SADC SCHOOL HEALTH AND NUTRITION TOOLKIT

A RESOURCE FOR THE EDUCATION SECTOR

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Preface

The territorial impacts of COVID-19, persistent climate shocks, and sporadic conflicts in the SADC region have intensified vulnerabilities and created a significant reversal of decades of progress in education, health and nutrition. This crisis necessitates urgent action, as our aspirations for inclusive, equitable, and quality education for all are being pushed out of reach. Sub-Saharan Africa represents over 98 million school-age children and youths who are out of school. In the SADC region specifically, a considerable number of school-age children and youths who should be in school cannot attend school due to a myriad of factors. Despite efforts to improve access to education, many children, especially those living with disabilities and those from vulnerable households, marginalized communities, and hard-to-reach groups, continue to be faced with multiple obstacles that prevent them from attending school and learning. Even among those children enrolled in schools, preventable diseases and malnutrition remain significant impediments to learning. This reality calls for concrete actions to address barriers to education and learning among vulnerable children.

School Health and Nutrition (SHN) programmes represent innovative solutions and valuable opportunities to reach school-age children with essential SHN services. These initiatives extend beyond the promotion of health and well-being, encompassing disease prevention and addressing health and nutrition-related issues that may adversely affect school attendance and educational outcomes. Widely recognized as one of the most cost-effective strategies, SHN programmes not only draw children into schools and keep them there to learn but also incentivize parents to send their children (especially girls) to school, thereby reducing the likelihood of early child marriages and unintended teenage pregnancies while promoting gender equality in education. SHN programmes also contribute to achieving equitable and inclusive quality education for all. Beyond education, health, and nutrition benefits, SHN programmes such as school meal programmes generate additional gains across sectors such as social protection, agriculture, local economic development, and food systems. Moreover, these programmes create a ripple effect of positive change in the broader community, contributing to the overall goal of inclusive socioeconomic growth and sustainable development.

Recent regional assessments of SHN programs in SADC countries have identified shortcomings and provided recommendations to address gaps that could undermine their effectiveness and sustainability. Member States are urged to prioritize children's health and nutrition, develop and implement effective actions to improve program quality, scale up programmes, and ensure supportive policy frameworks and budgets.

Drawing cues from the SADC school meal guidelines, the SADC School Health and Nutrition Toolkit leverages best practices to strengthen the national SHN programmes of SADC Member States. This toolkit is more than just a resource, it signifies optimism and progress toward improvement in health, nutrition and education outcomes.

Acknowledgments

The SADC School Health and Nutrition Toolkit is the result of joint efforts that involved regular consultations with Member States, partners and other key stakeholders. We deeply appreciate and value their technical input and feedback, which has been instrumental in shaping this toolkit.

The SADC Secretariat extends its gratitude to the United Nations World Food Programme (WFP) for its technical and financial support in developing the SADC School Health and Nutrition Toolkit. We also acknowledge the Food and Agriculture Organization of the United Nations (FAO) for their role in designing the toolkit's layout. We appreciate the technical inputs of the United Nations Children's Fund (UNICEF), World Health Organization (WHO), United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Population Fund (UNFPA), and AUDA-NEPAD. Each partner brought their expertise to this project.

We extend our deepest gratitude to the Care and Support for Teaching and Learning (CSTL) committee for their insights and validation of the toolkit and to the national SHN programme's technical officers for their input. We also thank all other stakeholders who provided critical inputs to developing this toolkit.

We would like to express our deepest gratitude and give special recognition to Ms Ruusa Mushimba for her invaluable technical expertise, unwavering guidance and exceptional commitment to developing and producing this toolkit. Her contributions have been truly outstanding, and we are immensely grateful for her dedication.

Acronyms

AIDS	Acquired immunodeficiency syndrome
AU	African Union
AUDA- NEPAD	African Union Development Agency – New Economic Partnerships for Africa Development
CDC	United States Centers for Disease Control and Prevention
CSE	Comprehensive sexuality education
FRESH	Focusing Resources on Effective School Health
FAO	Food and Agriculture Organization of the United Nations
GBV	Gender-based violence
HGSF	Homegrown school feeding
HIV	Human Immunodeficiency Virus
HPV	Human papillomavirus
HECAT	Health Education Curriculum Analysis Tool
HPS	Health Promoting Schools
IFA	Iron and folic acid
MHPSS	Mental health and psychosocial support
M&E	Monitoring and evaluation
IQ	Intelligence quotient
REs	Refractive errors
RISDP	Regional Indicative Strategic Development Plan
SDGs	Sustainable Development Goals
SADC	Southern African Development Community
SABER-SH	Systems Approach for Better Education Results – School Health
SABER-SF	Systems Approach for Better Education Results – School Feeding
SHN	School health and nutrition
SMP PLUS	School Meal Planner Plus
STI	Sexually transmitted infections
SRH	Sexual and reproductive health
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WHO	World Health Organization
WFP	World Food Programme
WASH	Water, sanitation and hygiene

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BACKGROUND AND CONTEXT

Health, nutrition, and education are the critical cogs in the wheel of human capital development. Studies have shown that optimal health and nutrition are essential foundations for learning (Sridhar, 2008), as healthy and well-nourished children tend to perform better in school and lead healthier lives as adults (UNESCO *et al*. 2020). Several studies have provided compelling evidence on the impact of nutritional and health-related factors on education, health, and nutrition outcomes. For example, hunger can impair a learner's cognitive ability and concentration in class (Afridi, Bidisha and Rohini 2019), while micronutrient deficiencies, such as iron deficiency anaemia, are associated with low intelligence quotient (IQ) (Sadeghzadeh *et al*., 2018; Zaky *et al*., 2021). Moreover, overweight and obesity can adversely affect health, cognitive function, and school performance (Meo *et al*., 2019; Ameen and Abdelazeim, 2015). Additionally, poor sanitation conditions, hygiene practices, and lack of clean drinking water in schools increase children's susceptibility to helminthic infections, with implications on children's health, nutrition, school attendance, retention, and education outcomes (Donkoh *et al*., 2023; Estevez Mills and Cumming, 2017). Health-related conditions like refractive errors (REs) and hearing disorders can hinder learners' participation in class activities (Boesen and Lyke, 2012). Early marriage and unintended teenage pregnancies can also adversely impact a girl's education and learning (Birchall, 2018). Furthermore, violence in all forms, including bullying and cyberbullying, can lead to mental health, psychosocial, and educational consequences for affected school children (Armitage, 2021). All of these factors pose significant barriers to learning in vulnerable school children.

However, these obstacles can be addressed through well-designed school-based programmes that promote children's health, well-being, and nutrition. The School Health and Nutrition (SHN) Toolkit provides evidence-based resources and practical tools that can assist Member States in developing and implementing quality SHN programs that are context-specific and responsive to school children and adolescents' evolving needs.

School health and nutrition programmes draw children into schools and keep them there to learn and realize their full potential.

Where we are as a region

In the SADC region, school-age children and adolescents are facing numerous preventable health and nutrition-related challenges. An assessment conducted in 2021 by the WFP revealed high prevalence rates of soil-transmitted helminth infections, micronutrient deficiencies, malaria, sexually transmitted infections, and HIV among school-age children and adolescents. Malnutrition in all its forms is also a major issue in the region, with approximately 18.6 million children under five years of age being stunted, while 6.4 million children of the same age group are wasted (SADC, 2022).

Moreover, the 2023 SADC overweight and obesity landscape analysis report highlights significant prevalence rates of overweight and obesity, with more than 29 percent of school-age children and adolescents affected. In addition to these issues, a considerable number of children are affected by micronutrient deficiencies, particularly dietary iron deficiency. More than 40 percent of the 5–14 age group and over 20 percent of the 15–19 age group are impacted by this deficiency (WFP, 2021).

Malnutrition, diseases related to WASH conditions at schools, and school environments that are not conducive to good health and well-being are critical barriers to learning among school children. Although most SADC countries have established SHN programmes, evidence suggests that such programmes need to be more comprehensive to address all learners' needs effectively. Challenges related to limited programme reach, effectiveness and sustainability are primarily attributed to policy, funding, and coordination issues (SADC, 2021). Regional assessments have identified critical gaps (SADC, 2021; African Union, 2018; AU, 2023; WFP, 2021), summarized in Figure 1. Member States are urged to take necessary actions to address these critical gaps and improve the SHN programme's effectiveness and sustainability.

Keys gaps in Member States SHN programmes

1. **Policy frameworks:** There is a lack of evidence-based policies and standards related to school health and nutrition.

2. **Institutional capacities for implementation and coordination:** Most countries have designated institutions to coordinate the implementation of SHN programmes. However, these institutions are often under-resourced. National coordination mechanisms are weak , and often not representive of all key sectors.

3. **Financial capacity and stable funding:** SHN programmes are often underfunded and lack specific budget lines. In countries where such arrangement exist, funds are not often ring-fenced.

4. **Programme design and implementation:** Objectives of SHN programmes are often not clearly defined, school meals provided are not guided by dietary guidelines or nutrition standards. Additionally, there is limited linkage of school meal programmes to local agricultural production and procurement. Essential SHN services are fragmented and not comprehensive in scope.

5. **Monitoring and evaluation:** Weak monitoring and evaluation (M&E) framework systems.

Recommended regional assessment reports

- WFP. 2021. A review of school-based interventions addressing the health and nutrition of school-aged children in Southern Africa. (Unpublished. Available on request).
- SADC. 2021. Assessment report of school nutrition programmes in SADC Member States. (Unpublished. Available on request).
- SADC. 2023. Overweight and obesity in the SADC region. (Unpublished. Available on request).
- African Union. 2023. African Union biennial report on home-grown school feeding (2021-2022). (https://au.int/fr/node/40022)
- African Union. 2018. Sustainable school feeding across the African Union. (https://au.int/en/documents/20240212/sustainable-school-feeding-across-african-union)

Our aspirations for 2030 and beyond

Equitable and inclusive quality education is achievable when we place all vulnerable children at the centre of the education agenda, supported by coherent investments in education, health and nutrition. We aim to unlock the potential of every girl and boy child.

Our approach towards improving SHN programmes is grounded within the framework of the African Union 2063 agenda, the AU Heads of States 2016 decision (Assembly/AU/Dec.589(XXVI) on homegrown school feeding (HGSF), and SADC collective commitments towards realizing Vision 2050 as outlined in the Regional Indicative Strategic Development Plan (RISDP) 2020–2030 in which we strive to promote equitable access to quality education, health, and nutrition for all young children and adolescents.

Government ministries and agencies mandated with school meal programs are better positioned and have greater potential and capacity to lead the adoption and institutionalization of regional mechanisms for improving SHN programmes using a holistic approach. Such institutions will coordinate the implementation of alignment actions and scale-up efforts using a multisectoral approach.

Purpose of the toolkit

The SHN Toolkit is a practical guide that builds on the SADC School Meals Guidelines, and AUDA-NEPAD HGSF Guidelines. It has been expanded in scope to align with the WHO Health Promoting Schools Framework, and the Global Standards for Health-Promoting Schools. The toolkit draws knowledge and best practices from the Focusing Resources on Effective School Health (FRESH) and the Systems Approach for Better Education Results-School Health and School Feeding (SABER-SHSF) framework. The toolkit provides Member States with evidence-based recommendations and practical tools to assist in identifying and addressing policy and programme gaps.

How to use the toolkit

The SHN Toolkit is divided in two sections:

- **Section 1:** This section provides a foundation for understanding the core elements of effective SHN programmes and their impacts on the education, health and nutrition outcomes of school children. It provides evidence-based recommendations on the best intervention options, including practical guidance and tools for developing and implementing necessary solutions.
- **Section 2:** This section provides technical guidance on configuring and implementing the recommended minimum package of SHN programmes. This section is designed to help understand the "what," "why," and "how" of integrated SHN programmes.

It is important that applications of practical guidance and tools in this toolkit are adapted to country contexts and the needs of school-aged children and adolescents. Each part of this toolkit provides detailed information along with relevant practical tools, recommendations, and additional resources available as appendices.

Scope of the toolkit

The SHN Toolkit has been developed to provide guidance, tools, and resources to support SADC member states in developing effective national mechanisms and action plans to strengthen their SHN programmes. It is intended for use by the education sector and others entrusted with the implementation of school meals programmes. The toolkit specifically targets policy makers and programme managers from the education sector and other key sectors who are directly involved or working towards improving children's education, health and nutrition.

SECTION 1

IMPROVING EDUCATION, HEALTH AND NUTRITION OUTCOMES THROUGH SCHOOL-BASED HEALTH AND NUTRITION PROGRAMMES

Photo ©: WFP/Benjamin Anguandia

WHAT YOU WILL FIND IN THIS SECTION:

An overview of the importance of integrated SHN programmes

Technical guidance on strengthening national SHN programmes

Links to tools and resources

The importance of integrated SHN programmes

"Even when quality schools, textbooks, and teachers are provided, children can only receive effective education if they are in school and prepared to learn" (World Bank, WFP and Partnership for Child Development, 2016). Vulnerable children often face multiple barriers to learning. Factors such as hunger can impede cognitive ability and attention span in the classroom (Afridi, Bidisha and Rohini, 2019). Additionally, micronutrient deficiencies, like iron deficiency anaemia, can impair cognitive function and are strongly linked to low IQ (Sadeghzadeh *et al.*, 2018). Overweight and obesity negatively impact health, cognitive function, and academic performance (Meo *et al.*, 2019; Ameen and Abdelazeim, 2015). Helminthic infections related to poor WASH conditions can negatively affect children's health, leading to irregular school attendance and dropouts (Levinger, 1992; Esteves Mills and Cumming, 2016).

Other health issues, such as uncorrected refractive disorders and hearing impairments, also affect children's ability to participate in classroom learning activities, resulting in poor academic performance (Boesen & Lyke, 2012). Moreover, early marriage and unintended teenage pregnancies have detrimental effects on girls' education (Maemeko, Nkengbeka and Chokomosi, 2018), while various forms of violence, including bullying, can impact children's mental health and psychosocial wellbeing, with serious implications for educational outcomes (Armitage, 2021). These factors represent critical barriers to learning and are associated with low enrolment, high absenteeism, dropouts, and poor academic performance (Jáuregui-Lobera, 2014).

Integrated SHN programmes are crucial in protecting vulnerable school children and ensuring equitable access to essential services, thereby optimizing their health and nutrition. SHN programmes help prevent diseases that lead to absenteeism, dropouts, and poor academic performance, ultimately improving educational outcomes. For maximum impact, SHN interventions are best implemented alongside health and nutrition education to promote the adoption of healthy habits. A recent global review demonstrates the significant impacts of SHN programmes on education outcomes (see corresponding box).

What the 2023 global review on SHN programmes says:

School health and nutrition programmes deliver big education outcomes

- **2.5 years** of additional schooling by providing school-based deworming and micronutrient supplementation where helminth infections and iron deficiency anaemia are prevalent (Bundy, 2011)
- **9% and 8%** increases in enrolment and attendance rates respectively when introducing school meals (Snilstveit, Stevenson et al., 2015; Drake, Fernandes et al., 2017). When fortified with micronutrients, daily meals can reduce anaemia in adolescent girls by up to 20% (Adelman, Gilligan et al., 2012)
- **5% higher** probability of passing tests in reading and mathematics when provided with free vision screening and glasses (Glewwe, Park et al., 2016)
- **62% reduction** in absenteeism by implementing malaria prevention interventions (Fernando, de Silva et al., 2006)
- **21% to 61%** reduction in absenteeism in low-income countries by promoting handwashing (McMichael, 2019)
- **Reduced girls' absence** during menstruation, by improving school WASH (UNESCO, 2014)
- **50%** fewer school days skipped by tackling school violence and bullying. Students who are frequently bullied are twice as likely to skip school than those who are not (OECD countries) (UNESCO, 2019)
- **Improved sexual and reproductive health** by providing comprehensive sexuality education, including reducing the risk of HIV and rates of early and unintended pregnancy — a critical factor in school dropout among girls (UNESCO, 2019a)

Source: UNESCO, WFP and UNICEF. 2023. Ready to learn and thrive: School health and nutrition around the world. Paris.

Multiple benefits of school health and nutrition programmes

Optimize health and well-being

Address short-term hunger and improve nutrition

Improve academic performance

Improve gender equality in education

Boost local agricultural production

Stimulate local economic development

Generate additional gains across other Sustainable Development Goals (SDGs)

Recommended SNH reports

- UNESCO, UNICEF & WFP. 2023. *Ready to learn and thrive: School health and nutrition around the world – 2023*. Paris. https://www.wfp.org/publications/ready-learn-and-thrive-school-health-and-nutrition-around-world-2023

- WFP. 2022. *State of school feeding worldwide 2022*. https://www.wfp.org/publications/state-school-feeding-worldwide-2022

Global and regional frameworks promoting children's education, nutrition, health and well-being.

The interconnectedness of health, nutrition, and education is gaining acknowledgment on a global scale as countries increasingly recognize its significance (WHO and UNESCO 2021; Sridhar, 2008). The impact of poor health and nutritional status on school enrolment, attendance and academic performance is widely acknowledged (Sadeghzadeh *et al*., 2018; Levinger, 1992). These impacts ultimately lead to poor health, nutrition and education outcomes. The United Nations Sustainable Development Goals (SDGs), particularly SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-being), and SDG 4 (Quality Education) provide a comprehensive framework for promoting children's education, nutrition, health, and overall well-being. Numerous frameworks have been developed to advance these objectives, one of which is the WHO Health Promoting Schools (HPS) framework. This framework focuses on creating schools that foster the health and well-being of students, staff and the wider community. HPS promotes school health and nutrition through several interrelated core pillars, particularly healthy school policies, physical school environments (including school feeding, WASH, and school food environment), social environments, health skills and education, access to school health services, and links with parents and community (WHO, 2021d). The HPS framework is guided by eight global standards that help countries make every school a health-promoting school (WHO and UNESCO, 2021).

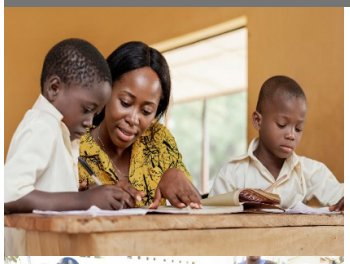
The Focusing Resources on Effective School Health (FRESH) framework promotes the health and well-being of school-age children by integrating health-promoting initiatives into the education sector, mainly focused on specific components such as school health policies, the school environment, skills-based health education, school-based health and nutrition services and community involvement. UNICEF's Child-Friendly Schools (CFS) framework, developed in 2009, aims to create safe, inclusive schools that support learning and well-being. It prioritizes child-centred approaches, equity, participation, and the integration of health, nutrition, and education services to promote children's holistic development. A partnership for healthy learners and brighter futures (stepping up effective school health and nutrition), established in 2020, promotes collaboration and coordination among diverse stakeholders to address school-age children's complex health and nutrition needs. The Systems Approach for Better Education Results School Health and School Feeding (SABER-SHSF) programmes provide a methodology for assessing and improving the effectiveness of education systems, including policies, institutions, and practices related to school health and nutrition. In addition, the Food and Agriculture Organization of the United Nations (FAO) School Food and Nutrition Framework takes a holistic approach, focusing on four key areas: healthy school meals, nutrition education, local food procurement, and supportive policies to improve child health and food systems (FAO, 2019). All these frameworks emphasize the importance of a whole-school approach, identifying and addressing gaps simultaneously across all core pillars of effective SHN programmes. The core pillars of effective SHN programmes are outlined on the next page.

Core pillars of effective SHN programmes

1. Health-related school policies

The sustainability of SHN programmes depends on enabling policy frameworks. It requires health-related policies that promote safe, and healthy school environments, quality nutrition, gender equality, and mental and psychosocial well-being, among others.

2. Safe, supportive school environments



A school environment is healthy when its conditions are conducive to children's health, well-being and learning, supports and facilitates the adoption of healthy behaviours, and helps school children develop physical, psychological, and social potential. According to the World Health Organization (1998), a healthy school environment has the following characteristics:

- Guarantees safe and free drinking water and clean sanitation facilities.
- Promotes healthy diets and makes available healthy and nutritious foods in and around schools. This includes ensuring that foods provided at schools are based on national dietary guidelines and nutrition standards.
- Protects and reduces school children's exposure to unhealthy foods and beverages; restricts the sale and marketing of unhealthy food and beverages in and around schools.
- Prevents and addresses violence in all forms, including bullying.
- Promotes healthy physical and psychosocial wellbeing of learners and teachers.

3. School-based health and nutrition services

This include a variety of services that are delivered at school to improve the health and nutrition of school children. These include:

- nutrition services (e.g. school meals programmes, deworming, micronutrient supplementation, biofortification)
- health services (e.g. health screenings, referral for treatment, vaccination, mental health psychosocial support)

4. Skills-based health and nutrition education

Skills-based interventions help school children to acquire knowledge and skills and promotes the adoption of habits that support good health and well-being. Examples of such interventions include health, nutrition and physical education, life skills education, and comprehensive sexuality education.

Recommended tools and resources

- Child Health Task Force. 2022. *Focusing Resources on Effective School Health (FRESH) Framework*. https://www.childhealthtaskforce.org/resources/2022/focusing-resources-effective-school-health-fresh-framework
- FAO. 2019. *School food and nutrition framework*. https://openknowledge.fao.org/server/api/core/bitstreams/6f3162ea-1c1f-4699-a4b1-59a041e5f113/content
- UNICEF. 2009.*Manual: child-friendly schools*. https://www.unicef.org/documents/child-friendly-schools-manual
- WHO and UNESCO. 2021. *Making every school a health-promoting school: global standards and indicators.* Available at https://www.who.int/publications/i/item/9789240025059
- WHO. 2021. *WHO guideline on school health services*. https://www.who.int/initiatives/making-every-school-a-health-promoting-school
- World Bank Group. 2016. *School health and school feeding*. Available at https://wbgfiles.worldbank.org/documents/hdn/ed/saber/supporting_doc/brief/SABER_SHN_Brief.pdf

Bridging the gap in SHN programmes

SADC Member States have made notable progress in developing and implementing SHN programmes. Recent regional assessments of the SADC Member States' national SHN programmes have revealed several critical gaps, including limited sustainable funding, deficiencies in national systems, and policy and programme shortcomings (SADC, 2022; WFP 2021). These gaps can potentially compromise the quality, effectiveness, and sustainability of SHN programs in the region (SADC, 2022). The WFP's 2021 report on SHN programs in the SADC region identified high prevalence rates of soil-transmitted helminth infections due to inadequate WASH conditions, lack of access to safe drinking water, and gender-sensitive sanitation facilities. Furthermore, the report highlighted significant prevalence rates of malaria, sexually transmitted infections, and HIV among school-age children and adolescents. All these factors negatively impact children's health, nutrition and education outcomes. Malnutrition, in all its forms, remains a pressing issue in the region, with approximately 18.6 million children under the age of five being stunted and 6.4 million children in the same age group experiencing wasting (SADC, 2022). The 2023 SADC overweight and obesity landscape analysis report indicated high prevalence rates of overweight and obesity among school-age children and adolescents, affecting more than 29 percent of this population. Additionally, micronutrient deficiencies, particularly dietary iron deficiency, are prevalent in 40 percent of the 5–14 age group and over 20 percent in the 15–19 age group (WFP, 2021). These findings underscore the critical need for creating safe and healthy school environments, as the current challenges pose significant barriers to children's learning and overall well-being.

The 2023 global review report on SHN programmes provides compelling evidence that SHN interventions, particularly school meal programmes, significantly contribute to higher school enrolment and attendance rates. The report shows an increase of 9 percent in enrolment and 8 percent in attendance, highlighting the effectiveness of SHN interventions in promoting educational outcomes. Additionally, deworming and micronutrient supplementation have been found to extend children's school attendance by 2.5 years in areas with high rates of anaemia and worm infections. Furthermore, the promotion of WASH practices has resulted in a 21–61 percent reduction in absenteeism, with particularly significant improvements in reducing girls' absence from school. Malaria prevention interventions have led to a 62 percent reduction in absenteeism, while addressing school violence and bullying has resulted in a 50 percent reduction in school days skipped. The provision of comprehensive sexuality education (CSE) contributed to improved sexual and reproductive health (SRH) outcomes. Further, vision screening services, coupled with the provision of eye glasses, increased the likelihood of passing reading tests by 5 percent. In most SADC countries, essential SHN programme components are fragmented, lack integration, and need to be more comprehensive in scope. SHN programmes are often not supported by evidence-based policy frameworks and standards, and more scaling up is needed to reach areas of greatest need. Additionally, domestic funding deficiencies, weak intersectoral coordination, and ineffective monitoring and evaluation mechanisms undermine programme quality and effectiveness. Member States urgently need to address these gaps to improve SHN programmes.

The effectiveness of SHN interventions depends on how different programme components are intentionally packaged to generate complementary impacts. Member States are encouraged to use an integrated approach in designing and implementing SHN programmes, as these interventions are interdependent, and the success of one depends on the delivery of others. For instance, the impact of nutrition packages such as school meals, micronutrient supplementation, and deworming is reinforced to a greater extent by WASH interventions and nutrition education, which foster the adoption of healthy dietary behaviours and practices. Furthermore, SHN programmes

are inherently multisectoral, and their successful implementation depends on well-configured coordination mechanisms, partnerships, and active engagement of communities and learners throughout the programme life cycle. Member States are encouraged to follow the steps outlined on the next page (*Where do we start?*) to help them identify gaps and develop transformative actions that can improve the quality and scale up SHN programmes.

Where do we start?

There are five key steps that Member States can take to identify policy and programme deficiencies, devise corrective actions, and implement impactful changes across all core pillars of SHN. The recommended steps are not exhaustive and must be tailored to the specific contexts of individual countries in order to achieve the desired outcomes.

01 STEP 1
Laying the ground for improving SHN programmes

Step 1 includes preparatory work required to gain momentum and buy-in. It facilitates multisectoral engagements by convening key stakeholders and initiating national dialogues to build a common understanding of the current programme's challenges and the expected roles in addressing gaps.

In addition, it includes establishing multisectoral coordination mechanisms, such as steering committees or technical working groups, that will guide the implementation of alignment actions.

02 STEP 2
Policy and programme landscape analysis

Step 2, addressing SHN programme gaps, requires a thorough understanding of current challenges and contexts within which they can be addressed. Policy and programme landscape analysis involves a comprehensive assessment of the needs, determining what SHN-related policies and programmes are currently in place, and to what extent such interventions address the needs of schoolchildren.

The analysis also helps to identify gaps, challenges and opportunities that can be leveraged to strengthen SHN programmes. It is important that the analysis covers all core pillars of SHN, as these programmes are interdependent and mutually reinforcing.

03 STEP 3
Strategic plans development

Step 3: Based on the findings of the landscape analysis, appropriate interventions are selected, defined, and pursued to address identified gaps in all core pillars of SHN programmes. A strategic plan is developed in collaboration with key stakeholders to achieve the desired change. The plan should outline clear objectives, goals, and strategies, including a budget and monitoring and evaluation (M&E) framework. Additionally, governance structures and clear roles and responsibilities are established to coordinate the plan's implementation.

04 STEP 4

Implementation of strategic plans

Step 4 involves actual implementation of the plans to achieve the desired results. Strong multisectoral collaboration and partnerships are necessary, and adequate capacities are essential. Consideration should be given low-hanging fruit and activities with immediate impacts.

05 STEP 5

Monitoring and evaluation

Step 5 involves continuous tracking of implementation progress to identify challenges, make adjustments, evaluate outcomes, and document best practices.

Success Factors

The success of SHN programmes depends on:

- Strong political will and commitment.
- Adequate and sustainable domestic funding.
- Mainstreaming of SHN into national development plans, sectoral policies and strategic plans.
- Adequate capacity (human resources, systems)
- Strong multisectoral coordination, collaboration, and effective partnerships.
- Involvement and participation of communities and learners.
- Robust M&E systems mechanisms.

Gender mainstreaming considerations

Photo ©: UNICEF

Gender is a critical factor that significantly impacts education, health, nutrition and the overall well-being of women and adolescent girls. Factors such as poverty, disability, early marriage and pregnancy, gender-based violence, as well as harmful gender roles and norms represent important barriers to girls' education (UNESCO, 2023; UNICEF, 2019). In addition, women and girls with disabilities often face many challenges such as marginalization, discrimination, and other barriers while accessing education, health, and reproductive services (UN Women, 2018). By nature, girls have different needs and face more obstacles than boys, impacting their education, nutrition, health and overall well-being. For instance, global statistics indicate that 60 percent of the 820 million people suffering from chronic malnutrition are women and girls (Global Nutrition Cluster, 2023). In 2019, a significant percentage (30% or 539 million) of non-pregnant women aged 15–49 and 37% (32 million) of pregnant women suffered from anaemia (WHO, 2023a, b) Adolescent girls and women are particularly vulnerable to micronutrient deficiencies, especially iron deficiency anaemia, due to menstrual blood loss during their monthly cycles (WHO, 2023a). Girls with iron deficiency anaemia may experience cognitive function impairments and poor overall health. Moreover, adolescent girls are disproportionately affected by inadequate gender-sensitive WASH facilities, menstrual hygiene management facilities and supplies, leading to high absenteeism and dropouts (Agol and Harvey, 2018; Shah *et al*., 2022).

Integrating gender perspectives into planning, designing, implementation, monitoring, and evaluating school health and nutrition-related policies and programmes is essential to address these obstacles (USAID, 2022). Nutrition-related conditions such as micronutrient deficiencies in girls can be addressed by intentionally combining nutritional interventions such as school meal programmes with micronutrient supplementation and food fortification and nutrition education interventions.

To maximize impact, interventions such as school feeding should be implemented alongside other essential SHN packages such as deworming, nutrition education, gender-inclusive WASH programmes, and menstruation hygiene management, including the provision of free sanitary pads, as a means to reduce barriers to education and learning among adolescent girls.

In the context of home-grown school feeding, sourcing food commodities from local female smallholder producers is strongly recommended to promote gender equality and economic opportunities for women. This approach ensures that women have equal opportunities to participate and take full advantage of local economic opportunities.

Adolescent girls face numerous health risks, including HIV, STIs, HPV infections and unintended pregnancies. Hence, it is crucial to incorporate gender perspectives throughout comprehensive sexuality education programmes and HPV vaccination services as part of SHN programmes to protect girls against cervical cancers. In addition, adolescent girls are at risk of various forms of

violence, including gender-based violence (GBV) and bullying in and around schools. Violence in all forms poses a significant barrier to their education. This can be better addressed by integrating measures to prevent violence as part of SHN programmes. By mainstreaming gender into policy and programming, policymakers and programme implementers can ensure that SHN interventions effectively respond to the specific needs of both girls and boys.

Recommended tools and resources

- FAWE. 2018. *Gender-responsive pedagogy: a toolkit for teachers and schools*. https://www.unicef.org/esa/reports/gender-responsive-pedagogy
- UNGEI, GPE and UNICEF. 2017. *Guidance for developing gender-responsive education sector plans.* https://www.ungei.org/publication/guidance-developing-gender-responsive-education-sector-plans
- WHO. 2011. *WHO gender mainstreaming for health managers: a practical approach.* https://www.who.int/publications/i/item/9789241501057

SECTION 2

CORE COMPONENTS OF COMPREHENSIVE SCHOOL HEALTH AND NUTRITION PROGRAMMES

Photo ©: wfp/Gabriela Vivacqua

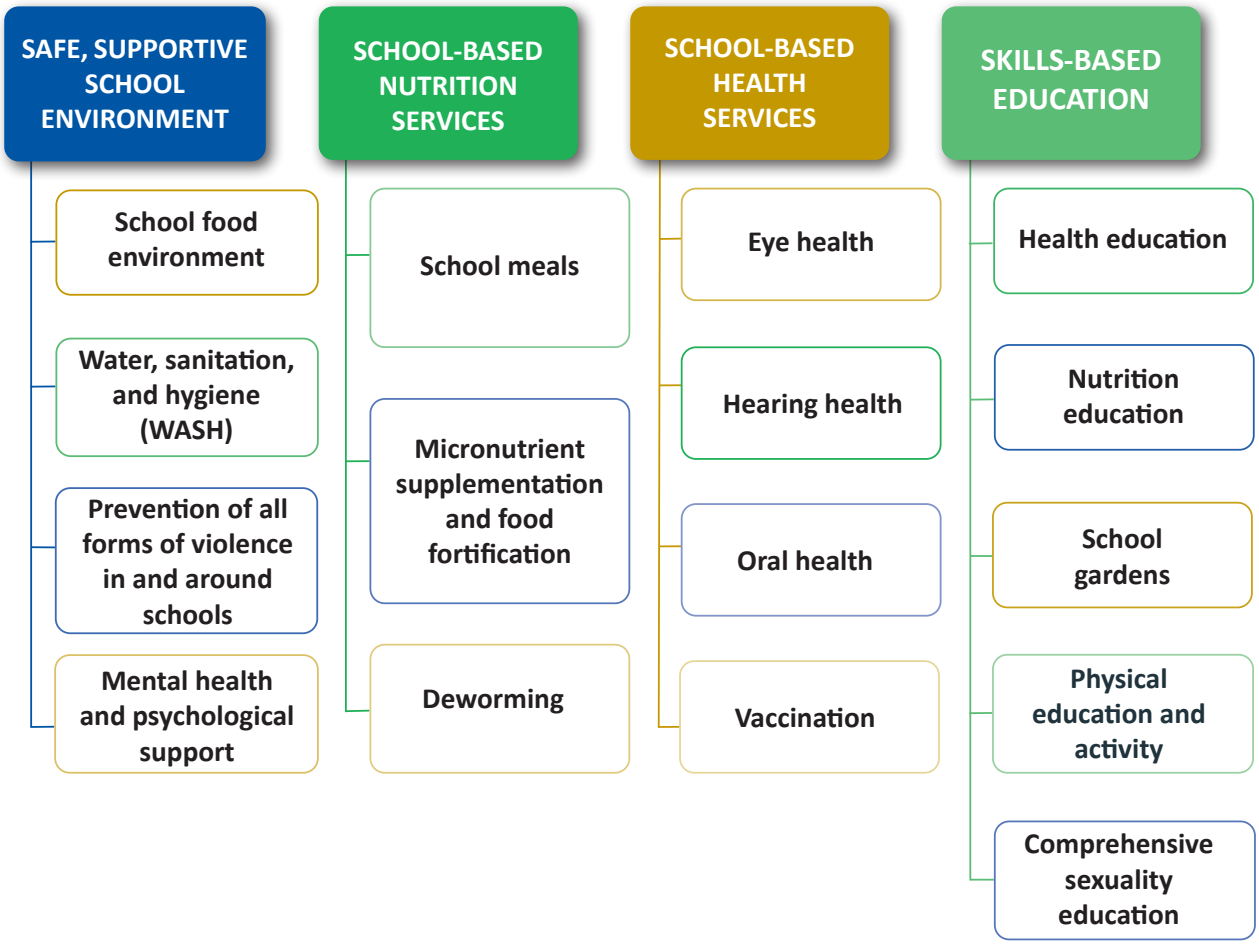
WHAT YOU WILL FIND IN THIS SECTION:

Recommended minimum SHN packages for school-aged children and adolescents

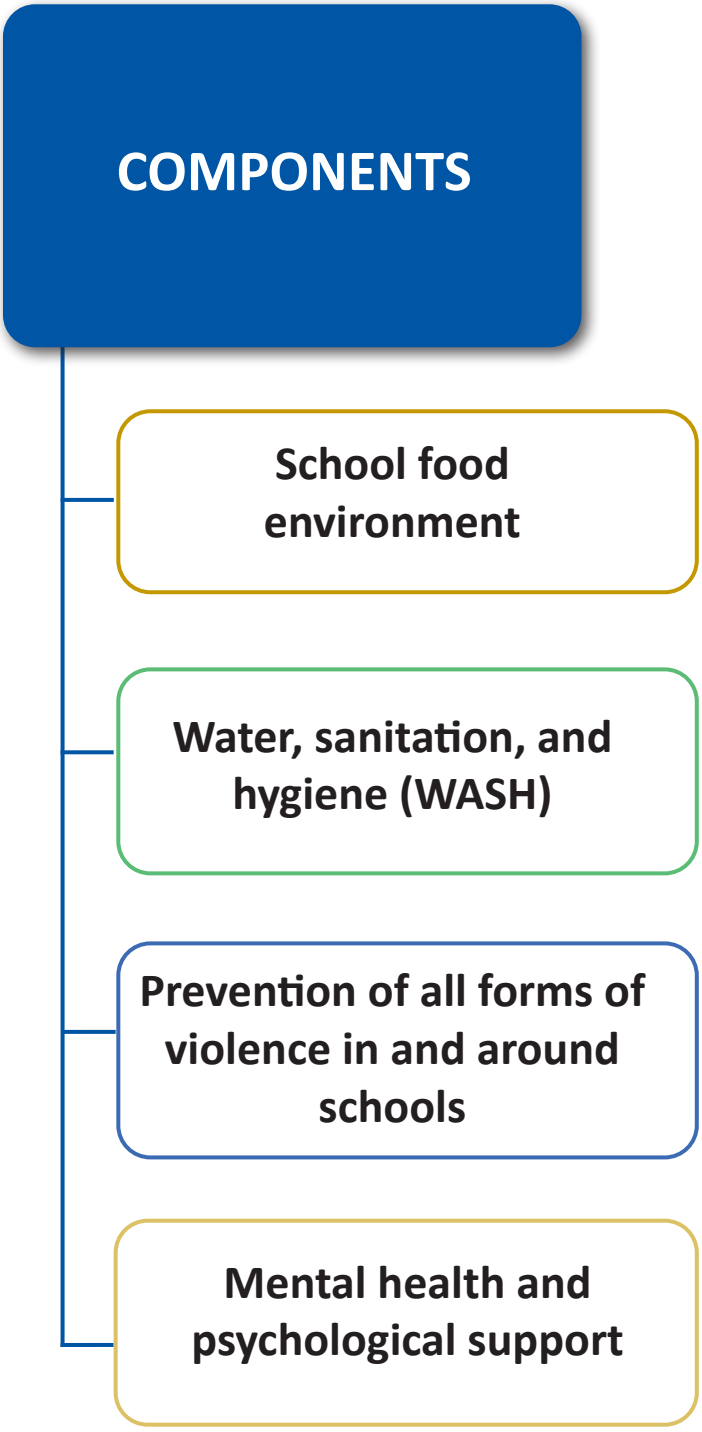
Technical guidance on configuration of minimum SHN package

Links to tools and resources

Minimum package of school health and nutrition programmes



1. Safe, supportive school environment



Safe, supportive school environment:

School food environment

This component provides practical guidance and tools for creating healthy school food environments.

SCHOOL FOOD ENVIRONMENT

The school food environment plays a crucial role in shaping the health, nutrition, and educational outcomes of schoolchildren. It encompasses various factors and conditions through which school children obtain, purchase or consume food (UNICEF, 2019). Unhealthy food environments are typically characterized by limited availability and accessibility of healthy food options and are influenced by factors such as food information, pricing and promotion, including marketing, advertisements, branding, and food labels (UNICEF, 2021).

Unhealthy school food environments influence school children's dietary choices and practices and are regarded as one of the primary drivers of overweight and obesity in school children and adolescents (UNICEF 2019; Osei-Assibeyi *et al*. 2012). Overweight and obesity in young children and adolescents can have adverse health, nutrition and education consequences. It can increase their risks of developing emotional problems, cognitive impairments and lifestyle diseases such as cardiovascular diseases and Type 2 diabetes later in adulthood (WHO, 2023b; UNICEF, 2019).

Creating a healthy school environment involves promoting the availability and accessibility of healthy and nutritious foods, implementing measures to restrict access to unhealthy food and beverages, and protecting children from food industry marketing. Additionally, healthy school environments set and promote the adoption of nutrition standards for food served in and around schools and provide children with access to safe, palatable and free drinking water.

Given the significant time school children spend in unhealthy food environments while at school, it is essential for countries to implement evidence-based interventions that promote healthy school environments. Recommended interventions for creating healthy school food environments and strategies for preventing overweight and obesity in school-age children are outlined in Box 1 and Table 1, respectively.

Unhealthy school food environments can have a negative impact on the health, nutrition, and education outcomes of school children.

Box 1 Key intervention for creating healthy school food environments

Policies and regulatory frameworks	• This intervention entails adopting and implementing evidence-based policies and regulations that promote healthy school environments. These policies should impose restrictions or a complete ban on all forms of marketing and promotion of unhealthy food and beverages targeted at school children. Further, such policies should prohibit food and beverage industries from sponsoring schools, sporting events and nutrition education materials. Such industries should also be prohibited from branding school infrastructure, equipment, etc.
Food and nutrition standards for foods and beverages provided and sold in and around schools	• This intervention involves adopting nutrition standards that determine the nutritional quality of food served or sold in and around schools. All school food and beverages should adhere to evidence-based nutrition standards. An evidence-based approach ensures that the intervention can effectively improve children's diets. Set standards should apply to all foods and beverages sold or available in and around schools, including cafeterias, kiosks, vending machines and outside vendors. This intervention helps to prevent the sale of unhealthy foods and beverages to schoolchildren.
Front-of-pack labelling systems and nutrition education	• Adopting front-of-pack labelling requirements can provide information on food nutrition quality at the point of purchase. This, in turn, encourages schoolchildren to make more informed choices, leading to the selection of healthier food options. Furthermore, integrating nutrition education into the school curriculum is essential to empower schoolchildren with the knowledge and skills required to make healthy food choices. It is equally essential to extend nutrition education to teachers and parents by providing them with resources and learning aids to support children's nutrition education.
Subsidies of healthy and nutritious foods	• This intervention promotes healthier food alternatives by making healthy and nutritious food options more affordable and accessible to schoolchildren through subsidies for healthy foods. In addition, schools should provide safe, palatable and free drinking water to limit the consumption of unhealthy beverages by school children.

Box 2 A list of "how to" guidance documents and tools for creating healthy school food environments

Assessing school food environments:	• School Nutrition Environment Assessment Tool 1 & 2 (Annex 1) • UNICEF Programming Guidance. Nutrition in middle childhood and adolescence (Annex 3a – A tool to support situation analysis). https://www.unicef.org/media/106406/file)
Regulating advertisements and promotions of foods in schools:	• WHO/UNICEF toolkit: Taking action to protect children from the harmful impact of food marketing: a child rights-based approach. https://www.who.int/publications/i/item/9789240047518 • WHO guideline: Policies to protect children from the harmful impact of food marketing. https://www.who.int/publications/i/item/9789240075412 • WHO Be smart drink water: a guide for school principals in restricting the sale and marketing of sugary drinks in and around schools. https://www.who.int/publications/i/item/WPR-2016-DNH-008 • WHO nutrient profile model for the Western Pacific region: a tool to protect children from food marketing. https://apps.who.int/iris/bitstream/handle/10665/252082/9789290617853-eng.pdf?sequence=1&isAllowed=y • UNICEF. 2023. Engaging with the food and beverage industry: UNICEF programme guidance. https://www.unicef.org/documents/nutrition/engaging-food-and-beverage-industry • FAO. 2020. Legal guide on school food and nutrition – legislating for a healthy school food environment. https://doi.org/10.4060/ca9730en

Table 1 **Interventions for prevention of overweight and obesity in school-age children**

	Interventions	Action
Skill-based intervention	**Nutrition and physical education through school curriculum**	• Integrating nutrition education into the school curriculum helps children develop nutrition literacy and fosters adoption of healthy eating habits. • Incorporating physical education in the school curriculum promotes an active lifestyle, physical health and mental well-being and instils healthy habits that can last a lifetime. Furthermore, incorporating physical activity in the classroom can help children maintain a healthy body and prevent obesity. The World Health Organization recommends that young children and adolescents aged 5–17 years should accumulate at least 60 minutes of moderate or vigorous physical activity daily. *Full details covered under the Nutrition and Physical Education & Activity minimum package.*
School food environment intervention	**Policy and regulatory frameworks**	**See Box 1**
	Food and nutrition Standards	**See Box 1**
	Restrictions on advertising in schools	**See Box 1**
	Improving teachers and parents' knowledge on nutrition	**See Box 1**
Community environment intervention	**Food-based standards in the community**	• Ban advertising, promotion, and sponsorship of unhealthy foods and beverages to school-age children. Also see Box 1. • Legislation imposing taxes on unhealthy foods while reducing import duties and providing subsidies for healthy foods can prevent obesity in school-age children.

Source: Adapted from UNICEF. 2015. *Improving nutrition in adolescent and school-age children: toolkit*

Recommended tools and resources

- Essential standards checklist for school-based obesity prevention (Annex 2).
- UNICEF. 2015. *Improving nutrition in adolescent and school-age children*. https://unicefeaproinasactoolkit.wordpress.com/inasac-toolkit/#_Toc436749481
- UNICEF. 2021. *The role of schools in preventing overweight and obesity among students in Latin America and the Caribbean*. https://www.unicef.org/lac/media/30436/file/The-role-of-schools-in-preventing-overweight.pdf

Safe, supportive school environment:

Water, sanitation, and hygiene (WASH)

Photo ©: USAID

This component provides practical guidance and tools for developing and implementing evidence-based WASH programmes in schools.

WATER, SANITATION AND HYGIENE

WASH (water, sanitation and hygiene) conditions in schools can impact children's education, nutrition, and health outcomes (WHO, 2023b). Studies have established a strong correlation between poor WASH conditions and soil-transmitted helminth infections, diarrhoeal diseases, and malaria (WHO, 2018a). If not appropriately managed, school environments can easily transform into breeding and transmission grounds for soil-transmitted helminths, including diarrhoeal diseases and malaria (Esteves Mills and Cumming, 2017), leading to increased absenteeism and early school dropouts among affected children. In addition to ill health, children affected are at risk of malnutrition due to diarrhoeal diseases and soil-transmitted helminths, which can affect nutrient absorption. Further, WASH-related infections contribute to intellectual retardation (UNICEF, 2012), leading to poor academic performance. Inadequate WASH facilities, including a lack of gender-sensitive toilets, can deter children from attending school regularly. Moreover, the lack of proper menstruation hygiene management in schools impedes regular school attendance, particularly for adolescent girls (WHO, 2023a.)

Poor WASH conditions at schools can undermine the purpose of school health and nutrition programmes. Schools that ensure access to safe drinking water, adequate sanitation and hygiene facilities that are gender inclusive, and which provide hygiene education as part of the WASH component, can positively impact children's health, attendance and academic performance. It is, therefore, essential for countries to prioritize the implementation of policy frameworks that promote appropriate levels of WASH in schools, particularly strategies that guarantee access to safe and free drinking water and clean sanitation facilities while at school.

Poor WASH conditions in schools have serious implications for the health, nutrition and education outcomes of school children.

How can we do this?

Lack of access to safe and clean drinking water, sanitation and hygiene facilities in schools impacts children's education, nutrition and overall health and well-being. Member States must prioritize improving access to adequate and functional WASH facilities to ensure that school children can thrive and reach their full potential. It is highly recommended that countries develop and implement supportive policies and strategies that ensure schoolchildren have access to safe and free drinking water while at school and adequate, clean and functioning gender-sensitive sanitation facilities.

Special attention should be given to menstruation hygiene management and supplies (such as free sanitary pads) to address the barriers to education and learning among adolescent girls. Providing WASH facilities alone is not enough – skills-based hygiene education needs to be integrated into the wider school curriculum to empower children with the knowledge, attitudes and behaviours to reduce the risks of WASH-related infections. Table 2 outlines key recommendations for managing WASH in schools. Furthermore, the recommended tools and resources below provide a step-by-step guide to designing and implementing school WASH programmes.

Recommended tools and resources

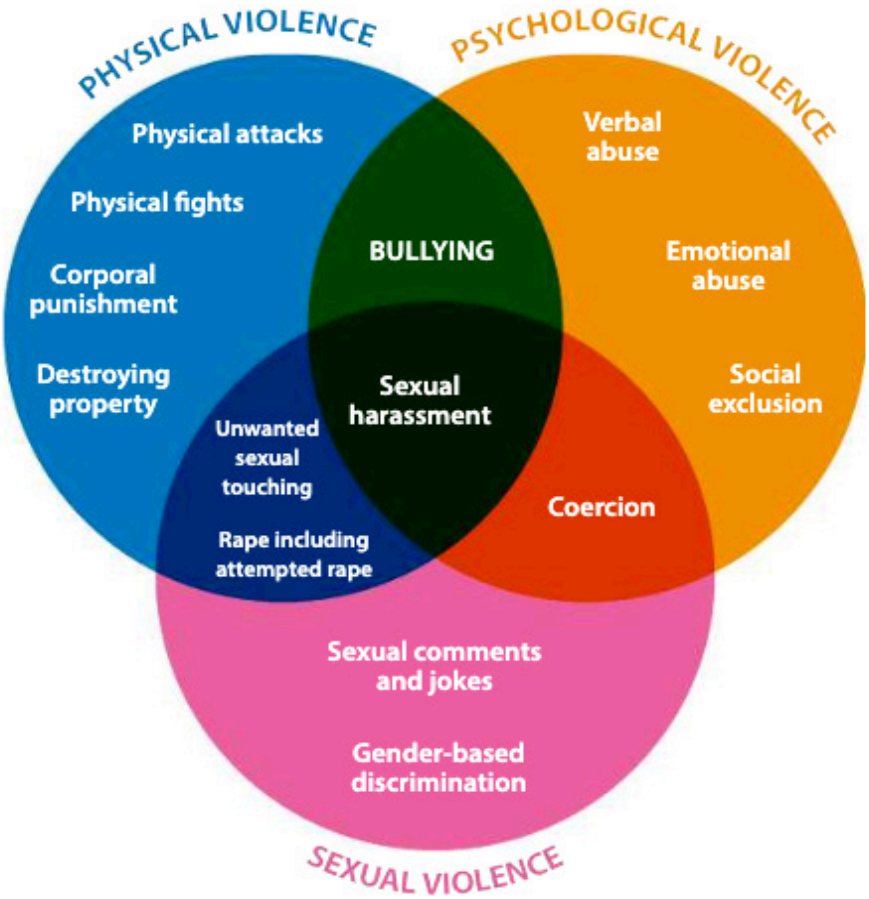
- Ministry of Gender, Zambia. 2016. Menstruation hygiene management toolkit. https://healtheducationresources.unesco.org/library/documents/menstrual-hygiene-management-toolkit
- UNICEF. 2019. Menstrual health and hygiene. (https://www.unicef.org/documents/guidance-menstrual-health-and-hygiene)
- UNICEF. 2022. UNICEF landscape analysis tool on overweight and obesity in children and adolescents. https://www.unicef.org/media/130991/file/UNICEF%20Overweight%20Obesity%20Landscape%20Analysis%20Tool%202022.pdf
- UNICEF. 2012. WASH in schools. https://inee.org/sites/default/files/resources/CFS_WASH_E_web.pdf
- WASH in schools: assessment checklist (Annex 3).
- WHO. 2009. WASH standards for schools in low-cost settings. https://inee.org/resources/water-sanitation-and-hygiene-standards-schools-low-cost-settings
- WHO. 2019. Improving health and learning through better WASH in schools: an information package for school staff. https://www.who.int/europe/publications/i/item/9789289054508

Table 2 Recommendations on managing water, sanitation and hygiene standards in schools

National level	District level	Local level (schools and community)
Review existing national policies and ensure that there is a national policy framework that is supportive of improved WASH in schools.	Raise awareness of water, sanitation and hygiene in schools among key stakeholders at district level.	Mobilize support from teachers, school children, families and other local stakeholders to achieve and sustain a healthy school environment.
Ensure that appropriate national bodies exist for setting and monitoring standards.	Ensure that an appropriate body or service exists at district level for overseeing compliance with standards. Incorporate all entities and organizations working in the district on WASH in schools.	Create an appropriate body to oversee the implementation of standards in the school.
Review national standards and amend if needed. Ensure that there is an effective regulatory framework that encourages and supports compliance.	Ensure that the national regulatory framework is reflected in appropriate guidance and support for compliance at district level. Use appropriate guidelines where standards do not exist	Define a set of targets, policies and procedures for implementing national standards and/or guidelines in a way that reflects local conditions. Define how targets, policies and procedures will be applied.
Provide expertise and resources for assessment and planning at national level.	Provide expertise and resources for assessment and planning at local level.	Assess existing conditions, consult local stakeholders (including staff and local community) and plan improvements and new developments.
Not applicable.	Provide locally appropriate plans and specialist input for new structures and improvements to existing structures.	Plan improvements or new developments required, with specialist technical input if necessary.
Promote, provide and/or facilitate funding for national programmes.	Promote the allocation of funding for planned improvements and new developments.	Guarantee funding for planned improvements and new developments.
Monitor developments at national level and promote consistent application of standards in all districts.	Ensure oversight of improvements and new developments to ensure the consistent application of appropriate standards in all schools.	Oversee implementation of planned improvements and new developments.
Ensure that water, sanitation and hygiene components are adequately reflected in the education management information system (EMIS) at national level.	Monitor ongoing conditions in all schools and promote remedial action where required.	Monitor ongoing conditions and ensure remedial action where required.
Provide training and information materials appropriate to a range of school settings. Ensure appropriate curriculum for teacher training	Provide appropriate training and information to teachers and school directors and extension agents.	Provide advice and training to staff, school children and parents.

Source: WHO. 2009. *Water, sanitation and hygiene standards for schools in low-cost settings*

Safe, supportive school environment:
Prevention of all forms of violence in and around schools



Source: UNESCO (2023)

This component provides practical guidance and tools for designing and implementing interventions that prevent and respond to all forms of violence in and around schools.

PREVENTION OF ALL FORMS OF VIOLENCE IN AND AROUND SCHOOLS

Violence in all forms is becoming a pervasive global phenomenon. School children are particularly at risk of experiencing violence in different forms, including physical, sexual, bullying, cyberbullying, corporal punishment, and gender-based violence both at school and from school. According to a UNESCO report from 2019, Sub-Saharan Africa has particularly high rates of school violence, with 36.4% physical attacks, 36.9% physical fights, and 48.2% bullying. Violence can be perpetrated by teachers, other learners, or other people at home or in the community (UNESCO, 2023). Violence in schools is regarded as one of the key drivers of high absenteeism, dropouts, and poor academic performance. Exposure to any form of violence can have long-term health and well-being consequences, which can develop into emotional, mental, and psychological problems (WHO, 2019b). Schoolchildren who are victims of violence have increased risks of developing social problems, are more likely to smoke, misuse alcohol and drugs, and engage in high-risk sexual behaviour at some point in life (WHO, 2019b). The UNESCO 2019 report highlights lower education outcomes in schoolchildren who have experienced violence and bullying.

Countries need to adopt and implement evidence-based interventions to prevent and address all forms of violence in and around schools, thereby creating safe and conducive learning environments. Key strategies for prevention include developing and implementing legal and policy frameworks, school-based interventions, and curriculum-based activities for violence prevention.

Violence in all forms contributes to serious and long-lasting health, mental and psychological consequences, which can impact education outcomes.

How can we do this?

It is essential to recognize that schools are an integral part of their communities. Preventing and addressing violence in and around schools therefore requires an integrated approach and tailored interventions that are context specific. Evidence-based recommendations advocate for the whole-school approach, which engages all key stakeholders, including teachers, law enforcement, learners and broader communities. This approach is considered more effective than interventions that target specific groups (WHO, 2019b). The WHO *School-Based Prevention Practical Handbook*, listed in the recommended resources and tools below, provides step-by-step guidance on preventing and responding to violence in and around schools using a whole-school approach.

Recommended tools and resources

- UNESCO. 2023. Connect with respect: preventing gender-based violence in schools. https://unesdoc.unesco.org/ark:/48223/pf0000380633
- WHO. 2018. INSPIRE Handbook: action for implementing the seven strategies for ending violence against children. https://www.who.int/publications/i/item/school-based-violence-prevention-a-practical-handbook
- WHO. 2019. School-based violence prevention: a practical handbook. https://iris.who.int/bitstream/handle/10665/324930/9789241515542-eng.pdf?sequence=1

Safe, supportive school environment

Mental health and psychosocial support

Photo ©: UNICEF/Tremeau

This component provides practical guidance and tools for planning and implementing interventions for mental health and psychosocial well-being.

MENTAL HEALTH AND PSYCHOSOCIAL SUPPORT

Mental health and psychosocial well-being are critical foundations of good health and overall well-being. Learners with good mental health and well-being tend to be healthier, more socially connected, and better able to cope with stressors and thrive (WHO, 2023b). Negative experiences at school, such as bullying, violence among peers, discrimination, and psychosocial problems, can lead to anxiety, depression, and psychological distress, as well as poorer mental health in school children (WHO, 2023b). These factors are critical drivers of absenteeism, dropout, and poor academic outcomes. The consequences of mental health problems during childhood and adolescence can have long-lasting effects on general health and well-being, and on education (UNICEF, 2022).

To prevent and address these challenges, schools should create safe and supportive learning environments that safeguard learners' and teachers' mental health and psychosocial well-being, making it a place where they feel included, supported, and valued. This can be achieved by developing and implementing comprehensive school-based mental health and psychosocial support (MHPSS) policy frameworks, strategies and supportive services that promote and respond to mental health and psychosocial needs early on, mitigating adverse effects on their health, well-being and academic outcomes.

The effects of mental health and psychosocial problems during childhood and adolescence can have long-lasting impacts on education, health and well-being.

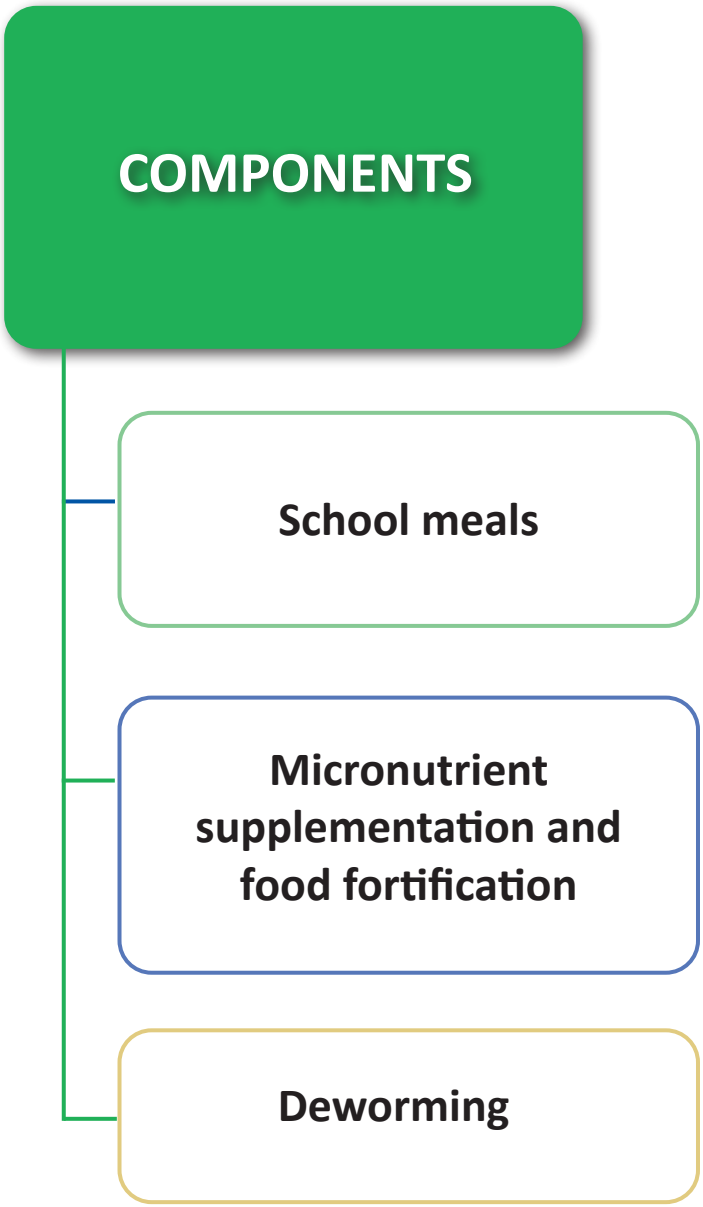
How can we do this?

It is essential to recognize that schools are an integral part of their communities. Preventing and addressing violence in and around schools therefore requires an integrated approach and tailored interventions that are context specific. Evidence-based recommendations advocate for the whole-school approach, which engages all key stakeholders, including teachers, law enforcement, learners and broader communities. This approach is considered more effective than interventions that target specific groups (WHO, 2019b). The WHO *School-Based Prevention Practical Handbook*, listed in the recommended resources and tools below, provides step-by-step guidance on preventing and responding to violence in and around schools using a whole-school approach.

Recommended tools and resources

- Ministry of Education Zambia and REPSSI. 2012. *Mainstreaming psychosocial care and support within the education sector: for school communities working with children and families affected by HIV and AIDS, poverty and conflict.* (https://inee.org/sites/default/files/resources/REPSSI_PSS_Support_Mainstreaming_2012_EN.pdf)
- UNESCO. 2022. *Five essential pillars for promoting and protecting mental health and psychosocial well-being in schools and learning environments: a briefing note for national governments.* (https://unesdoc.unesco.org/ark:/48223/pf0000384614)
- WHO. 2020. *Guidelines on mental health promotive and preventive interventions for adolescents*. https://www.who.int/publications/i/item/9789240011854
- WHO. 2021. *Mental health in school: a manual*. https://applications.emro.who.int/docs/9789290225652-eng.pdf

2. School-based nutrition services



School-based nutrition services:
School meals

This component provides practical guidance in designing and implementing quality and sustainable quality school meal programmes.

SCHOOL MEALS

School meal programmes represent safety nets for vulnerable school children, providing them with the necessary nutrition for optimum growth and development. By drawing children into schools and keeping them there to learn, school meal programmes improve enrolment and attendance and reduce absenteeism and dropouts, ultimately improving learning and education outcomes. School meal programmes play a pivotal role in addressing food insecurity among children from vulnerable and food-insecure households. By providing vulnerable children with access to nutritious meals at school every day, such programmes help to alleviate short-term hunger, enhance cognitive abilities and improve attention span during class time. Moreover, these programmes serve as an effective means of preventing malnutrition. Through providing healthy and nutritious food, school meal programmes contribute to the prevention of overweight and obesity in school-aged children.

In areas where girls face multiple barriers to education, school meal programmes provide a critical key to unlocking their full potential. Such programmes facilitate access to education, thereby contributing significantly to gender equality in education. In emergencies and crisis contexts, school meal programmes provide a safety net by transferring food commodities (take-home rations) to food-insecure households, meeting vulnerable children's food and nutrition needs. In conflict contexts, school meal programmes are a beacon of hope, contributing to peace and social cohesion.

Beyond social protection, education, health, and nutrition objectives, school meals deliver additional benefits to vulnerable school children and their communities. When linked to local agriculture and local food procurement, school meal programmes benefit smallholder farmers by creating demand and stable markets for their products. Home-grown school feeding (HGSF) programmes, particularly, are considered a critical stimulus for local agricultural production, local economic development and the strengthening of local food systems.

School meal programmes not only address short-term hunger and malnutrition but also improve enrolment, retention and learning.

Where do we start?

KEY QUESTIONS

Country A

- A national school feeding programme exists? → *If no, start with **Step 1–2***
- Is the current school feeding programme funded and nationalized by the government? → *If the answer is no, engage partners who support the school meals programme to develop transition plans for nationalizing the programme.*

Country B

- Has the national school feeding programme been reviewed in the past 5 years? → *If the answer is yes, work with local partners to develop and execute appropriate action plans based on programme review recommendations.*
- Was a review of the national school feeding programme conducted over 5 years ago or never been conducted at all? → *If the answer is no, proceed to Step 3 to conduct a SABER exercise and develop action plans to address identified gaps.*

Recommended resource and tools:
World Bank, WFP & Partnership for Child Development. 2016. *SABER-school feeding: manual for SABER-SF exercise.*

A detailed guide on designing and implementing quality and sustainable school meal programmes is attached as Annex 4.

STEP 1: CONTEXT AND SITUATIONAL ANALYSIS

School meal programmes should be based on a sound analysis of the broader context and the prevailing situation (in this case, school children, smallholders' farmers, traders, etc.). Context and situational analysis help to identify needs or problems that can be addressed by the programme, including gaps in current school meal programmes. The involvement of all relevant stakeholders and beneficiaries is crucial during this process to foster ownership, commitment and buy-in.

A context analysis helps to understand:	A situation analysis helps to:
• **Prevailing situation in the country:** Economic situation, socio-political situation, poverty, natural hazards, food insecurity and malnutrition, food systems, and food preferences. • **Food security:** The overall food security situation, current coverage of school feeding, vulnerable groups, shocks (conflict, climate, natural, economic, environmental, and health-related shocks), coping strategies, seasonal patterns, and agricultural production. • **Nutrition and health:** Key indicators/ prevalence rates such as iron deficiency anaemia, vitamin A and iodine deficiencies, parasitic worms, diet diversity, food frequency, waterborne diseases, HIV/AIDS, and malaria. • **Basic education:** Net enrolment and attendance rates, gender parity index, drop-out, pass and completion rates.	• Identify the needs of the target population. • Determine the extent to which existing policies and programmes address identified needs. • Identify existing national capacities that can be built on by the programme. • Inform programme design (i.e. objectives, targeting, delivery modalities, and menu). • Identify available opportunities that the programme can leverage. • Determine the feasibility of different school meal implementation modalities.

STEP 2: PROGRAMME DESIGN AND IMPLEMENTATION

The effectiveness of school meal programmes depends on evidence-based design. Based on the context and situation analysis results, appropriate evidence-based interventions can be established to inform design options and address identified problems/needs. Traditionally, school meal programmes have mainly served a social protection role for vulnerable children. However, school meal values and contributions are increasingly recognized as critical to achieving equitable, inclusive economic, and sustainable development across key sectors. This can be achieved through well-designed programmes that can deliver numerous benefits across different sectors, including social protection, nutrition, health, and education. In emergency and crisis contexts, well-designed school meal programmes can serve as social safety nets, providing value transfer to vulnerable households and extending spill-over benefits to other children at home. When strategically linked to local agricultural production and procurement, school meal programmes can significantly contribute to local agricultural and economic development objectives. The success of a school meal programme hinges on its design, which should be tailored to the country's prevailing context and the needs of the target population, and its potential to contribute to multiple sectoral objectives. This underscores the importance of context-specificity and needs-based approaches, ensuring the programme is relevant and effective.

2.1. Setting programme objectives

After conducting a thorough context and situation analysis to identify the problem or needs, it is crucial to clearly define programme objectives and expected outcomes. It is important to develop a clear programme logical model outlining goals and expected outcomes, which provide the necessary framework for programme implementation, monitoring, evaluation and reporting. School meals naturally contribute to multiple sectoral policy objectives, such as social safety nets, addressing short-term hunger and all forms of malnutrition, increasing school enrolment and retention, boosting agriculture, and stimulating local economic development. Member States are therefore encouraged to pursue these multiple sectoral objectives to achieve long-term sustainable development gains by linking school meals to local agriculture through local procurement. *Annex 5 provides a list of examples of school feeding objectives.*

2.2. Targeting

Given a finite budget environment, targeting becomes critical in ensuring the programme reaches the most vulnerable populations with the greatest needs or vulnerable or geographical areas. Informed by the programme objectives, evidence-based targeting criteria and mechanisms should be established. Effective targeting should be based on key indicators (e.g. high rates of poverty, malnutrition, low rates of school enrolment and attendance, high dropout rates, high food insecurity rates, gender parity indexes, children with disability, and marginalized groups). Several approaches to targeting can be used, including universal, geographical and individual targeting. A geographical targeting approach (selecting schools from vulnerable geographical areas) is recommended where universal targeting is not feasible.

Countries are advised to conduct periodic re-targeting of the programme, especially when there have been changes in prevailing situations (e.g. change in poverty or food security and nutrition security) or change in programme objectives.

A step-by-step guidance on targeting is provided in Table 3.

Targeting considerations

Based on the findings of the situation analysis and programme objectives, a target population should be defined. The below critical questions can inform targeting:

- What geographical areas should be targeted (e.g. areas with greatest needs).
- Who should be targeted (e.g. schoolchildren, out of school children, and other specific vulnerable groups, including children with disabilities).
- What type/level of schools should be covered by the programme (pre-primary, primary, secondary) and whether public or private schools.
- What are the minimum criteria that schools have to meet to benefit from the programme?

Examples of targeting criteria and indicators to consider:

- Geographic targeting of areas with high rates of food insecurity, poverty, and malnutrition.
- Educational indicators such as low enrolment rate and attendance rates; and high dropouts' rates.

Note: It is important that the targeting criteria are communicated to key programme stakeholders, including communities.

Table 3 How to determine target groups according to programme objectives

Programme Objectives	Target Group
Increase enrollment	Out-of-school children
Improve attendance	Primary/lower secondary school children where attendance is low/irregular
Reduce drop-out	Primary/lower secondary school children most at risk of dropping out
Improve the capacity to concentrate and learn	Primary/lower secondary school children where academic performance is low
Contribute to meeting school children's food needs	Pre-primary/primary school children where availability or access to food is limited
Contribute to school children's balanced diet	Pre-primary/primary school children where diet diversity is poor
Improve micronutrient status in schoolchildren	Pre-primary/primary school children where micronutrient deficiencies are high
Reduce drop-out of girls	Girls in primary/secondary schools most at risk of dropping out
Increase enrollment and attendance of orphans, children with disabilities, and other vulnerable children	Orphans, children with disabilities and other vulnerable children in primary/lower secondary schools
Improve household food consumption	School children and households in food insecure communities
Increase smallholder farmers' income and marketing opportunities	Local smallholder farmers

2.3 Menu design

Menu design is a critical element of school meal programmes. It can determine whether the programme's nutritional objectives will be met or not and to what extent the school meal programmes can be linked to local agricultural production to derive additional benefits. A well-designed menu is informed by the programme objectives and nutritional targets that will be fulfilled. The World Health Organization (2019a) recommends diverse menus comprising fruits, vegetables, whole grains, roots, beans, nuts, and animal products, while avoiding ultraprocessed foods and beverages. Diverse menus ensure that school meals provided meet children's macronutrient and micronutrient requirements (the recommended daily nutrient intake for children and adolescents is provided in Annex 6). Furthermore, a diverse menu promotes the incorporation of local and indigenous nutritious foods, thereby supporting local farmers, stimulating local economies, and strengthening local food systems. During menu design, it is important to consider local food availability, seasonal variations, prices and local dietary preferences and habits. It is essential that school menus are based on national food dietary guidelines and nutritional standards. This alignment enhances nutritional quality, sustainability and cultural appropriateness of school meal programmes. Collaborative efforts between FAO and WFP are ongoing to develop a methodology for countries to establish tailored nutrition guidelines and standards for school meals.

The menu design process should be consultative and should seek inputs from a professional nutritionist, including inputs from a wide range of stakeholders and local communities to ensure cultural and contextual appropriateness. Several school meal planning tools can be used to ensure that school menus are diverse and nutritious and are in alignment with the country's food-based dietary guidelines. One effective tool for streamlining school menu planning is the School Meal Planner Plus (SMP PLUS). This innovative digital solution optimizes the process of creating school menus, making them more nutritious, locally sourced, and cost-effective. This tool is freely available and can be accessed here: https://innovation.wfp.org/project/smp-plus

2.4 Linking school meals to local agricultural production.

The importance of linking school meal programmes to local agriculture is gaining recognition and receiving significant attention at continental and regional levels. In 2016, the African Union (AU) heads of states and Government passed a decision (Assembly/AU/Dec.589(XXVI) in support of home-grown school feeding (HGSF), acknowledging its value and contribution to inclusive and sustainable development in Africa. HGSF is a school feeding model that provides safe, diversified, nutritious meals to school children sourced from local smallholder farmers. Such programmes are regarded as a catch-all solution that not only optimize school children's nutrition and learning through diverse and nutritious meals, but which have a multiplier effect delivering numerous benefits to local communities and smallholder farmers. The HGSF programme facilitates access to stable markets through local sourcing, ensuring predictable incomes for smallholder producers and traders. Additionally, the HGSF programme stimulates local agricultural production, bolsters local economies and promotes job creation in surrounding communities. Moreover, HGSF has the potential to strengthen local food systems as diverse school menus create demand for diverse and nutritious locally available foods. Consequently, HGSF incentivizes local farmers to increase the production and availability of diversified nutritious foods for schools and broader communities.

Member States are strongly encouraged to prioritize linking school meal programmes to local agricultural production and gradually transition to fully fledged HGSF to reap the multiple benefits of the programme. Greater consideration should be given to developing supportive procurement policies that are pro-smallholder farmers to address market access barriers often experienced by smallholder farmers and traders while concurrently bolstering food supply chain systems to enhance the capacity and sustainability of food supply to meet school demand. Step-by-step guidance on how to link school meal programmes to local agricultural production is provided in the AUDA-NEPAD Guidelines for the Design and Implementation of HGSF programmes in Africa, available here: https://www.nepad.org/publication/guidelines-design-and-implementation-of-home-grown-school-feeding-programmes. An additional valuable resource to consider is the FAO 2017 paper titled *Leveraging institutional food procurement for linking small farmers to markets: findings from WFP's Purchase for Progress initiative and Brazil's food procurement programmes*, which can be accessed from http://www.fao.org/3/a-i7636e.pdf.


Photo ©: ZimPro

Home-grown school feeding: Good practices

Brazil's National School Meals Programme and Food Acquisition Programme

In 2003, Brazil adopted a national strategy to tackle hunger and malnutrition. The Zero Hunger Strategy articulates a range of programmes, including Brazil's National School Meals Programme (PNAE) and Food Acquisition Programme (PAA). The PNAE has been in existence since 1954 and was initially aimed exclusively at providing schoolchildren with access to food. In 2003, the programme focus was expanded to place greater emphasis on nutrition – realised, among others, through the provision of complementary food to children under the age of 5 years. This expansion also led to a decentralization of PNAE's structure, wherein a nutritionist, placed in each state and municipality, was tasked with the design of regional school menus. Furthermore, in 2009, the school meals law established formal linkages between smallholder farmers and food and nutrition education. Currently, the PNAE operates in more than 165 000 public schools in Brazil and reaches over 42 million students. Its budget for 2017 is over BRL 3 billion (USD 1.5 billion), with average cost of BRL 0.36 (USD 0.15) per student, per day. Children are provided with nutritionally balanced meals, designed according to the needs of different age groups, wherein a minimum of 30 percent of all required foods are procured from smallholder farmers. The programme provides up to 70 percent of the daily nutritional requirement for students attending full-time classes.

The PAA purchases food from smallholder farmers through a simplified public bidding process. The PAA was designed to create and enhance market access to smallholder farmers, with the main objectives of strengthening family farming and local markets, encouraging organic and agroecological food production, enhancing diversity of locally available and grown foods, and encouraging smallholder farmers to be organised in cooperatives. Under PAA, fresh foods with little or no processing are the most frequently purchased products from smallholder farmers.

Combined, the PNAE the PAA represent the largest structured demand initiatives for smallholder farmers in Brazil. The two programmes connect large and predictable demand for food to the farmers, which in turn holds the potential for farmers to increases their income, while increasing the supply of locally-grown foods within communities.

Source: African Union. 2018. *Sustainable school feeding across the African Union*. Addis Ababa. Pg 46.

2.5 Delivery modality

When choosing delivery modalities, it is essential to consider the key objectives of the school meal programme and the prevailing contexts under which the programme will be delivered. Effective delivery modalities include on-site cooked meals given each school day to schoolchildren at school, snacks (including fortified high-energy biscuits), and take-home rations (usually dry rations) given to schoolchildren to take home. Depending on programme objectives and contexts, different modalities can be combined to maximize impact. For instance, on-site school modality can be combined with take-home rations to provide a safety net to specific vulnerable groups of school children or to contribute to gender equality objectives, especially where there are gender disparities in girls' school enrolment and attendance. By carefully selecting, and when necessary, combining delivery modalities, school meal programmes can effectively address multiple needs dimensions and improve nutrition and education outcomes.

2.6 Food safety and quality

Food safety and quality are critical elements of school meal programmes and are essential to achieving programme objectives. Consumption of unsafe, poor-quality and contaminated food is detrimental to the health of schoolchildren. Contaminants such as aflatoxin and others can lead to severe health consequences, including impaired cognitive function, stunted growth and fatalities. These negative impacts could negate the very purpose of the school meal programmes. Food contamination can occur at various points, including production, transportation, processing, storage at school, and during meal preparation. Governments have a duty to ensure that food provided to school children is safe and is of high quality. Each country should develop comprehensive food safety and quality guidelines and standards and implement effective measures to prevent contamination at all potential points. A step-by-step guide to ensuring food safety and quality is provided in the WFP guidance document, accessible here:
https://docs.wfp.org/api/documents/WFP-0000105252/download/

2.7 Complementary school-based interventions

The effects of school meal programmes can be potentiated by other essential school-based services. For example, school meal programmes are most impactful when implemented with food fortification, and micronutrient supplementation as an integral part rather than as a complementary package (Bundy et al., 2009). The impact of school meal programmes can be increased by implementing them alongside other essential SHN packages such as deworming and WASH. Further impetus can be gained by including nutrition education to create positive dietary habits among schoolchildren. Member States are advised to deliver school meal programmes in combination with other essential SHN intervention packages to leverage complementary and mutually reinforcing effects.

2.8 Community participation

The involvement and participation of local communities in implementing school meal programmes helps create a sense of ownership, enhancing programme sustainability. Countries must ensure that communities, including programme beneficiaries (e.g. schoolchildren, smallholder farmers) are engaged from an early stage of programme design, throughout implementation, and during monitoring and evaluation. Establishing mechanisms such as community-level platforms (e.g. school board advisory committees) and other governing structures are good practices that countries can consider.

Planet-friendly school meal programmes

The effect of climate change on food systems directly affects food and nutrition security. Current food systems heavily rely on intensive and unsustainable agricultural practices, such as the use of excessive chemical fertilizers and pesticides, monocropping, deforestation for farmland, and an overreliance on fossil fuels. These practices significantly contribute to environmental degradation and climate change (UNCTAD, 2011; FAO, 2022; WFP, 2023). Addressing these issues requires a fundamental shift towards more sustainable food systems. School meal programmes present a strategic opportunity to combat environmental degradation and climate change. For instance, adopting planet-friendly menus can lower greenhouse gas emissions, while promoting seasonal and diverse food options reduces reliance on monocropping and supports agricultural biodiversity. Furthermore, locally sourcing food commodities for school meals can bolster local agricultural production and reduce food miles, lowering carbon emissions. Additionally, implementing clean cooking solutions, such as using energy-efficient appliances and renewable energy sources, can further reduce greenhouse gas emissions.

Planet-friendly school meal programmes can significantly contribute to environmental conservation and climate change mitigation. Member States are strongly encouraged to integrate environmental and climate change considerations into the design and implementation of school meal programs. For recommended action, please see *WFP's approach to planet-friendly school meals*, accessible here: https://www.wfp.org/publications/wfps-approach-planet-friendly-school-meals

School meal programmes in emergency contexts

Emergencies, particularly conflicts, pandemics, and climate-related disasters, not only deprive vulnerable children of education and learning opportunities but also disrupt their access to school meal programmes as a result of consequential school closures. These crises disproportionately affects vulnerable schoolchildren (including children with disabilities), often leading to their withdrawal from school by their parents. For many schoolchildren who rely on school meals (in some cases as their only source of meal for the day) disruptions of school meals means their food and nutritional needs will not be met. School meal programmes are one of the social protection tools that protect and provide a safety net to children affected by crises by addressing their food and nutrition needs and supporting their learning. During emergency situations that affect food security at the household level, school meal programmes incentivize parents to send their children to school and keep them in school to learn, reducing the likelihood of dropouts, especially among girls. In conflict contexts, school meal programmes are one of the critical tools for peace and society cohesions, with the potential to dissuade the involvement of children in armed conflicts. Emergencies are often complex and challenging, sometimes requiring school closures. To ensure the continuity of school meal programmes, countries should include contingency plans in programme designs to ensure uninterrupted operation and provision of essential nutrition

services. In emergency contexts, implementation of school meal programmes requires strong sectoral coordination and effective collaborations, including working with local partners such as WFP, FAO, UNICEF and WHO to leverage technical expertise in emergency and crisis contexts programming. For step-by-step guidance, please see the Global Child Nutrition Foundation and The Global Food Banking technical guidance document (Responding to an Emergency for Food Bank and school meals), particularly Annex 1, page 25 (*Quick guide to developing an emergency response plan*) and Annex 5, page 38 (*Safe food distribution guide for food banks and schools*) accessible here: https://gcnf.org/wp-content/uploads/2022/04/Responding_To_An_Emergency_Guide.pdf

Recommended tools and resources

- FAO. 2021. *Capacity needs assessment tool – School-based food and nutrition education*. https://doi.org/10.4060/cb7584en
- GCNF. 2010. *School feeding toolkit: a resource for assessing needs and planning sustainable school feeding programs*. https://www.gcnf.org/wp-content/uploads/2016/03/2009-gcnf-English-toolkit-INTERACTIVE.pdf
- The Global Food Banking Network. 2021. *Developing a school feeding program*. https://www.foodbanking.org/resources/developing-a-school-feeding-program/
- UNICEF. 2017. *Guidance: Including children with disabilities in humanitarian action*. https://reliefweb.int/sites/reliefweb.int/files/resources/disability_inclusive_humanitarian_action.pdf
- WHO. 1998. *Healthy nutrition: an essential element of a health-promoting school*. Information Series on school health - Document Four (Annex 2 Pg 39) https://iris.who.int/bitstream/handle/10665/63907/WHO_HPR_HEP_98.3.pdf?sequence=1

School meals in emergency contexts: Good practices

Case study 1. High-intensity war, displacement and limited access: Syria

In November 2016, the Office for the Coordination of Humanitarian Affairs (OCHA) estimated that 13.5 million people were in need of assistance in Syria at the time, of which close to 1 million were in then-besieged locations. Over half of the population has been forced from their homes since the onset of the war in 2011, either as refugees or as internally displaced persons (IDPs). One out of three schools in Syria is destroyed, and many hundreds of thousands of school employees cannot do their jobs. In effect, the education system is overwhelmed. In areas with an influx of IDPs, the classrooms are overcrowded, with 60 students in each class. It is estimated that in 2015, more than 600 000 school-age children were located in besieged areas, and 2.1 million children were out of school. The main reasons for children not to attend school were displacement, poverty, and safety and security issues. In zones where armed conflict is ongoing, parents are reluctant to send their children to school. Before the crisis, Syria had a well-functioning education system.

Emergency programmes: In 2014, in collaboration with UNICEF and the Ministry of Education, WFP started an SF programme in areas of relative stability. Mainly IDP-areas were targeted, as the pressure from new pupils on schools in these areas is high, and many of the schools run double shifts. They distribute vitamin and mineral-fortified date bars that are locally produced. It is estimated that 375 000 children receive these bars daily. In the acutely insecure situation in Syria, it was seen as essential to plan for an SF programme where modalities have long shelf lives and a maximum reach. It has been possible to bring date bars into besieged areas in relatively calm periods. The date bar has high nutrient and energy density, which makes transportation and storage efficient. As long as the bars are stored in schools, they can also be distributed during periods characterised by armed fighting.

Source: Hatløy, A. & Sommerfelt, T. 2017 Rethinking emergency school feeding: a child-centred approach. Fafo.

STEP 3: REVIEW AND UPDATE EXISTING PROGRAMMES TO ENSURE THEY MEET QUALITY STANDARDS FOR SCHOOL FEEDING

In countries with established school meal programmes, conducting a comprehensive review of such programmes is recommended to identify and address gaps that could undermine their effectiveness and quality. Countries are encouraged to use the Systems Approach for Better Education Results School Feeding (SABER-SF) tool to determine if national school meal programmes meet quality standards for school feeding. This tool is anchored on five globally agreed-upon quality standards for school feeding. The SABER-SF tool is very useful in identifying strengths and weaknesses in policies and systems related to school feeding. Furthermore, the SABER exercise helps countries devise appropriate actions to enhance the efficiency and effectiveness of national school meal programmes. A checklist for assessing whether programmes meet quality standards for school feeding is attached as Annex 7.

SABER-SF methodology and tools are available here: https://openknowledge.worldbank.org/server/api/core/bitstreams/e0e665b0-12c5-5251-b884-63f4e6ec4970/content

FIVE SCHOOL FEEDING QUALITY STANDARDS

1. **Policy framework:** This quality standard recognizes that the effectiveness and sustainability of school meals programmes depend on their embedment within national policy and legal frameworks, particularly, national overarching policies and plans, sectoral policies, and specific school feeding related policies.

2. **Financial capacity:** This quality standard recognizes that the sustainability of school meal programmes is contingent upon stable and sustainable funding. It should be included in national planning and budgeting processes, with a specific budget line designated for school meal programmes that are ring-fenced.

3. **Institutional capacity & coordination:** This quality standard recognizes that school meal programmes quality and effectiveness are enhanced when specific institutions (with adequate capacity and resources) are mandated and accountable for programme delivery. Effective multisectoral coordination and partnerships are critical enablers.

4. **Design & implementation:** the effectiveness and quality of school meal programmes depend on thorough contextual and situational analyses, clearly defined programme objectives aligned with prevailing contexts and population needs, accurate targeting, appropriate delivery modalities, well-designed menus, food safety and quality, complementary SHN services, and robust M&E systems.

5. **Community participation:** Involving local communities in the design and implementation of school meal programmes creates a sense of ownership, and enhances programme sustainability.

School-based nutrition services: Micronutrient supplementation and food fortification

This component provides practical guidance for designing and implementing micronutrient supplementation and food fortification school-based programmes.

MICRONUTRIENT SUPPLEMENTATION & FOOD FORTIFICATION

Micronutrient deficiencies, also known as hidden hunger, are a prevalent issue among young children and adolescents, often caused by various factors such as including inadequate dietary intake of healthy and nutritious foods, parasitic infections (e.g. malaria), and soil-transmitted helminth infections (UNICEF, 2021). Iron deficiency anaemia is prevalent in adolescent girls due to increased iron requirements during menstruation (WHO, 2018a). Micronutrient deficiencies are associated with fatigue, impaired cognitive function, low IQ, and poor academic performance in school children (Singh *et al*., 2023).

Addressing micronutrient deficiencies in school children requires targeted interventions such as micronutrients supplementation, food fortification and biofortification (Bundy *et al*., 2009; Scott *et al*., 2018; WHO, 2018a). Micronutrient supplementation interventions are effective short-term solutions for addressing specific micronutrient deficiencies. For example, iron and folic acid (IFA) given to young children and adolescents in settings with high anaemia prevalence has shown to be effective in combating iron deficiency anaemia and enhancing the cognitive ability of school children (Falkingham *et al*. 2010; UNICEF, 2021). Other interventions, such as food fortification, provide additional benefits to schoolchildren by addressing multiple forms of micronutrient deficiencies; for example, adding vitamins and minerals such as iron, iodine, and vitamin A to school meals to increase their nutritional value. Additionally, incorporating biofortified crop varieties high in essential vitamins and minerals (e.g. vitamin A, iron and zinc) in school menus can effectively address micronutrient deficiencies. Establishing robust policies and strategies that promote the integration of school nutrition programmes is essential to tackling micronutrient deficiencies in school children.

Micronutrient deficiencies are associated with cognitive impairment, low IQ, and poor academic performance.

How can we do this?

Addressing micronutrient deficiencies in schoolchildren requires robust policies that promote integrated school nutrition programming, along with targeted interventions. The World Health Organization (WHO) recommends **preventive iron supplementation** for schoolchildren and adolescents to combat iron deficiency and anaemia. Please refer to the WHO recommendations in Table 5.

Countries should implement preventive iron supplementation interventions according to the national guidelines of their respective ministries of health. In addition, WHO recommends **point-of-use fortification of foods** with iron-containing micronutrient powders in children aged 2–12 years in populations where anaemia is prevalent. Refer to the WHO recommendations in Table 6.

Incorporating **biofortified crops into school menus** is another effective strategy to address micronutrient deficiencies in schoolchildren, particularly where micronutrient supplementation and food fortification interventions may be challenging to implement (WHO, 2023).

Recommended tools and resources

- Harvest Plus. 2023. *Biofortified crops on my plate: A National Biofortification recipe book*. https://www.harvestplus.org/wp-content/uploads/2023/02/HarvestPlus-Recipe-Book.pdf
- UNICEF. 2021. *Programming guidance: nutrition in middle childhood and adolescence.* Page 21. https://www.unicef.org/media/106406/file
- WHO. 2016. *WHO Guidance: use of multiple micronutrient powders for point-of-use fortification of foods consumed by infants and young children aged 6–23 months and children aged 2–12 years*. Page 14. (https://www.who.int/publications/i/item/9789241549943)

Table 4 WHO recommended preventive iron supplementation for school-age children and adolescents

Age group	Children 5–1		Non-pregnant adolescent girls 10–19	
Settings	Populations where the prevalence of anaemia among children under 5 years is 40% or higher	Populations where the prevalence of anaemia among school-age children is 20% or higher	Populations where the prevalence of anaemia among menstruating adult women and adolescent girls is 40% or higher	Populations where the prevalence of anaemia among menstruating adult women and adolescent girls is 20–39.9 %
Frequency and duration	Daily	Weekly	Daily	Weekly
Supplement form and composition	Tablets or capsules; 30–60 mg elemental iron	Tablets/capsules; 45 mg elemental iron	Tablets; 30-60 mg elemental iron	Tablets; 60 mg of elemental iron and 2 800 µg of folic acid
Duration	Three consecutive months in a year	Three months of supplementation followed by three months of no supplementation and again restarting the supplementation; if feasible, intermittent supplementation throughout the school calendar year	Three consecutive months in a year	Three months of supplementation followed by three months of no supplementation and again restarting the supplementation; if feasible, intermittent supplementation throughout the school calendar year
Special considerations	• In malaria-endemic zones, iron supplementation should be provided only in conjunction with measures to prevent, diagnose and treat malaria. • The concomitant use of iron supplementation and MNP with iron should be avoided. • Where iron deficiency and anaemia are also common among adolescent boys, national weekly iron and folic acid supplementation programmes may also target adolescent boys. • To avoid confusion related to overlapping age groups for 10–12-year-olds, consider the recommendations for adolescents.			

Source: UNICEF. 2021. *UNICEF programming guidance: nutrition in middle childhood and adolescence.* New York.

Table 5 WHO recommended scheme for point-of-use fortification of foods with iron-containing micronutrient powders in children aged 2–12

Scheme for fortification	Target group: children aged 2–12
Composition per sachet	• Iron: 10 to 12.5 mg of elemental iron for children aged 2–4; and 12.5 to 30 mg elemental iron for children aged 5–12[a] • Vitamin A: 300 µg retinol • Zinc: 5 mg elemental zinc • With or without other micronutrients to achieve 100% of the RNI[bc]
Regimen	Programme target of 90 sachets/doses over a six-month period
Settings	Areas where the prevalence of anaemia in children under 5 years of age is 20% or higher

- 12.5 mg of elemental iron equals 37.5 mg of ferrous fumarate or 62.5 mg of ferrous sulphate heptahydrate or equivalent amounts in other iron compounds. If sodium iron EDTA (NaFeEDTA) is selected as a source of iron, the dose of elemental iron should be reduced by 3–6 mg due to its higher bioavailability. The appropriate range of NaFeEDTA is an area of research need.

- Recommended nutrient intake (RNI). Multiple micronutrient powders can be formulated with or without other vitamin and minerals in addition to iron, vitamin A and zinc to achieve 100 percent of the RNI, and also taking into consideration the technical and sensory properties.

- Where feasible, likely consumption from other sources, including home diet and fortified foods, should be taken into consideration for establishing the composition of the sachet.

School-based nutrition services:
Deworming

Source: WHO (2016)

This component provides practical guidance on designing and implementing deworming programmes.

DEWORMING

Micronutrient deficiencies, also known as hidden hunger, are a prevalent issue among young children and adolescents, often caused by various factors such as including inadequate dietary intake of healthy and nutritious foods, parasitic infections (e.g. malaria), and soil-transmitted helminth infections (UNICEF, 2021). Iron deficiency anaemia is prevalent in adolescent girls due to increased iron requirements during menstruation (WHO, 2018a). Micronutrient deficiencies are associated with fatigue, impaired cognitive function, low IQ, and poor academic performance in school children (Singh *et al*., 2023).

Addressing micronutrient deficiencies in school children requires targeted interventions such as micronutrients supplementation, food fortification and biofortification (Bundy *et al*., 2009; Scott *et al*., 2018; WHO, 2018a). Micronutrient supplementation interventions are effective short-term solutions for addressing specific micronutrient deficiencies. For example, iron and folic acid (IFA) given to young children and adolescents in settings with high anaemia prevalence has shown to be effective in combating iron deficiency anaemia and enhancing the cognitive ability of school children (Falkingham *et al*. 2010; UNICEF, 2021). Other interventions, such as food fortification, provide additional benefits to schoolchildren by addressing multiple forms of micronutrient deficiencies; for example, adding vitamins and minerals such as iron, iodine, and vitamin A to school meals to increase their nutritional value. Additionally, incorporating biofortified crop varieties high in essential vitamins and minerals (e.g. vitamin A, iron and zinc) in school menus can effectively address micronutrient deficiencies. Establishing robust policies and strategies that promote the integration of school nutrition programmes is essential to tackling micronutrient deficiencies in school children.

Soil-transmitted helminths negatively impact school children's health, nutritional status, and learning ability.

How can we do this?

To tackle worm infestation, particularly schistosomiasis and soil-transmitted helminths, the WHO recommends regular preventive deworming for preschool children aged 1–4 years and school-age children aged 5–12 years in areas where soil-transmitted infection prevalence is 20 percent or more among children. To be more impactful, deworming programmes should be delivered alongside WASH programmes and hygiene education to effectively reduce the burden of worm infections. Countries are advised to conduct regular school-based deworming according to the WHO technical guidance provided in Table 6. The recommended resources and tools box below provides step-by-step guidance on planning, implementing, monitoring and evaluating school-based deworming programmes as part of integrated SHN programmes.

Recommended tools and resources

- WHO. 2011. *Helminth control in school-age children: A guide for managers of control programmes*. 2nd edition. https://www.who.int/publications/i/item/9789241548267
- World Bank Group & Global Partnership for Education. 2018. *Guidelines for school-based deworming programs: information for policy-makers and planners on conducting deworming as part of an integrated school health program*. https://www.globalpartnership.org/content/guidelines-school-based-deworming-programs
- World Bank Group & Global Partnership for Education. 2018. *Teachers' handbook for inclusive school health and nutrition.* https://healtheducationresources.unesco.org/library/documents/teachers-handbook-inclusive-school-health-and-nutrition

Table 6 WHO recommended chemotherapy (deworming) for school-age children and adolescents

Age group	Girls and boys age 5–14		Non-pregnant adolescent girls age 10–19	
Settings	Populations where the prevalence of any soil-transmitted helminths (STH) infection is 20–50%	Populations where the prevalence of any STH infection is >50%	Populations where the prevalence of any STH infection is 20–50%	Populations where the prevalence of any STH infection is >50%
Frequency and duration	Annual	Bi-annual	Annual	Bi-annual
Supplement form and composition	Albendazole 400 mg; mebendazole 500 mg	Albendazole 400 mg	Albendazole 400 mg	Albendazole 400 mg
Special considerations	• Provision of adequate water, sanitation and hygiene services is crucial in preventing and controlling STH infections. • Administration of anthelminthic medicines in adolescent girls and women of reproductive age should be avoided if they are pregnant until after the first trimester. • Among pregnant adolescents, deworming with single-dose albendazole (400 mg) or mebendazole (500 mg) is recommended as a public health intervention after the first trimester in areas where both (i) the baseline prevalence of hookworm and/or T. trichiura infection is 20 percent or more among pregnant women, and (ii) where anaemia is a severe public health problem, with a prevalence of 40 percent or higher among pregnant women, in order to reduce the worm burden of hookworm and T. trichiura infection			

Source: UNICEF. 2021. *Programming guidance: nutrition in middle childhood and adolescence*. New York, USA.

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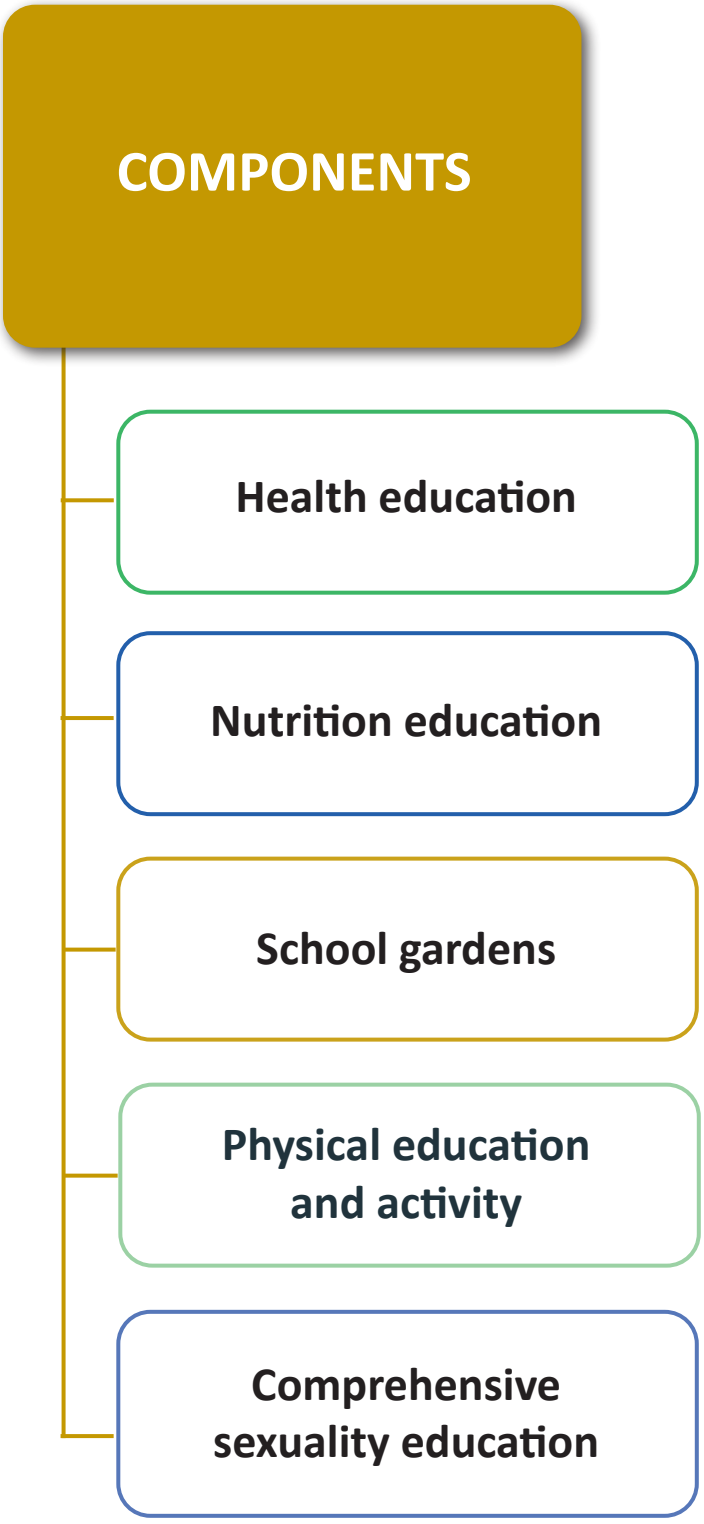
3. Skills-Based Education



Skills-based education:
Health education

Photo ©: UNICEF/LightOrive

This component is intended to provide practical guidance on integration of health education into school curriculum and delivery of skills-based health education activities.

HEALTH EDUCATION

School-aged children face various health challenges that can adversely affect their health and overall well-being. These challenges encompass issues such as parasite infections, malnutrition, micronutrient deficiencies, drug and alcohol abuse, violence, injury, early and unintended pregnancy, and infection with HIV and other sexually transmitted infections (WHO, 2003). In addition, schoolchildren and adolescents are at risk of engaging in unhealthy and risky practices that can negatively impact their health and education performance.

Skills-based health education equips schoolchildren with the essential knowledge and skills necessary to adopt and sustain healthy behaviours, thereby fostering long-term health and education outcomes (CDC, 2023). Health education is a critical element of a comprehensive school health and nutrition programme. It is essential for countries to integrate age-specific health education into the school curriculum, ensuring the systematic inclusion of health-related topics covering a wide range of health issues, including hygiene, nutrition, physical activity, mental health, substance abuse prevention and sexual health. By integrating these topics into the school curriculum, schoolchildren are empowered to make informed health decisions, leading to healthier lifestyles, reduced prevalence of chronic diseases, and enhanced overall health and well-being. This proactive approach culminates in improved health outcomes and academic performance, underscoring the profound impact of robust skills-based health education interventions.

Integrating age-specific health education into the school curriculum is essential to empower children with the knowledge and skills needed to adopt and maintain healthy habits, ultimately leading to healthier lives.

How can we do this?

For practical step-by-step guidance on integrating health education into the school curriculum and delivering effective health education, please see the recommended resources and tools box below. Countries are encouraged to use the Health Education Curriculum Analysis Tool (HECAT), an assessment tool developed by the United States Centers for Disease Control and Prevention (CDC) to assist schools in reviewing and developing appropriate health education curricula, scope and sequence.

Recommended tools and resources

- CDC. 2019. *Health Education Curriculum Analysis Tool (HECAT).* https://www.cdc.gov/healthyschools/tths/hecat.htm
- CDC. 2020. *Characteristics of an effective health education curriculum*. (https://www.cdc.gov/healthyschools/sher/characteristics/index.htm)
- WHO. 2003. *Skills for health skills-based health education including life skills: an important component of a child-friendly/health-promoting school*. https://iris.who.int/handle/10665/42818
- Save the Children. 2013. *The school health and nutrition: health education manual.* https://resourcecentre.savethechildren.net/document/school-health-and-nutrition-health-education-manual/

Skills-based education:
Nutrition education

Photo ©: FAO

This component provides practical guidance on integrating nutrition education into school curricula and delivering school-based nutrition education activities.

NUTRITION EDUCATION

Nutrition education is a critical component of school health and nutrition programmes, providing children with the knowledge and skills needed to make informed and healthy dietary decisions (WHO, 2008). Schools play a pivotal role in enhancing nutrition literacy and influencing food perceptions, practices and healthy eating habits among school children, and further provide a venue for making choices and decisions about food. It is, therefore, essential to integrate context-specific nutrition education into the school curriculum to empower schoolchildren with the knowledge and skills required to make healthier dietary choices, understand the importance of a balanced diet, and develop lifelong healthy eating habits. Integrating nutrition education across other subjects like health, biology and agriculture into other school health and nutrition programme interventions creates learning opportunities and experiences for children. In addition, it is critical to incorporate nutrition education into educators' pre-service and in-service training to ensure their adeptness in delivering impactful nutrition education lessons.

Effective nutrition education extends beyond classroom-based instruction. While basic and generic nutrition information is important, a more hands-on, experiential approach is essential for deeper learning and skills development. This could include the use of different media and technologies, opportunities for students to interact with food directly, and practising nutrition principles in real-life settings such as school canteens, markets, playgrounds, gardens, homes and communities. These practical experiences reinforce theoretical knowledge and make nutrition education more relatable and actionable for students. Comprehensive school nutrition education should cover a wide range of topics, including food groups, nutrients, selecting nutritious foods, food safety, messages on healthy eating, nutrition in the life cycle, food-based dietary guidelines, health risks of poor diets, growing nutritious foods, food preparation, sustainable diets, and food waste, among others. It should also address the sociocultural aspects of food and explore how food systems and food chains operate.

Integrating context-specific nutrition education into the school curriculum is essential to empower children with the knowledge and skills to make healthier dietary choices and develop lifelong healthy eating habits.

How can we do this?

Effective skills-based nutrition education targets both knowledge and behavioural change. It can be seamlessly integrated into the school curriculum either as a standalone subject, across different subjects, or within a specific subject. Schools and educators can combine multiple approaches to create comprehensive and engaging nutrition programmes that lead to lasting behaviour change. Some of these approaches include:

- *Integrating nutrition education into the mainstream school curriculum:* This can be done either as a stand-alone subject or across various subjects like health, biology and agriculture. Institutionalizing nutrition education within the formal curriculum ensures its sustainability and long-term impact.
- *Curriculum-based projects:* Educators can focus on specific aspects of nutrition through assignments such as language essays, research projects and field trips to farms or food industries. These activities provide students with deeper insights into nutrition by linking classroom learning with real-world applications.
- *Regular extracurricular activities within the school system:* Initiatives like school gardens, cooking classes, sports, or health clubs offer students practical learning experiences.
- *Experiential and demonstrative approaches:* Hands-on learning during school meal times and through community engagement activities can significantly enhance students' understanding of nutrition. Involving parents, caregivers, and the broader community allows children to observe and practice healthy behaviours in familiar settings, reinforcing the lessons learned at school.
- *Extracurricular activities and projects outside the formal school system:* These can be managed by external entities or part of broader national programmes on nutrition, agriculture, health, or social protection. For example, campaigns on healthy eating, food-based dietary guidelines, or anaemia prevention could include schools as a target audience, thus broadening the reach and impact of nutrition education.

School-based nutrition education activities should be designed using a contextualized and holistic approach based on nutrition education needs and implemented using the school food environment, food systems, and community lens. In countries where nutrition education still needs to be integrated into the school health and nutrition programmes, conducting a capacity needs assessment is recommended to gain a deeper understanding of the needs and inform the design of the nutrition education curriculum. Countries are encouraged to use the FAO tool for school-based capacity needs assessment available here: https://www.fao.org/3/cb7584en/cb7584en.pdf. The resources and tools on next page provide step-by-step guidance on developing and integrating nutrition education into the school curriculum.

Recommended tools and resources

- FAO. 2010. Nutrition education in primary schools: A planning guide for curriculum development. https://www.fao.org/4/a0333e/a0333e00.htmhttps://www.fao.org/3/a0333e/a0333e02_.pdf
- FAO. 2016. Learning activities in food and nutrition education. https://openknowledge.fao.org/handle/20.500.14283/i6077e
- FAO. 2021. Capacity needs assessment tool: School-based food and nutrition education. https://www.fao.org/3/cb7584en/cb7584en.pdf
- WHO. 1998. Healthy nutrition: an essential element of a health-promoting school. Information series on school health – Document Four (Annex 5, 6 & 7, pp Pg. 42-45). https://apps.who.int/iris/bitstream/handle/10665/63907/WHO_HPR_HEP_98.3.pdf?sequence=1&isAllowed=y
- WHO. 2020. Life skills education school handbook: prevention of noncommunicable diseases. https://www.who.int/publications/i/item/9789240005020

Skills-based education:
School gardens

This component provides practical guidance on establishing school gardens as part of school health and nutrition programmes.

SCHOOL GARDENS

School gardens serve both educational and nutritional purposes, providing children with practical knowledge and skills in agricultural production and sustainable practices while promoting healthy eating from a young age (Walshe, Law and Evans, 2024; Holloway *et al*., 2023; FAO, 2010a). Typically managed in part by students, school gardens often produce vegetables and fruits, and in some cases may include small-scale animal husbandry, fish farming and beekeeping. This hands-on experience complements classroom education and enhances school nutrition programs by:

- *Promoting healthy eating and education:* Students gain hands-on experience with farming and food production, fostering an appreciation for diverse diets and healthy eating habits.
- *Developing life skills:* School gardens promote the development of food production skills particularly important to agriculture-dependent countries. In this way, students are equipped with practical livelihood skills.
- *Interdisciplinary learning:* Gardens provide a platform for learning across subjects like science (plant growth and soil science experiments), agriculture, business and entrepreneurship (selling surplus produce and generating income for the school), maths (measurements, fractions and geometry), and even art (nature-inspired creations).
- *Environmental awareness:* Students cultivate a sense of respect for nature and sustainable practices while reducing the garden's carbon footprint.
- *Complement school meals:* While school gardens may not fully feed an entire school, they offer fresh, nutritious meals that can help combat micronutrient deficiencies. Additionally, growing produce on-site can potentially reduce meal costs and food miles, making school nutrition programmes more sustainable.
- *Community engagement:* Involving parents and the community strengthens the programme, fostering co-learning and potentially expanding garden-based education to homes and communities and creating a sense of shared ownership and sustainable food production practices.

School gardens are powerful tools for nutrition education, offering a unique opportunity to engage students in a fun and informative way while promoting healthy eating.

How can we do this?

To ensure the establishment of sustainable school gardens, countries can adopt the following strategies:

- *Curriculum integration:* Incorporate school gardens into existing subjects such as agriculture, nutrition, home economics, science and business studies.
- *Dedicated garden projects:* Establish school gardens as a separate project linked to curricular and extracurricular activities, like gardening clubs.
- *Partnerships:* Collaborate with organizations such as Junior Farmer Field and Life Schools (FAO, 2009) or similar initiatives. Working with local agricultural entities enhances the long-term sustainability of the gardens.
- *Parent and community engagement:* Involve parents and the community in garden maintenance and education efforts. Strengthen community connections through harvest celebrations and workshops led by local farmers and nutritionists, encouraging shared ownership and active participation.
- *Connecting with local farmers:* Establish relationships with local farmers to supply fresh produce and organize farm visits for students. These connections give students insights into food production and help them understand where their food comes from.

A supportive environment is crucial for the successful implementation of school gardens. Running gardens may require some upskilling and learning for both the teachers and the school as a whole. In-service teacher development is therefore essential to equip educators with the skills needed to effectively integrate gardening into their curricula and to build teacher expertise and curricular collaboration given the interdisciplinary nature of school gardens. A collaborative initiative involving relevant ministries and stakeholders is crucial. A lead ministry and development team should be appointed to conduct a comprehensive national analysis. Based on this analysis, a policy framework outlining the goals and benefits of school gardens can be developed. Infrastructure support, regulations, and guidelines are essential to ensure the effective implementation and operation of school gardens.

Recommended tools and resources

- FAO. 2009. Junior farmer field and life schools. http://www.fao.org/3/a-i1208e.pdf
- FAO. 2010. New deal for school gardens. https://www.fao.org/4/i1689e/i1689e00.pdf
- FAO. 2010. Setting up and running a school garden – teaching toolkit. www.fao.org/docrep/012/i1118e/i1118e00.htm
- Additional FAO school gardens-related materials and resources: www.fao.org/schoolgarden
- World Vegetable Center. n.d. School gardens for nutrition and health. https://avrdc.org/our-work/enhancing-consumption/

Skills-based education:
Physical education and activity

Photo ©: UNICEF/UN0199014/Noorani

This component provides practical guidance on developing and implementing physical education and activity interventions.

PHYSICAL EDUCATION AND ACTIVITY

The increasing prevalence of overweight and obesity in young children and adolescents presents a pressing health concern. Studies have shown that unhealthy diets, lack of physical activity, and energy imbalance are significant contributors to overweight and obesity among schoolchildren (Grace, Edward and Gopalakrishnan, 2021; Pearson and Biddle, 2011). Overweight and obesity are associated with an increased risk of cardiovascular diseases and type 2 diabetes (WHO, 2006). Additionally, evidence suggests that physical inactivity in schoolchildren can adversely affect cognitive function and academic performance (WHO, 2023b; CDC, 2022). Given the influential role of schools in shaping behaviours and habits, it is recommended that countries integrate physical education and activity as core components of the school curriculum. This integration is paramount in fostering healthy lifestyles, preventing overweight and obesity, enhancing school children's physical and mental well-being, and improving academic performance. To achieve both physical and mental health benefits, WHO (2020) recommends that children and adolescents aged 5–17 accumulate at least 60 minutes of moderate to vigorous physical activity daily. This can include activities such as sports, active play, and structured exercise programmes. It is essential to ensure that physical education and activity programmes in schools are designed to be inclusive and adaptable to meet the diverse needs of all students, including those with disabilities. Studies have highlighted that children with disabilities have a higher prevalence of overweight and obesity compared to their peers (Reinehr *et al*. 2010), underscoring the critical importance of prioritizing inclusive physical education and activity. By prioritizing physical education and physical activity within the school curriculum, countries can create environments that support and encourage healthy behaviours, leading to improved overall health outcomes for children and adolescents.

Physical education and activity promote health, prevent obesity, and improve cognitive function and academic performance.

How can we do this?

Practical step-by-step guidance on how to formulate and implement physical education and activity interventions is provided on the recommended tools and resources box below.

Recommended tools and resources

- UNESCO. 2015. *Quality physical education (QPE): guidelines for policy makers.* https://unesdoc.unesco.org/ark:/48223/pf0000231101
- WHO. 2020. *WHO guidelines on physical activity and sedentary behaviour*. https://www.who.int/publications/i/item/9789240015128
- WHO. 2021. *Promoting physical activity through schools: a toolkit*. https://iris.who.int/bitstream/handle/10665/350836/9789240035928-eng.pdf?sequence=1

Skills-based education:
Comprehensive sexuality education (CSE)

This component provides practical guidance in developing and implementing comprehensive sexuality education programmes.

COMPREHENSIVE SEXUALITY EDUCATION (CSE)

Young people face a myriad of sexual and reproductive health (SRH) issues, including HIV and AIDS, sexually transmitted infections (STIs), gender-based violence (GBV), early marriage, unintended teenage pregnancies and unsafe abortion practices (UNESCO, 2018). All these issues represent serious risks to young people's health and well-being and can negatively impact their education outcomes.

In the SADC region, where young people make up 75% of the population, there are high rates of teenage pregnancies, HIV infections, child marriage and GBV (SADC, 2019). Comprehensive sexuality education (CSE) has been shown to have positive effects on sexual behaviour and health (UNESCO, 2018). CSE provides young people with accurate, age-appropriate knowledge, attitudes and skills to make informed decisions about their sexual and reproductive health. Evidence indicates that CSE positively impacts sexual behaviour and health outcomes, including increased HIV knowledge, condom use, delayed initiation of sexual activity, and reduced rates of early marriages and unintended pregnancies (UNESCO, 2018; Fonner *et al.*, 2014; Maticka-Tyndale and Tenkorang, 2010). CSE can contribute to improved sexual and reproductive health outcomes, the development of positive gender norms, and the foundation of healthy relationships (UNESCO, UNICEF and WFP, 2023). Integrating CSE into school curricula is essential for equipping young people with the knowledge and skills they need to make informed decisions about their sexual and reproductive health.

Comprehensive sexuality education empowers young people with age-appropriate knowledge and skills to make informed decisions regarding their sexual and reproductive health.

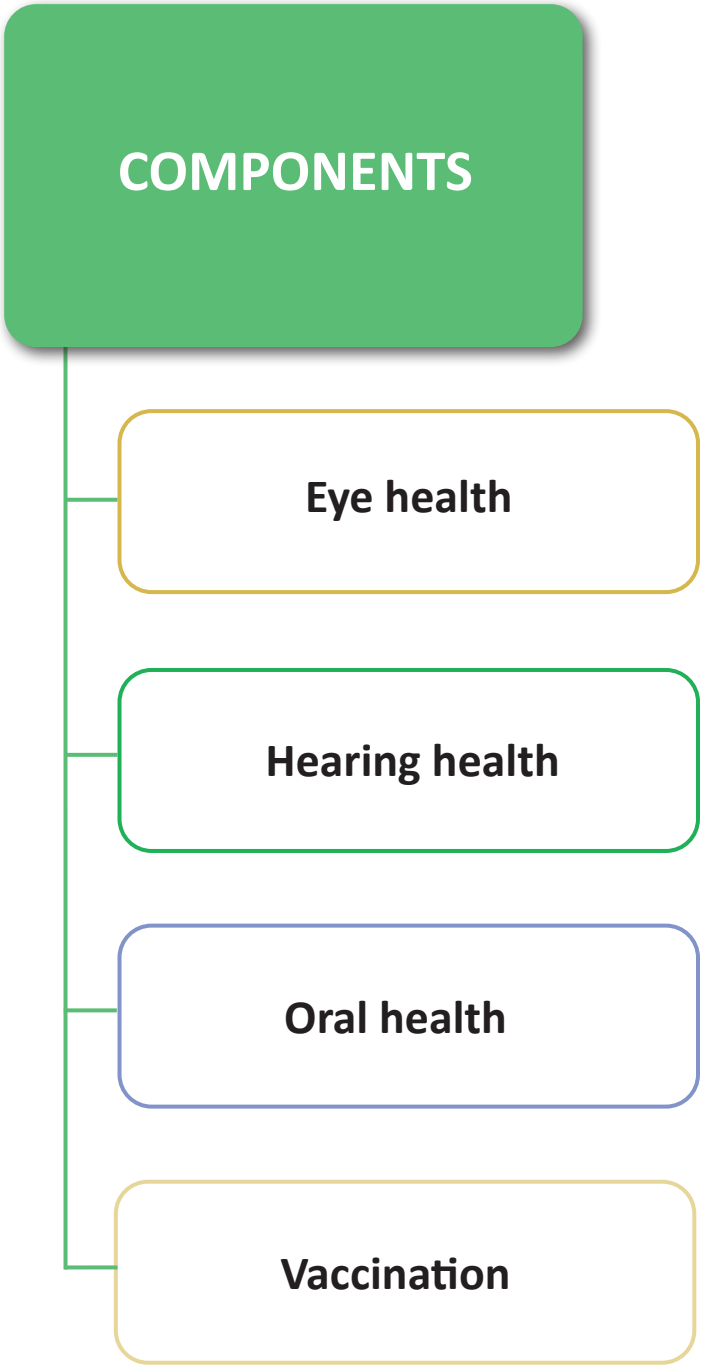
How can we do this?

Practical step-by-step guidance on how to formulate and implement CSE programmes is provided in the recommended resources and tools box below.

Recommended tools and resources

- UNESCO. 2018. *International technical guidance on sexuality education*. https://www.who.int/publications/m/item/9789231002595
- UNESCO. *Comprehensive sexuality education implementation toolkit*. https://csetoolkit.unesco.org/
- UNESCO. *Positive learning toolkit: how the education sector can meet the needs of learners living with HIV*. https://positivelearning.unesco.org/

4. School-based health services



Skills-based health services:
Eye health

This component provides practical guidance on planning and implementing school-based eye health programmes.

EYE HEALTH

Eye health conditions, particularly uncorrected refractive errors (REs), congenital cataracts, glaucoma, corneal opacities, trachoma, and vitamin A deficiency disorders, are among the leading causes of vision impairment and blindness in school children (SHIP, 2016; Yong *et al*., 2022). Vision impairment can significantly impact a child's development, learning abilities and overall academic performance (Wodon *et al*., 2019).

School-based eye health programmes are crucial in preventing and treating eye problems. Such programmes encompass a range of components, including vision screenings, educational initiatives to raise awareness about eye health, preventive measures to reduce the risk of eye problems, comprehensive eye examinations, and treatments for eye disorders. Additionally, eye health programmes help in identifying children who may need specialized care and treatment (SHIP, 2016), ensuring that they receive necessary support services, including the provision of eye glasses.

It is essential to integrate eye health interventions into broader school health and nutrition programmes. This ensures a holistic and comprehensive approach to school children's overall health, well-being and education.

Vision impairment affects children's ability to participate in learning activities, which has profound implications for their education outcomes.

How can we do this?

In most SADC member states, the ministries of health provide school health and services in collaboration with the ministries of education. Countries are advised to deliver comprehensive eye health services according to national health guidelines and established institutional arrangements. Establishing national mechanisms that foster cross-sectoral collaboration (e.g. MoUs, technical committees, joint planning), particularly between the ministries responsible for health/nutrition, agriculture, finance and education, is critical for the seamless delivery of school-based eye health programmes. The recommended resources and tools box below provides step-by-step guidance on designing and implementing school-based eye health programmes.

Recommended tools and resources

- SHIP (School Health Integrated Programming). 2016. *Guidelines for school-based eye health programmes*. https://www.globalpartnership.org/sites/default/files/2017-09-ship-guidelines-vision-screening.pdf
- World Bank Group & Global Partnership for Education. 2018. *Teachers' handbook for inclusive school health and nutrition*. https://healtheducationresources.unesco.org/library/documents/teachers-handbook-inclusive-school-health-and-nutrition

Skills-based health services: Hearing health

Photo ©: WHO

This component provides practical guidance in planning and implementing school-based hearing health programmes.

HEARING HEALTH

Hearing problems represent one of the preventable conditions that affect school children. Ear diseases like otitis media and congenital and environmental factors are important risk factors for hearing impairment in children. If left unaddressed, hearing impairments can impede a child's development and education (WHO, 2021a). Research has also indicated a correlation between hearing impairment and poor academic performance among affected school children (Westerberg *et al.*, 2005).

School-based hearing health programmes provide a unique opportunity to promote hearing health, prevent hearing loss, diagnose early, provide treatment and facilitate referral for specialized services. Hearing health programmes typically include regular hearing screenings, educational initiatives to raise awareness about hearing health, preventive measures to reduce the risk of hearing loss, and support services to ensure affected students receive the necessary interventions. Integrating hearing health programmes into broader school health and nutrition programmes is imperative to foster a holistic approach to student health, well-being and education.

Hearing problems in school children have serious social and educational consequences.

How can we do this?

In most SADC member states, the ministries of health provide school health and services in collaboration with the ministries of education. Countries are advised to deliver comprehensive eye health services according to national health guidelines and established institutional arrangements. Establishing national mechanisms that foster cross-sectoral collaboration (e.g. MoUs, technical committees, joint planning), particularly between the ministries responsible for health/nutrition, agriculture, finance and education, is critical for the seamless delivery of school-based eye health programmes. The recommended resources and tools box below provides step-by-step guidance on designing and implementing school-based eye health programmes.

Recommended tools and resources

- SHIP (School Health Integrated Programming). 2016. *Guidelines for school-based eye health programmes*. https://www.globalpartnership.org/sites/default/files/2017-09-ship-guidelines-vision-screening.pdf
- World Bank Group & Global Partnership for Education. 2018. *Teachers' handbook for inclusive school health and nutrition*. https://healtheducationresources.unesco.org/library/documents/teachers-handbook-inclusive-school-health-and-nutrition

Skills-based health services:
Oral health

Photo ©: WHO

This component provides practical guidance on planning and implementing school-based oral health programmes.

ORAL HEALTH

Optimal oral health is essential for a child's overall well-being. Poor oral health can negatively impact the health and education of school children. Oral diseases are caused by various factors, including poor oral hygiene, lack of fluoride exposure, and frequent consumption of sugar or carbonated beverages (WHO, 2023c). Untreated dental caries and gingivitis can cause pain, discomfort while eating, and potential tooth loss, affecting a child's general health, nutrition and academic performance (WHO, 2023c).

Oral health programmes focus on promoting and improving the oral health of school children. These programmes encompass a range of components, including regular dental screenings to detect oral diseases and specific dental issues, further facilitating referral for treatment. In addition, oral health programmes provide education on good oral hygiene practices, such as proper brushing and flossing techniques, and preventive measures, such as fluoride treatments or dental sealants, to protect teeth from decay.

Integrating oral health programmes into broader school health and nutrition programmes ensures a holistic approach to promoting oral health, early detection and referral for the treatment of oral diseases and dental problems.

Poor oral health affects the health, nutrition status and academic performance of schoolchildren.

How can we do this?

In most SADC member states, the ministries of health provide school health and services in collaboration with the ministries of education. Countries are advised to deliver comprehensive oral health services according to national health guidelines and established institutional arrangements. Establishing national mechanisms that foster cross-sectoral collaboration (e.g. MoUs, technical committees, joint planning), particularly between the ministries responsible for health/nutrition, agriculture, finance and education, is critical for the seamless delivery of school-based oral health programmes. The recommended resources and tools box below provides step-by-step guidance on designing and implementing school-based oral health programmes.

Recommended tools and resources

- Future Smiles. 2015. *School-based oral health handbook*. https://www.futuresmiles.net/resources/

Skills-based health services:
Vaccination

Photo ©: WHO

This component provides practical guidance on planning and delivering school-based vaccination services.

VACCINATION

Vaccine-preventable diseases, particularly diphtheria, tetanus, pertussis (whooping cough), polio, measles, mumps, rubella and hepatitis, pose serious health risks for school-age children. Vaccinations act as a powerful shield, protecting children from devastating diseases, which can lead to severe health complications, long-term disabilities and even fatality. Vaccinations provide a safe and effective way to protect school-age children from serious diseases by reducing the risk of outbreaks, enhancing the body's natural defence system and establishing immunity against future infections. In addition, in 2022, cervical cancer was the fourth leading cause of death in women, with 90 percent of cases attributed to the human papillomavirus (HPV) (WHO, 2022). Unvaccinated adolescent girls who are sexually active are particularly at risk of contracting HPV. HPV vaccination, especially if administered before exposure to the infection, can protect and prevent most cervical cancers (WHO 2022).

Schools provide ideal platforms for reaching children and adolescents with routinely recommended vaccines and provide an opportunity to catch up with children who may not have received all age-appropriate vaccines (WHO, 2022). With the introduction of newer vaccines, such as those for human papillomavirus and meningococcal disease, and increased efforts to provide booster doses of routine vaccines to older children (e.g. diphtheria-tetanus-pertussis, polio, measles, rubella, hepatitis B), schools play a critical role in achieving and sustaining elimination of these vaccine-preventable diseases. As a primary preventive measure, WHO recommends **one or two-dose** HPV vaccination for adolescent girls aged 9–14 years before sexual debut, and **one or two-dose** vaccination for girls and women aged 15–20 years (WHO, 2022). It is, therefore, essential to integrate a range of vaccination interventions, including HPV vaccination, with broader school health and nutrition programmes. This approach can significantly improve vaccination coverage and prevent outbreaks of vaccine-preventable diseases (WHO, 2022).

Vaccination is essential to protect children from vaccine-preventable diseases and is crucial in preventing disease outbreaks in school environments.

How can we do this?

In most SADC member states, the ministries of health provide school health and services in collaboration with the ministries of education. Countries are advised to deliver comprehensive vaccination services according to national health guidelines and established institutional arrangements. Establishing national mechanisms that foster cross-sectoral collaboration (e.g. MoUs, technical committees, joint planning), particularly between the ministries responsible for health/nutrition, agriculture, finance and education, is critical for the seamless delivery of school-based vaccination programmes. The recommended resources and tools box below provides step-by-step guidance on designing and implementing school-based vaccination programmes.

Recommended tools and resources

- WHO. 2013. *School vaccination readiness assessment tool*. https://www.who.int/teams/immunization-vaccines-and-biologicals/essential-programme-on-immunization/integration/school-vaccination
- WHO. 2014. *Options for linking health interventions for adolescents with HPV vaccination.* https://www.who.int/publications/m/item/options-for-linking-health-interventions-for-adolescents-with-hpv-vaccination
- WHO. 2022. *Human papillomavirus vaccines: WHO position paper*. https://www.who.int/publications/i/item/who-wer9750-645-672

MONITORING AND EVALUATION

The integration of monitoring and evaluation (M&E) is crucial in ensuring the effectiveness and sustainability of SHN programmes. M&E is essential for ensuring that interventions are implemented as planned, objectives are met and the desired impact is achieved. Monitoring continuously tracks implementation progress, identifies potential challenges early on, and allows for necessary adjustments to ensure the programme meets its goals. Evaluation, on the other hand, focuses on assessing whether SHN programmes are implemented as intended, measuring the extent to which objectives are achieved, evaluating the broader impact of programmes on students' health, nutrition, and educational outcomes, and determining the overall effectiveness and efficiency of SHN interventions.

To ensure the effective implementation and sustainability of SHN programmes, it is important to establish robust monitoring and evaluation mechanisms. In addition, developing a logical framework with clearly defined goals, objectives, activities, expected outputs, outcomes and long-term impact is critical for each SHN programme component. It is recommended that countries select from established SHN thematic indicators for measuring progress and impact (see suggested SHN thematic indicators provided in the recommended resources and tools on the next page). Furthermore, setting up clear reporting structures and promoting the use of standardized reporting formats is important for systematic data collection and reporting. Defining reporting frequency and disseminating information to keep stakeholders informed and engaged is also necessary.

Given the multisectoral nature of SHN programmes, fostering strong cross-sectoral coordination and collaboration is vital. This is essential for cohesive implementation and the monitoring and evaluation of SHN programmes. Capacity-building interventions such as training are critical to enhancing the knowledge and skills of stakeholders at all levels to carry out M&E activities effectively. Robust M&E systems and tools underpin the effective implementation and sustainability of SHN programmes.

M&E key questions

- How do we best measure SHN programme implementation progress?
- Which indicators can best measure progress?
- How often?
- What M&E mechanisms are appropriate?
- Which entity should be responsible for monitoring and evaluating SHN programmes and which stakeholders should be involved?
- What reporting structures and formats are required?
- How do we capture and document lessons learnt, and information disseminated?

How can we do this?

Step-by step guidance on monitoring and evaluating different components of SHN programmes, including a menu of suggested thematic indicators, are provided in the recommended resources and tools box.

Recommended tools and resources

- UNESCO. 2014. *Monitoring and evaluation guidance for SHN programs: thematic indicators.* https://healtheducationresources.unesco.org/sites/default/files/resources/FRESH_M%26E_THEMATIC_INDICATORS.pdf
- Global Financing Facility. 2021. *Monitoring adolescent school health & nutrition programs & interventions answering the why, what, who and how*. https://www.globalfinancingfacility.org/resource/monitoring-adolescent-school-health-nutrition-programs-interventions-answering-why-what

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Annexes

Annex 1: School Nutrition Environment Assessment Tool 1

School Nutrition Environment

Questions in GREEN BOXES are CORE (recommended) questions.

*Data collector name*_____

School number (please number chronologically in order of data collection) _____

General questions to be pre-filled by data collector prior to school visit

1. School is a: a) Primary school b) Secondary school	☐ ☐
2. School is: a) Private b) Public	☐ ☐
3. School is located in a: a) Urban area b) Rural area	☐ ☐

Questions for school administrator

Ideally, data should be collected in consultation with one or more senior staff members with visibility over the school's operations. Staff members for data collection may include:

- School Principal or Director
- Dietitian or other who is responsible for the preparation of school lunches each day
- Teacher or other who is responsible for nutrition education
- Another appropriate delegate nominated by the school leadership

4. Who is answering the questions today? (position at school)

NUTRITIOUS FOODS IN SCHOOLS

Nutritious foods in school *encompasses school meals or snack programs provided by the school (not sold through tuck shops, vending etc), the standards for these (including fortification) and use of local supply chains (including private and public sectors) for school meals or snack program provision*

5. Does your school have a policy/participate in a policy related to school meal or snacks program? If yes, please provide a summary on policy name and scope below.

a) Yes ☐

b) No ☐

Details:

6. Which of the following does your school provide (check all that apply)?

a) Meal program for all children ☐

b) Meal program for children in need ☐

c) Juice program ☐

d) Snack program ☐

e) Milk program ☐

f) Other (add detail) ☐

Detail:

Food company support of school meals or snacks *is usually by way of sponsoring or providing free or discounted foods for school meals or snacks*

7. Is your school meal or snack programme supported by food and beverage companies? *(If yes, please add detail)*

a) Yes ☐

b) No ☐

Detail:

Local supply chains *are those where ingredients are sourced from local growers, producers or manufacturers. This does not include sourcing meals or snacks from local providers who source their ingredients elsewhere.*

8. Does your school take steps to source local ingredients (e.g. growing own or directly purchasing from a local plantation, grower or market)?

a) Never ☐

b) Rarely ☐

c) Sometimes *(please provide detail below on how this done)* ☐

d) Often *(please provide detail below on how this done)* ☐

e) Always ☐

HEALTHY SCHOOL FOOD AND PHYSICAL ACTIVITY ENVIRONMENTS

Healthy school food and physical activity environments *refers to the spaces, infrastructure, and conditions inside and around the school premises where food is available, obtained, purchased and/or consumed and which influence students' physical activity*

9. Does your school have a policy/participate in a policy related to healthy food environments (e.g. what types of foods can be sold and/or marketed in and around schools) or physical activity environments? If yes, please provide a summary on policy name/s and scope below.

    a) Yes ☐

    b) No ☐

Details:

10. Are students allowed to purchase meals or snacks from food stores outside of school grounds during school hours?

    a) Yes ☐

    b) No ☐

11. Is information given to parents about the nutritional quality of foods (snacks or meals) that students bring from home?

    a) Yes ☐

    b) No ☐

12. When purchasing foods whilst at school (within or around school grounds), are steps taken to ensure that it is cheaper for students to buy healthier foods compared to unhealthy foods? If yes, please add detail below.

    a) Yes ☐

    b) No ☐

Detail:

13. Is there a piped water supply for drinking water on school grounds?

a) Yes ☐

b) No ☐

MICRONUTRIENT SUPPLEMENTATION AND DEWORMING

14. Does your school have a policy/participate in a policy related to micronutrient supplementation and/or deworming? If yes, please provide a summary on policy name/s and scope below.

a) Yes

b) No

Details:

15. Which group of students does your school provide these services for:

	Deworming	Iron supplementation
a) Girls grades 1-5	☐	☐
b) Girls grades 6-10	☐	☐
c) Girls grades 11-12	☐	☐
d) Boys grades 1-5	☐	☐
e) Boys grades 6-10	☐	☐
f) Boys grades 11-12	☐	☐
g) No-one receives this service	☐	☐

16. If a child is identified with an issue related to malnutrition (in all its forms, including overweight obesity), are they referred to a local health service?

a) Never ☐

b) Rarely ☐

c) Sometimes ☐

d) Often ☐

e) Always ☐

NUTRITION EDUCATION IN SCHOOL CURRICULUM

17. Who gives students nutrition education in this school (*check all that apply*)

a) Health or nutrition teacher/or school nurse who is trained in nutrition education ☐

b) School teacher who is not trained in nutrition (main subject is not nutrition) ☐

c) Other (add detail) ☐

Detail:

18. Is nutrition education for parents/community offered in this school?

a) Yes (at least annually) ☐

b) No ☐

19. How much time do students spend participating in school organised physical activity per week?

	≥150 minutes per week (≥average 30mins/day)	<150 minutes per week (<average 30 mins/day)
a) Grades 1-5	☐	☐
b) Grades 6-10	☐	☐
c) Grades 11-12	☐	☐
d) Not applicable	☐	☐

Questions for direct observation

NUTRITIOUS FOODS IN SCHOOLS

Nutritious foods in school *encompasses school meals or snack programs provided by the school (not sold through tuck shops, vending etc), the standards for these (including fortification) and use of local supply chains (including private and public sectors) for school meals or snack program provision*

Sugary drinks *include all drinks with added sugar, including sugar (using thresholds aligned with national nutrient profile models or national dietary guidelines sweetened carbonated drinks, less than 100% fruit juice, flavoured milk*

Dairy foods *are foods made from or containing milk, including cheese, yogurt and sugar-free milk-based beverages*

Wholegrain foods *contain grains in their whole form (rice, barley, oats, corn, wheat, sorghum)*

Deep fried foods *are those that have been cooked or heated by deep frying in any oil (e.g., chips, fried chicken or fish, dim sims)*

Safe drinking water *is water that has been improved and is regularly assessed against the 'Guidelines for drinking-water quality' (WHO) to ensure it is safe for drinking*

Salty packaged foods *are those that contain high amounts of salt (using thresholds aligned with national nutrient profile models or national dietary guidelines and are provided to the school packaged in some way (e.g. instant noodles, wafers, crisps)*

Sweet packaged foods *are those that contain high amounts of added sugar and are provided to the school packaged in some way (e.g. candy, muffins, cakes, ice-creams)*

20. Did the meal or snack program today include (*check all that apply*):

Not applicable ☐

	Meals	Snack
a) Fruit	☐	☐
b) Vegetables	☐	☐
c) Wholegrains	☐	☐
d) Dairy	☐	☐
e) None of the above	☐	☐

21. Did the school meal or snack <u>today</u> include (*check all that apply*):

Not applicable ☐

	Meals	Snack
a) Sugary drinks	☐	☐
b) Deep fried foods	☐	☐
c) Salty packaged foods	☐	☐
d) Sweet packaged foods	☐	☐
e) None of the above	☐	☐

22. Are the following facilities sufficient to prepare school meals and/or snacks on school grounds?

Not applicable ☐	Yes	No	Not Sure
a) Pots/pans/utensils	☐	☐	☐
b) Ovens/stoves for cooking	☐	☐	☐
c) Fridges/cold storage	☐	☐	☐
d) Safe water for cooking	☐	☐	☐
e) Clean food preparation areas	☐	☐	☐
f) Areas to separate cooked and raw ingredients	☐	☐	☐
g) Kitchen staff for food preparation	☐	☐	☐

HEALTHY SCHOOL FOOD AND PHYSICAL ACTIVITY ENVIRONMENTS

<u>Healthy school food and physical activity environments</u> *refers to the spaces, infrastructure, and conditions inside and around the school premises where food is available, obtained, purchased and/or consumed and which influence students' physical activity*

23. Are food and/or drinks sold in this school (e.g. via tuckshop, stall, or vending machine/s)?

a) Yes ☐

b) No ☐

Sugary drinks *include all drinks with added sugar (using thresholds aligned with national nutrient profile models or national dietary guidelines), including sugar sweetened carbonated drinks, less than 100% fruit juice, flavoured milk*

Artificially sweetened drinks *include those that contain artificial sweeteners or non-caloric sweeteners*

Drink powders *are drink mixes that are produced usually by mixing with a liquid (e.g., tang or 2-in-1 mixes)*

100% fruit juice *are made entirely from fruit, with no added sugar*

Flavoured waters *are sold and marketed as water that contains added ingredients including natural or artificial flavours, sugars, sweeteners, vitamins, minerals or other enhancements.*

24. Which of the following drinks are available for purchase at this school today (on the day of the survey), including in vending machines) (*check all that apply*)?

a) Sugary drinks ☐

b) Drink powders with added sugar ☐

c) Artificially sweetened drinks ☐

d) 100% fruit juice ☐

e) Plain milk ☐

f) Plain water ☐

g) Flavoured water ☐

h) None of the above ☐

Deep fried foods *are those that have been cooked or heated by deep frying in any oil (e.g., chips, fried chicken or fish, dim sims)*

Salty packaged foods *are those that contain high amounts of salt (as defined by national nutrient profile models or national dietary guidelines) and are provided to the school packaged in some way (e.g. instant noodles, wafers, crisps)*

Sweet packaged foods *are those that contain high amounts of added sugar and are provided to the school packaged in some way (e.g. candy, muffins, cakes, ice-creams)*

25. Which of the following are available for sale in this school today (*on the day of the survey*)?

	Deep fried foods	Salty foods	Sweet foods
Yes	☐	☐	☐
No	☐	☐	☐

26. Is fruit (fresh or tinned) available for sale to students today (*on the day of the survey*)?

a) No ☐

b) Yes. Fresh fruit is available, but quality is poor or prices are too high ☐

c) Yes, fresh fruit is available, and it is fresh and appropriately priced ☐

Safe drinking water *is water that has been improved and is regularly assessed against the 'Guidelines for drinking-water quality' (WHO) to ensure it is safe for drinking*

27. Do students have access to free and safe drinking today (*on the day of the survey*)?

a) No ☐

b) Yes, safe drinking water is available, but there is not enough to meet the needs of girls, boys and school staff ☐

c) Yes, safe drinking water is available, but it is not regularly assessed for quality and safety ☐

d) Yes, safe drinking water is available, it meets the needs of girls, boys and school staff and is regularly assessed for quality and safety ☐

Marketing *is defined as any form of commercial communication of messages that are designed to, or have the effect of, increasing the recognition, appeal and/or consumption of particular products, brands or services. Marketing includes, but is not limited to, advertising, sponsorship, direct marketing (e.g., give-aways), product placement and visible placement of brand logos.*

Branding *is defined as the visible presence of food or beverage company logos (whole or partial) within school grounds, on school infrastructure or on school materials*

28. Within the school grounds, is there visible food and drink company branding (logos) of:

a) Educational materials ☐

b) Academic awards ☐

c) Sports awards ☐

d) Sports or school uniforms or equipment ☐

e) School infrastructure (e.g. vending machines, fridges/freezers) ☐

f) Other (add detail) ☐

g) There is no visible food or drink sponsorship or gifts in the school

Detail:

29. Do food and drink companies promote their brands and foods in this school through (*check all that apply and add detail*)?

a) Free give aways ☐

b) Use of cartoon characters ☐

c) Celebrity endorsements ☐

d) Advertising (posters, banners) ☐

e) Price discounts ☐

f) School meals/snacks programs ☐

g) There is no food or drink promotion in the school ☐

Detail:

30. Are high fat foods, salty foods or sugary foods or drinks sold within 100m of the school grounds?

a) Yes

b) No

31. Is there marketing for high fat, salty or sugary foods and brands within 100 m of the school grounds?

a) Yes

b) No

32. Is a kitchen garden available in the school?

a) Yes (add detail below) ☐

b) No ☐

Detail on how school garden food is used (e.g. for student consumption at school, use in school meals):

***Physical activity facilities**: Sports, fitness or play equipment that has an intended use for physical activity (e.g. skipping ropes, balls) and sporting grounds (e.g. football fields, basketball courts).*

***Physical activity space**: Open air, clear, space where students can participate in physical activity, including running and playing.*

33. Does this school have a range of sports or physical activity equipment and facilities accessible by all students?

a) Yes ☐

b) Yes, but poor quality or limited access ☐

c) Unavailable ☐

34. Does this school have spacious physical activity spaces accessible by all students?

a) Yes, with sufficient physical activity space is accessible by all students ☐

b) Yes, with limited space for students to run around ☐

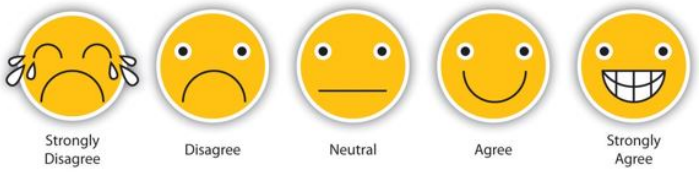
c) No ☐

Source: UNICEF. 2023. *School nutrition environment toolkit*

School Nutrition Environment Assessment Tool 2

Parents/student attitudes and perceptions

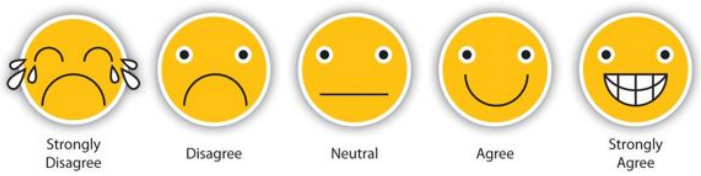
1. Please tell us whether you agree or disagree with the following statements:



6 DON'T KNOW

	1	2	3	4	5	6
My (child's) school provides healthy and nutritious food	☐	☐	☐	☐	☐	☐
I (my child) can buy healthy foods at my school if I (they) wish to	☐	☐	☐	☐	☐	☐
There are food logos or pictures for food and beverage companies around my (child's) school	☐	☐	☐	☐	☐	☐
If there were fewer people selling unhealthy food outside the school, it would be easier for school students to eat healthy	☐	☐	☐	☐	☐	☐
I have (my child has) access to safe drinking water, always, when at school	☐	☐	☐	☐	☐	☐
I (my child) use a kitchen garden at school	☐	☐	☐	☐	☐	☐
My school gives me (my child) opportunities to play sport	☐	☐	☐	☐	☐	☐
I (my child) have enough space to run and play at my school	☐	☐	☐	☐	☐	☐

2. Would you agree or disagree with measures to:



6 DON'T KNOW

	1	2	3	4	5	6
Provide free meals for all children at school	☐	☐	☐	☐	☐	☐
Ensure all meals given to children are healthy and nutritious	☐	☐	☐	☐	☐	☐
Ensure all foods sold to children in school are healthy and nutritious	☐	☐	☐	☐	☐	☐
Provide cheap healthy foods for purchase in school	☐	☐	☐	☐	☐	☐
Ban marketing of unhealthy food and beverages in schools (e.g. pictures of foods, drink or logos)	☐	☐	☐	☐	☐	☐
Ban marketing of unhealthy food and beverages 150m outside of the school gate	☐	☐	☐	☐	☐	☐
Ban sponsorship in schools by large food companies (e.g. sugary drink or fast food/burger companies)	☐	☐	☐	☐	☐	☐
Ensure daily physical activity in the school day	☐	☐	☐	☐	☐	☐
Strengthen existing nutrition education in school	☐	☐	☐	☐	☐	☐
When I am (my child is) at school I (my child) learn(s) about how to eat a healthy diet	☐	☐	☐	☐	☐	☐

Source: UNICEF 2023. *School nutrition environment toolkit*

Annex 2: Essential standards checklist for school-based obesity prevention

PREVENTION OF OBESITY TRHOUGH SCHOOL ENVIROMENT

1. Food and nutrition standards for school meals
1.1 Are on-site school meals provided at both pre and primary schools?
1.2 Are on-site school meals provided at secondary schools?
1.3 Are nutrition standards in place? A. If yes, are school meals provided according to mandatory nutrition standard (that set maximum calorie content, minimum serving of fruits and vegetables, whole grains and dairy and maximum servings of high-fat, high-sugar foods)? B. If no, mandatory nutrition standards available, is there nutritional guidelines for schools (e.g. school menu) and canteens on the provision of healthy meals and snacks to school-age children (clearly indicating the types of meals and snacks including guidance on maximum calorie, fat and sugar levels?
1.4 Are there restrictions measures on the sale and provision of all sugar-sweetened beverages with over 5 g of added sugars per 100 mL from the school grounds including school meals, snack shops, vending machines and outside vendors on school grounds?
1.5 Are there school-level restrictions against schools receiving funding from food and beverage manufacturers? A. If no, are there safety measures in place to ensure that food and beverage producers do not have any influence on curricula development for nutrition, physical education or wellness?
1.6 Are there sources of foods and beverages other than the school meals on the school grounds? A. If yes, is there standards for maximum calories, sugar and fat for all snacks sold by these vendors? B. If no, are there guidelines for vendors on the provision of healthy meals and snacks to school-age children (clearly indicating the types of meals and snacks including guidance on maximum calorie, fat and sugar levels)?
1.7 Is access to clean and safe, free drinking water mandated through school policy?
1.8 Are core messages on nutrition and physical activity included into teacher training and accreditation?
1.9 Do schools to encourage parents to volunteer and participate in school activities?

	ESSENTIAL STANDARDS
PREVENTION OF OBESITY TRHOUGH NUTRITION AND PHYSICAL ACTIVITY	**2. Iron supplementation and deworming**
	2.1 Is anaemia a public health concern at the national or sub-national level? A. If yes, is Iron and Folic Acid (IFA) supplementation provided through school-based school health and nutrition services?
	2.2 In regions where anaemia is prevalent, are deworming tablets provided annually to all primary school children through school-based school health and nutrition services?
	2.3 In regions where anaemia is prevalent, is iron supplementation provided to all adolescent girls through school-based school health and nutrition services?
	3 Nutrition and physical education
	3.1 Is nutrition and physical education part of the primary and secondary school curricula?
	3.2 Are there specially-trained teachers for nutrition and physical education (either accredited in nutrition or physical education or have received specialized training in nutrition or physical education during pre- or in-service training)?

	ESSENTIAL STANDARDS
PREVENT OBESITY THROUGH THE COMMUNITY ENVIRONMENT	**4. Legislation of food taxes and subsidies**
	4.1 In broader national regulatory frameworks, are taxes, subsidies or import duties for specific food included (to either discourage or encourage their consumption)?
	5. Restrictions on advertising of foods and beverages to school-age children
	5.1 Are restrictions in place on the advertising of foods and beverages to school-age children and or adolescents? A. If yes, is there measures in place to monitor adherence to these restrictions?

Source: Adapted from UNICEF. 2015. *A toolkit for UNICEF nutrition and education staff*

Annex 3: Water supply, sanitation and hygiene in schools: assessment checklist

This checklist can be contextualized and should be used in conjunction with section 4 of the WHO 2009 guidelines (*Water, sanitation and hygiene standards for schools in low-cost settings*). Available here: https://apps.who.int/iris/bitstream/handle/10665/44159/9789241547796_eng.pdf?sequence=1&isAllowed=y

1. Water quality

Water for drinking, cooking, personal hygiene, cleaning and laundry is safe for the purpose intended.

	Design and construction	Operation and maintenance
1	• Is water from a safe source (free from faecal contamination)? • Is water protected from contamination during transport from the source and in the school?	• Is the safety of the water source monitored regularly? • Is the quality of the water supplied to the school monitored regularly? • Are water storage, distribution and use facilities at the school adequately maintained to avoid contaminating the water?
2	• If necessary, can water be treated at the school?	• If water is treated at the school, is the treatment process operated effectively? • Are there sufficient supplies and adequately trained staff to carry out treatment?
3	• Does the water supply meet WHO guidelines ornational standards regarding chemical or radiological parameters?	• If necessary, are measures in place to avoid overexposure of susceptible children to chemical contaminants?
4	• Is water acceptable (smell, taste, appearance)?	• If the water is not acceptable to some or all the school children and staff, do they use a safe alternative supply of drinking-water?
5	• Is the school water supply designed and built so that low-quality water cannot enter the drinking- water supply and cannot be drunk?	• Are procedures for protecting drinking-water in the school followed consistently?

2. Water quantity

Sufficient water is available at all times for drinking, personal hygiene, food preparation, cleaning and laundry.

	Design and construction	Operation and maintenance
1	• Does the water supply have the capacity required? • Is there a suitable alternative supply in case of need?	• Is sufficient water available at all times for all needs? • Is the water supply operated and maintained to prevent wastage?

3. Water facilities and access to water

Sufficient water-collection points and water-use facilities are available in the school to allow convenient access to, and use of, water for drinking, personal hygiene, food preparation, cleaning and laundry.

	Design and construction	Operation and maintenance
1	• Are there sufficient water points in the right places for all needs (drinking-water, handwashing, washing and cleaning)?	• Is water accessible where needed at all times? • Is there always soap or a suitable alternative at hand washing points?
2	• Are there sufficient, clearly identified, safe drinking-water points? • Are there water points for disabled staff and children?	• Are drinking-water points properly used and adequately maintained? • Are water points for disabled staff and children accessible, properly used and adequately maintained?
3	• In boarding schools, are there sufficient showers or other places for body washing?	• Are showers properly used and adequately maintained?
4	• In boarding schools, are there sufficient laundry facilities?	• Are laundry facilities properly used and adequately maintained?

4. Hygiene promotion

Correct use and maintenance of water and sanitation facilities is ensured through sustained hygiene promotion. Water and sanitation facilities are used as resources for improved hygiene behaviours.

	Design and construction	Operation and maintenance
1	• Is hygiene education part of the school curriculum? • Are staff trained in providing hygiene education?	• Is hygiene education actually provided? • Are hygiene-education methods used effectively?
2	• Is responsibility for promoting hygiene in the school identified clearly and supported?	• Is hygiene promoted systematically? • Do schoolchildren participate actively in maintaining hygiene? • Do staff provide positive role models for hygiene behaviours?
3	• Are school facilities designed to be easily and hygienically used and maintained? • Do schoolchildren know how to use the facilities correctly?	• Are school facilities maintained so as to be easy to use hygienically? • Have the children been shown how to correctly use the toilet and water point, and how to wash their hands correctly?

5. Toilets

Sufficient, accessible, private, secure, clean and culturally appropriate toilets are provided for schoolchildren and staff.

	Design and construction	Operation and maintenance
1	• Are there sufficient toilets at the school for girls, boys and teachers? • Are there separated blocks?	• Are there sufficient toilets actually in use?
2	• Are the toilets situated in the right place?	• Are access paths kept in good condition?
3	• Do the toilets provide privacy and security? • Are they safe to use?	• Are there working locks on the toilet doors and lighting?
4	• Are the toilets appropriate to local culture and social conditions, gender and age of the children? • Are they appropriate and accessible for children with a disability? • Is there one accessible toilet cubicle for disabled females and one for disabled males?	• Are the toilets being used properly? • Are there sufficient toilets for use by males, females and children with disabilities?

5	• Are the toilets hygienic to use and easy to clean?	• Is anal cleansing material available at all times? • Are the toilets clean and without too much smell? • Are flies and other insects controlled?
6	• Are there handwashing facilities close by?	• Is water and soap available?
7	• Is there a cleaning and maintenance plan?	• Is an effective cleaning and maintenance routine in operation?

6. Control of vector-borne disease

Schoolchildren, staff and visitors are protected from disease vectors.

	Design and construction	Operation and maintenance
1	• Is the site for the school protected from disease vectors? • Are school buildings designed and built to exclude disease vectors?	• Are local vector-breeding sites avoided or controlled? • Are inbuilt protective measures used effectively and maintained? • Are barriers and/or repellents used to reduce exposure to vectors?
2		• Are schoolchildren and staff with vector-borne diseases kept at home and treated rapidly? • Are there regular inspections to detect and treat body lice and fleas? • Are the school grounds kept free from faecal matter? • Is excess vegetation cut back regularly?

7. Cleaning and waste disposal

The school environment is kept clean and safe.

	Design and construction	Operation and maintenance
1	• Are floors smooth and easy to clean? • Are buildings designed and built to avoid damp and moulds?	• Are teaching areas cleaned regularly? • Are teaching areas clean?
2	• Are buildings designed and built to minimize physical hazards?	• Are the school premises free from sharp objects and other physical hazards?

3	• Are there adequate bins and other equipment for managing solid waste?	• Is solid waste collected daily and disposed of safely? • Is hazardous waste managed appropriately?
4	• Is the wastewater drainage system correctly designed and built?	• Is the wastewater drainage system used correctly and maintained?

8. Food storage and preparation

Food for schoolchildren and staff is stored and prepared so as to minimize the risk of disease transmission.

	Design and construction	Operation and maintenance
1	• Are food storage and preparation areas designed and built so as to be easy to keep clean? • Is there a handwashing station in the kitchen area?	• Do food handlers wash their hands when necessary? • Are food storage and preparation areas kept clean? • Are food storage and preparation areas protected from insects and rodents? • Is water accessible where needed, at all times?
2	• Are there facilities and equipment provided for preventing contact between cooked and raw foodstuffs?	• Is contact between raw foodstuffs and cooked foods prevented?
3	• Are cooking facilities adequate for heating food sufficiently?	• Is food cooked thoroughly?
4	• If cooked food is stored, is there a refrigerator at the school for this?	• Is food kept at safe temperatures?
5	• If dry foods are stored at the school, is it stored appropriately?	• Are only safe water and ingredients used?

Source: WHO. 2009. *Water, sanitation and hygiene standards for schools in low-cost settings.*

Annex 4: Guidance notes: step-by-step guide for designing and implementing school meal programmes

Step-by-step guide for designing and implementing school meal programmes	
CONTEXT AND SITUATION ANALYSIS	Carrying out a context and situational analysis helps to determine whether there is a need that can be addressed by school meal programme and whether it is feasible. ***Context analysis helps to understand:*** • **Prevailing situation in the country:** economic situation, socio-political situation, poverty, natural hazards, food insecurity and malnutrition. • **Food security:** overall food security situation, current coverage of school feeding, vulnerable groups, shocks (conflict, climate, natural, economic, environment and health related shocks), coping strategies, seasonal patterns and agricultural production. • **Nutrition and health:** key indicators/prevalence rates such as iron deficiency anaemia, vitamin A and Iodine deficiencies, parasitic worms, diet diversity and food frequency, waterborne diseases, HIV/AIDS and malaria. • **Basic education:** net enrolment rate, attendance rate, gender parity index drop-out rate, pass rate and completion rate. ***Situation analysis helps to:*** • Identify the needs of the population. • Determine the extent to which existing policies and programmes are addressing identified needs. • Identify existing national capacities that can be built on by the programme. • Inform programme design (objectives, targeting, implementation modalities and menu). • Identify available opportunities that can be leveraged up on by the programme. • Determine feasibility of different school feeding implementation modalities.

PROGRAMME DESIGN AND IMPLEMENTATION	
Programme objectives	Based on the situation analysis and the country context, programme objectives and expected outcomes are defined. Objectives should be framed around population needs and country priorities. School feeding contributes to multiple sectoral policy objectives (e.g. education, nutrition, health, social protection, agriculture, local economic development). It is essential that countries pursue multiple objectives to reap the multiple benefits of the programme. See Annex 5 for an example of school meal programme objectives.
Targeting	Based on the findings of the situation analysis and programme objectives the target population or areas is identified. The following questions can inform the targeting: • What areas should be targeted (geographical areas with greatest need in terms of food insecurity and poverty). • Who should be targeted (schoolchildren, out of school children, smallholders, farmers and other specific groups). • What types of schools should be covered by the programme (pre-primary, primary, secondary), and whether public or private schools. • What are the minimum criteria schools have to meet to qualify as a beneficiary school. *Examples of targeting criteria and indicators to consider:* • Geographic targeting of areas most affected by food insecurity, high poverty rates and high levels of malnutrition, including areas where marginalized populations reside. • Educational indicators such as enrolment, dropout and attendance. • Disaster-affected areas. **Note:** It is important that the targeting criteria are communicated to key programme stakeholders including communities. See Annex 7 for how to determine target groups according to programme objectives.
Meal planning, food basket and school feeding modality	**Meal planning/food basket** Meal planning is an important step in determining the food basket; the content of the food basket can determine whether the programme will meet nutritional objectives and to what extent school feeding will be linked to local agricultural production (in the case of the HGSF). The following are guidelines for meal planning: • The food basket should be diverse, comprising nutritious food from different food groups to meet nutrition requirements for school children. • Nutrition targets should be defined.

	• School meals provided should be based on national dietary guidelines for specific age-groups and nutritional standards for school meals. • During the meal planning, consider the nutrition targets of school children, food availability and seasonality, local food habits and preferences. • Tools such as School Meal Planner Plus (accessible here: https://smpplus.wfp.org/) are used as they are very helpful in create nutritious meals. Training on the use of the tool can be requested from WFP free of charge. • Define food procurement arrangements. **Selection of school feeding modality** Based on the objective and context decide on the appropriate modality: • **On-site cooked meals:** most appropriate modality if the programme objectives are to alleviate short-term hunger, micronutrient deficiencies, to improve school enrolment and attendance. • **Take-home rations:** appropriate modality if the programme objectives are to provide a safety net (through value-transfer), and to increase enrolment, attendance and retention. • **Snacks:** (including fortified high energy biscuits). This modality is least preferred as it does not meet schoolchildren's energy requirement as per WHO and WFP guidance. It can be used in combination with on-site cooked school meals. This modality can be useful in emergencies when providing on-site school meals is not possible.
Linking school meals to local agricultural production	• Transition to HGSF by linking school feeding to local agricultural production. • Define the procurement modality. • Procure school food commodities from smallholders, farmers and traders. Note: For step-by-step guidance on transitioning to home-grown school feeding please see the AUDA-NEPAD *Guidelines for the design and implementation of home-grown school feeding programmes in Africa* available here: https://www.nepad.org/publication/guidelines-design-and-implementation-of-home-grown-school-feeding-programmes
Food safety and quality	• Develop guidelines on food safety and standards and enforce at all potential points of contamination (school and school meal preparation).

	• Establish systems to ensure regular inspection of food products by relevant authority from the health sector, especially new deliveries. • For step-by step guidance, see the *WFP guidelines: from the school gate to children's plate: golden rules for safer school meals Guidelines* accessible here: https://docs.wfp.org/api/documents/WFP-0000105252/download/
Complimentary services	Ensure integration of school meals with other essential school health and nutrition services such as WASH, micronutrients supplementation, deworming, nutrition education, school gardens, health screening, nutrition assessment.
Community participation	• Engage and ensure involvement of community members and beneficiaries (learners, smallholders, farmers/traders) in the design, implementation, monitoring and evaluation of the school meal programmes. • Ensure establishment of coordination mechanisms at community level (school feeding committee/school health and nutrition committee, procurement committee etc.). • Ensure establishment of community feedback mechanisms.
Monitoring and evaluation	• Develop M&E plan. • Establish monitoring and evaluation systems to capture data and monitor programme implementation. • Ensure alignment of program M&E and national education management information systems (EMIS) or other sectoral information systems
PROGRAMME COORDINATION AND PARTNERSHIP	
Institutional home for school meal programme	• School meal programmes contributes to multiple policy objectives (education, nutrition, health, social protection, agriculture, local economic development). House the school meal programme in the highest institutional structure (e.g. Office of the President/Vice-President) for better national coordination.
School meal programme management structures	• Identify a specific government institution/ministry that will be mandated to manage and coordinate the implementation of school meal program at central, regional and district level (ideally Ministry of Education). • Identify a directorate/unit within the mandated government institution/ministry to coordinate the implementation of school meal programme. • Establish directorate/unit staffing structure based on an assessment of staffing needs and complementary skills.

	• Ensure training of programme staff (at all levels) to enhance their capacity for the implementation of school meal programme. • Develop and disseminate programme guidelines and operation manuals to guide staff at all levels. • Establish multisectoral coordination mechanisms at all levels (multisectoral steering committees and technical working groups). • Identify partnership and ensure involvement of key sectors such as agriculture, health, gender, developmental partners, private sectors, academia, communities, beneficiaries, among others. • Define the responsibilities of the central, regional, district and school-level staff in the management of the programme. • Define the responsibilities of key sectors (including the communities) in the implementation of school meal programmes.

Source: Adapted from Bundy, B. Burbano, C., Grosh, M., Gelli, A., Jukes, M. & Drake L. 2009. *Rethinking school feeding: social safety nets, child development and the education sector*. Washington; AUDA-NEPAD. 2022. *AUDA-NEPAD Guidelines for the Design and Implementation of Home-Grown School Feeding Programmes in Africa*.

Annex 5: Example school meal programme objectives

EXAMPLE SCHOOL MEAL PROGRAMME OBJECTIVES		
If the situation analysis indicates:	**Output Objectives**	**Impact Objectives**
Low enrolment, low attendance or high drop-out rates, and the analysis of their causes demonstrated the likelihood of a food incentive (either in school or as a take-home ration) having a beneficial effect.	• Increase enrolment of boys and girls in school feeding benefiting schools. • Improve attendance of boys and girls in school feeding benefiting schools. • Reduce drop-out (or increase retention) of boys and girls in school feeding benefiting schools. • Reduce absenteeism of boys and girls in school feeding benefiting schools. • Improve the capacity to concentrate and learn (or improve school achievement) of boys and girls in school feeding, benefiting schools by alleviating short-term hunger.	• Improved learning of school children. • Increased gender equality in education.
A need to improve the food intake and diet of school-age children or important micronutrient deficiencies among school-age children, in particular iron and vitamin A, as shown by a prevalence of anaemia above 40% among school-age children.	• Contribute to meeting school children's food needs by ensuring they receive at least one nutritious meal a day; or • Contribute to school children's balanced diet by providing nutritious meals. • Improve micronutrient status in targeted school children; or • Improve the calorie and protein intake of targeted school children.	• Enhanced nutrition and health of school-age children.

There is a potential for school feeding to act as a safety-net for vulnerable households by providing a value transfer.	• Increase household income. • Improve household food consumption.	• Decrease in reliance on negative coping mechanisms
There is a possibility to procure or process school feeding commodities locally.	• Increase smallholder farmers' income and marketing opportunities through local procurement and processing of school feeding	• Improved food security. • Increased household investments in productive assets.
Relevant gaps and needs to activate the beneficial role of school feeding as a platform for wider socio-economic benefits.	• Increase the provision and promotion of school health and nutrition essential package integrated interventions in schools. • Create safe learning environments. • Improve school-community collaboration.	• Improved local economies. • Other wide socio-economic benefits (e.g. improved school environment and infrastructure).
Strong political will but limited capacity at central or decentralised levels to manage a national school feeding programme, or specific weak logistics and accountability mechanism.	• Strengthen the national capacity to plan for and implement school feeding. • Strengthen coordination and complementary partnerships with relevant key sectors.	• Sustainable National School Feeding Programme.

Source: Adapted from *WFP school-based programmes technical guidance manual*. 2023

Annex 6: Recommended daily nutrient intake for children and adolescents.

Table: 4. Recommended daily nutrient intake for children and adolescents

Macronutrient

Age (years)	Gender	Energy (MJ/kcal)	Carbohydrate (g)	Protein (g)	Fat (g)	Saturated fat[5] (g)	Sugar(g)	Fibre(g)	Sodium/salt (mg/g)
4–6	Boys	7.18/1715	228.7	19.7	66.7	21.0	50.3	13.7	598/1.6
	Girls	6.46/1545	206.0		60.1	18.9	45.3	12.4	
7–9	Boys	8.24/1970	262.7	28.3	76.6	24.1	57.8	15.8	1380/3.6
	Girls	7.28/1740	232.0		67.7	21.3	51	14.0	
10–13	Boys	9.3/2220	296.0	42.1	86.3	27.1	65.1	17.8	1380/3.6
	Girls	7.72/1845	246.0	41.2	71.8	22.6	54.1	14.8	
14–18	Boys	11.5/2755	367.3	55.2	107.1	33.7	80.8	22.1	1600/4.0
	Girls	8.83/2110	281.3	45.0	82.1	25.8	61.9	16.9	

Micronutrients

Age (years)	Gender	Iron(mg)	Folate(µg)	Calcium (mg)	Vitamin A(µg)	Vitamin C(µg)	Zinc(mg)
4–6	Boys	6.1	200	60	500	30	6.5
	Girls			0			
7–9	Boys	8.7	300	70	500	30	7.0
	Girls			0			
10–13	Boys	11.3	400	13	600	35	9.0
	Girls	14.8		00			
14–18	Boys	11.3	400	13	700	40	9.5
	Girls	14.8		00	600		7.0

Source: WHO.2006. *Food and nutrition policy for schools: A tool for the development of school nutrition programmes*

Annex 7: A checklist for assessing quality standards for school meal programmes.

SCHOOL FEEDING QUALITY STANDARDS

POLICY GOAL 1: POLICY FRAMEWORKS

Overarching policies for school feeding – sound alignment with the national policy

A. National-level poverty reduction strategy or equivalent national strategy (national development plans (NDPs), poverty reduction strategies, and or food and nutrition security policies), as well as sectoral policies and strategies (education sector plan, nutrition policy, social protection policy, etc.) identify school feeding as an education, social protection, nutrition, health, agriculture, and/or economic development intervention, clearly defining objectives and sectoral responsibilities.

B. An evidence-based technical policy related to school feeding outlines the objectives, rationale, scope, design and funding and sustainability of the programme and comprehensively addresses all four other policy goals (institutional capacity and coordination, financial capacity, design and implementation, and community participation)

POLICY GOAL 2: FINANCIAL CAPACITY

Governance of the national school feeding programme – stable funding and budgeting

National budget line(s) and funding are allocated to school feeding; funds are disbursed to the implementation levels (national, district and/or school) in a timely and effective manner

POLICY GOAL 3: INSTITUTIONAL CAPACITY AND COORDINATION

1. *School feeding coordination – strong inter-sector coordination and partnership*

Multisectoral steering committee coordinates implementation of a national school feeding policy

2. ***Management and accountability structures, including staffing - strong institutional frameworks for implementation***

A. National school feeding management unit and accountability structures are in place, coordinating with school level structures.

B. School level management and accountability structures are in place

POLICY GOAL 4: DESIGN AND IMPLEMENTATION

Quality assurance of programming and targeting, modalities, and procurement design, ensuring design that is both needs-based and cost-effective

A. A functional monitoring and evaluation (M&E) system is in place as part of the structure of the lead institution and used for implementation and feedback.

B. Programme design identifies appropriate target groups and targeting criteria corresponding to the national school feeding policy and the situation analysis.

C. Food modalities and the food basket correspond to the objectives, local habits and tastes, availability of local food, food safety (according to WHO guidelines), and nutrition content requirements.

D. Procurement and logistics arrangements are based on procuring as locally as possible, taking into account the costs, the capacities of implementing parties, the production capacity in the country, the quality of the food, and the stability of the pipeline

POLICY GOAL 5: COMMUNITY ROLES–REACHING BEYOND SCHOOLS

Community participation and accountability – strong community participation and ownership (teachers, parents, children)

Community participates in school meal programme design, implementation, management and evaluation; and contributes resources (in-kind, cash or as labour).

Source: SABER. 2012. *What matters most for school health and school feeding: A framework paper*.

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