-80%).

Marketing of breastmilk substitutes through broadcast and non-broadcast media (PROMO3.5) was rated as medium (40-60%), as the effectiveness and enforcement of R991 (2012) following voluntary adoption of the International Code of Marketing of Breastmilk Substitutes since 1981 remains a challenge. More capacity is needed to monitor violations of R991, which is currently being redrafted to cover loopholes in the regulation. As regards *provisions for breastfeeding* in the workplace and public places and spaces (PROV5.5), implementation of the Code of Good Practice on the protection of employees during pregnancy and after childbirth received a low rating (20-40%) due to its low adherence, except for the Western Cape, where its application is encouraged. The Code also does not apply to informal work settings and needs more regulation.

As regards the adoption and implementation of a *national policy on breastfeeding*, the MBFI is a comprehensive policy but not consistently implemented, hence this indicator (LEAD8.6) was rated as medium (40-60%). The NFNSP 2018–2023 provides national targets for the prevalence of exclusive breastfeeding (LEAD8.8), and the 2013 IYCF has recommendations in line with WHO breastfeeding guidelines that need to be updated. *Complementary feeding* is also covered by the IYCF, but without national targets or timelines for implementation. Monitoring and evaluation of the policy is lacking, and the indicator (LEAD8.7) received a low rating (20-40%). Political support to address *malnutrition over the life course* is stated in national policy (Strategy for the Prevention and Control of Obesity in South Africa 2015-2020, NFNSP 2018-2023,

Table 2. Qualitative comments related to DBM indicators from benchmarking experts (n = 13).

Domain	Indicator	Qualitative Comment Summary
Food composition	Food fortification programmes	Regulations under amendment to extend to white cake flour and align to WHO 2016 guidelines. The portion size that should be consumed to ingest a sufficient amount of micronutrients is problematic for infants and young children. Iron deficiency remains a major issue, and salt should be iodised. Compliance is difficult to ascertain.
Food marketing/promotion	Restrictions on breastmilk substitutes	Effectiveness and enforcement remain challenging. R991, published in 2012, needs to be updated. More capacity is needed to monitor violations of R991.
Food provision	Provisions for breastfeeding	Code of good practice encouraged across government in the Western Cape, not in other provinces. Does not include informal work settings and needs more regulation.
Access to WASH in public spaces	Access to safe water is problematic, and the infrastructure required to achieve this is worsening, not improving.	
Food in retail Leadership	Support systems for informal retailers Policy on breastfeeding	Not being implemented. The MBFI is a comprehensive policy, but it is not consistently implemented in all parts of the country, and the IYCF policy is outdated.
Plan on complementary feeding	IYCF includes complementary feeding (no separate policy), but monitoring and evaluation of the policy is lacking.	
Breastfeeding country-level targets	No targets or timeframes set.	
Addressing malnutrition across the life course	The regulatory framework is there; however, evidence for political support is lacking.	
Monitoring and intelligence	Breastfeeding and complementary feeding	District Health Barometers do not include complementary feeding; regularity is questioned.
Growth- monitoring programmes	Implementation differs between places, and programmes are in place, but monitoring remains a challenge ('failure to measure length/height undermines the process')	
Targets for food safety indicators	Regulations exist through the Food Control Directorate, uncertainty regarding monitoring; no targets defined, no harmonised approach (different regulations/sector).	

NSP 2022-2027), but evidence of clear political action is lacking, the indicator (LEAD8.9) also received a low rating (20-40%).

Monitoring of indicators for breastfeeding is illustrated in the District Health Barometer (and to some extent the South Africa Demographic and Health Survey), but complementary feeding is not reported, which explains the low rating this indicator (MONIT10.7) received. *Growth monitoring* in the Western Cape is part of their Integrated Nutrition Programme (INP), but the implementation differs between places, and monitoring remains a challenge because 'the failure to measure length/height undermines the process' (MONIT10.8). Food safety is regulated by the Foodstuffs, Cosmetics and Disinfectants Act 54 of 1972 (incl. R146), but implementation remains fragmented and monitoring uncertain. No targets are defined, and no harmonisation in the approach due to various sectors being involved. The extent of policymaking related to food safety

is, however, substantial, which explains the medium rating of this indicator (MONIT10.9)

Implementation of national-level policies to promote access to safe drinking water and optimal environmental hygiene and sanitation (WASH) (PROV5.6) was rated very low (<20%). The Water Services Act of 1997 defines the right to basic water supply and sanitation and provides for the establishment of supply services, as well as the National Water & Sanitation Plan in 2018. Implementation of the Regulations governing general hygiene requirements for food premises and transport of food (R918) to ensure food safety in the informal retail sector (RETAIL6.4), which were updated in 2018, was also rated low (20-40%), partly because Local Municipalities are mainly responsible for regulating informal markets and the challenge lies in engaging with the diverse informal sector.

3.2 Priority setting of policy actions

In the prioritisation of concrete actions, proposed priority actions in the *policy component* related to undernutrition were mainly based on the rating of other (original /non-expanded) Food-EPI indicators. These focused on increased affordability of healthy foods with a focus on vulnerable population groups, which was rated very important and achievable, and income support programmes for healthy food acquisition, which were considered somewhat less important but achievable. Improved access to WASH was equally considered less important, though more achievable. In the *infrastructure support component*, adequate allocation of funding for a population nutrition budget, government-funded research and a health-promoting agency, and timely evaluation of policies and programmes were considered both important and achievable.

When mapped on the UNICEF Framework on the Determinants of Child & Maternal Nutrition (UNICEF 2020), the rating of indicators clearly reflects the need for comprehensive strategies that encompass both nutrition-specific and nutrition-sensitive interventions. *Nutrition-specific* indicators related to food fortification (COMP 1.3); policies for infant and young child feeding (LEAD 8.6-8.8) and specific environments (PROV 5.5-5.6; RETAIL 6.4). These could be seen as *underlying* determinants of maternal and child nutrition outcomes, while indicators related to Governance/policy enforcement (PROMO 3.5; LEAD 8.9; MONIT 10.7-10.9) are *enabling* determinants (Figure 3) Priority areas for policy action, e.g. income support programmes (indicator not reported here), are considered *nutrition-sensitive* and situated at the governance level.

4. Discussion

This study documented the benchmarking of undernutrition-related indicators included in the expanded Food-EPI tool implemented in South Africa in 2023-2024, resulting in a number of recommendations for priority policy action to address the problem of stunting. Of the indicators targeting undernutrition, food fortification policy was rated highest in terms of implementation (60-80%), and access to water, sanitation and hygiene (WASH) in public areas as the lowest (<20%). Restrictions on marketing of breast milk substitutes, breastfeeding policy and targets for food safety indicators were rated as medium (40-60%), and provisions for breastfeeding in public/workplaces, support

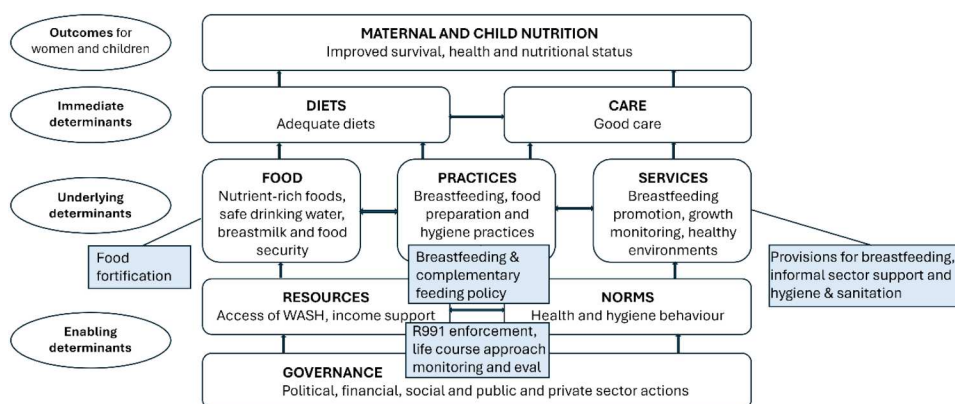


Figure 3. Conceptual map of policy priority actions (UNICEF 2020).

systems for food safety for informal retailers, breastfeeding targets, complementary feeding and growth monitoring were rated as low (20-40%).

The results show that implementation of the Food Fortification Program was rated as high, largely linked to the mandatory food fortification policy enacted in 2003. Fortification of staple foods has been found to be feasible and cost-effective for delivering micronutrients to populations with limited dietary diversity and micronutrient deficiencies, but the effectiveness of the programme depends on quality control and monitoring of, and compliance with, industry standards (Osendarp et al. 2018). In South Africa, there is room for improvement, as the programme faces rising costs of raw materials and production (many listed premix suppliers produce outside of South Africa), and programme monitoring and enforcement are challenging. Continued monitoring of iron deficiency and iodine status among children and pregnant women remains equally important (Jooste & Zimmerman 2008).

Compliance with the International Code of Marketing of Breastmilk Substitutes (2012) via implementation of R991 (Regulations Relating to Foodstuffs for Infants and Young Children) was rated as acceptable, although infant formula sales have skyrocketed over the years due to aggressive marketing by industry, particularly through social media and digital formats (Lake et al. 2019; Pereira-Kotze et al. 2020). Several initiatives were put in place to support infant feeding practices, including the Mother-Baby Friendly Initiative, which, however, needs to be revitalised (Lubbe et al. 2024). Implementation is monitored via the District Health Information System (DHIS), but exclusive breastfeeding rates remain low (43% according to the District Health Barometer 2023/24) (Jose & Mahomed 2025), and more is needed to protect, promote and support breastfeeding. Comprehensive national and provincial policy guidelines need to be translated into more action with adequate monitoring and evaluation at all stages of implementation (Du Plessis & Pereira 2013). Code regulations established over ten years ago need to be updated and strengthened, with specific reference to cross-promotion of products and digital marketing practices (Vitalis et al. 2022; WHO & UNICEF 2025).

Although South Africa in 2011 signed the Tshwane Declaration of Support for Breastfeeding, violations are frequent and require more capacity to guarantee effectiveness and enforcement. As Vitalis et al. (2022) indicated, strong political will is needed

to harness human and financial resources to implement, monitor and act against Code violators. In addition, as reported in their scoping review on breastfeeding inequity in South Africa, Vitalis et al. (2021) pointed out that enforcement of the WHO Code alone is not sufficient to improve breastfeeding outcomes, as factors such as social support and quality maternity care are equally important. The 2013 South African Infant & Young Child Feeding Policy, for example, mentions the Code of Good Practice for providing breastfeeding spaces in public and workplaces, but not all working women are able to access these entitlements, and the Code of Good Practice is not implemented nationwide.

Research has indicated that access to maternity protection is fragile for vulnerable groups, such as informal workers (Pereira-Kotze et al. 2022), and the need exists to increase the affordability of healthy foods for those in non-standard employment. Income support programmes were strongly advocated as a priority action area by our expert panel, who felt this to be an important and achievable policy objective. Support systems are also needed for informal food retailers to ensure a safer neighbourhood environment, in terms of sanitation, hygiene, physical contamination and food and beverage adulteration. The Businesses Act 72 of 1991 is the key piece of legislation governing informal trade, which largely falls under the responsibility of local Municipalities, although efforts are underway to regulate informal food businesses. A spate of incidents linked to the informal trade resulted in a new Standard Draft By-Law for Township Economies and the creation of a support programme for spaza (informal) shop owners (SA News 2025), which may help address this issue.

Access to safe water and sanitation is also problematic despite the efforts to regulate the sector, including through large-scale intervention projects by UNICEF and others to improve water, sanitation and hygiene (WASH) education and awareness among children, adolescents, and communities. Challenges are varied and include physical, infrastructure, and governance issues. Existing water stress and scarcity are exacerbated by climate change and population growth, reducing the reliability of water services, particularly among rural communities, which already face disparity in water access (Hemson 2016; Tseole et al. 2022; Maluleke 2024). Much of the WASH infrastructure is ageing and often poorly maintained, partly due to inadequate financial and human capacity resources and insufficient planning of vital and large-scale infrastructure projects (Development Bank of Southern Africa & The World Bank 2023). Municipalities are responsible for water services delivery, with significant inequities across provinces (Maluleke 2024). Governance issues include a lack of coordination between service departments, especially at the national level; limited community participation in water governance; corruption in service contracts distribution; and high turnover of senior management of water and sanitation services at the national level (Development Bank of Southern Africa & The World Bank 2023; Tyhotyholo & Ncube 2023; Maluleke 2024). The NFNSP 2018–2023 mentions WASH and the need for nutrition education and training. The Plan refers to identification of existing cadres of community-based workers to be trained in nutrition/WASH (early childhood development carers, school-based food handlers, community health, and home-based care workers), but given the technical and administration challenges as well as increasing water demands, much remains to be done to achieve the objective of safe water and sanitation and to ensure South Africa is able to achieve SDG 6 by 2030.

Finally, in regard to the objective of addressing all forms of malnutrition over the life course, evidence from national policy documents clearly indicates strong political support, as shown by successive statements of commitment in e.g. the Strategy for the Prevention and Control of Obesity in South Africa 2015-2020, the National Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2022-2027, National Development Plan 2030, and NFNSP. There is growing support for a more integrated approach to address DBM using double-duty actions, but scale and intensity to yield results are lacking (Hofman et al. 2020). Implementation is challenging due to incoherent food systems governance and lack of technical capacity, especially at lower levels of government (Moyo et al. 2025). There is also a gap in understanding of how national commitments to nutrition are translated to lower tiers of government, with the need to overcome organisational and management constraints at the municipal level in the poorest regions of South Africa.

Overall, the architecture of government structures has been identified as a major constraint to improving the national food and nutrition agenda, despite the multi-sectoral framing of food and nutrition security (Drimie et al. 2023). Sectoral alignment to converge on a nutrition agenda proves challenging, especially between agriculture and health, when such policies lack nutrition indicators and budgets. Political will is hence needed to change the status quo, and leadership to drive change at different levels of government, as well as technical and resource capacity to facilitate coherence between sectors and across administrative levels (Du Plessis et al. 2018; Drimie et al. 2023). Legislation forcing departments to adhere to a common framework for nutrition sensitivity might be necessary, and could be instigated by the call for accountability recently launched by human rights stakeholders (SAHRC 2025).

Translating strategies into action, however, not only requires a strong multi-pronged approach, spanning several government departments, tiers, and sectors, but also inclusive governance (Battersby 2022). Priorities such as outlined in the 2014 National Food Security policy failed to acknowledge the importance of multidimensional aspects of poverty and urban food insecurity, which warrant wider engagement to critically address food insecurity and transform the environmental, social and economic conditions that together shape the food system in South Africa. Participation and ‘whole-of-society’ approaches are needed to galvanise such action, as well as trained professionals with the skills to understand, facilitate and guide multisectoral processes.

In summary, and as outlined in the UNICEF Nutrition Strategy 2020-2030, improving maternal and child nutrition requires a systems approach, aimed at activating the interconnected systems of food, health, water and sanitation, education, and social protection. As this study has shown, there is a need to amend or enforce healthy food and nutrition public policy (e.g. breastfeeding and complementary feeding, WASH, informal food sector) but also support social and maternal protection programmes. Multi-level and transversal governance is needed beyond the remit of a single government department, requiring whole-of-government approaches and food security strategies to achieve the aim of lowering maternal undernutrition and childhood stunting in South Africa. The objective could be facilitated by the intended establishment of the National Food and Nutrition Security Council, as proposed by the NFNSP, to align policies and coordinate programmes, aimed at fulfilling the

constitutional right to food, and ensure that all South Africans have access to safe, adequate, and nutritious food.

Our study was limited by the relatively low number of participants from government and civil society stakeholders in the implementation of Food-EPI, although larger participation of these stakeholders could have introduced bias due to issues inherent to rating their own performance, as found in other Food-EPI studies (Nieto et al. 2019). The study also excluded other indicators related to, inter alia, health sector performance in addressing stunting in South Africa, and a description of wider social protection mechanisms. The study, however, resulted in an updated assessment of food environment public policy using the expanded DBM indicators, which are particularly useful to examine progress and gaps in under – and malnutrition.

The findings have been shared at the closing event of the FoodSAMSA project and welcomed by stakeholders from academia, civil society, and government. Local government stakeholders have reached out to organise a policy dialogue with relevant counterparts at the Municipal level to sensitise officials to this body of work and try to land the policy recommendations.

5. Conclusion

South Africa faces a significant burden of undernutrition and micronutrient deficiencies, and as this study has shown, much remains to be done to help achieve SDG 2 of ending hunger and all forms of malnutrition by 2030. The study used an expert panel to rate indicators related to undernutrition added to the original Food-EPI tool for benchmarking food and nutrition-related policy in South Africa. Results pointed out policies that need to be amended and/or enforced, in particular regarding breastfeeding and complementary feeding, informal food sector support and WASH programmes. As outlined in the UNICEF Nutrition Strategy 2020-2030, improvement of maternal and child nutrition therefore requires a systems approach, to activate interconnected systems of food, health, water and sanitation, education, and social protection. There is an urgent need for political leadership to drive this multisectoral agenda and technical and resource capacity across the different tiers of government. Action is needed to correct the status quo and enforce the implementation of the myriad policies and guidelines, in the absence of which civil society will inevitably demand more accountability using legislative means.

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