Enhancing impact through collective action

A regional approach to home-grown school feeding

SNV is committed to enabling sustainable and more equitable lives for all. Our mission is to strengthen capacity and catalyse partnerships, working on system transformation in agri-food, water, and renewable energy. In line with this, SNV supports the ambitions of the School Meals Coalition[1] and its contributions towards the achievement of Sustainable Development Goal outcomes. Building on a track record in school feeding programming, SNV aims to engage with and support a regional layer in East Africa to strengthen national programs - leveraging what is already in place, rather than duplicating efforts. As a first step, SNV hosted a regional visioning workshop on Homegrown School Feeding (HGSF) in Kampala, Uganda in May 2025. By bringing together thought leaders from across the continent, we aimed to spur innovation and scaling of context specific approaches and models, through collaborative actions cultivating a vibrant regional school feeding ecosystem.

This document was first developed as prereading material for the Regional Homegrown School Feeding Workshop. It is now updated, including perspectives from the workshop, for a wider audience. Notably, three distinct pitches/ areas emerged for collaborative actions and are elaborated here. While this paper is not an in-depth study, it collates recent developments and insights on key themes and discussion topics. Consultations with different stakeholders were held, including government representatives, UN agencies, technical experts and non-governmental organisations, funders, private sector, and academics. Based on these conversations, common themes emerged, notably procurement mechanisms and logistics of sourcing safe, nutritious, diverse food and meeting the institutional demand for the same, as well as planetary health and impact. While water, hygiene, food quality and safety, and food loss and waste handling are also important components of an integrated school feeding system, these got less traction. There is large interest in and several opportunities for creating effective and efficient HGSF models and interventions that provide adequate supply, benefitting local smallholder farmer communities. The importance of integrating climate resilience and health concerns into the school-feeding ecosystem, is calling for innovations in energy use for food production, storage, processing, and clean cooking. Recognising the tension between social inclusion of the poorest and sustainable national and local funding options deserves further exploration. Across all of this, context specificity is important, including the differences between the – remote – rural and the urban environment.

[1] The School Meals Coalition is a global initiative launched in 2021 looking to ensure that every child has access to healthy and nutritious school meals by 2030. With a diverse membership of 100 member countries and over 130 partners including governments, international organisations, NGOs and the private sector, the Coalition commits to sharing best practices and tailoring solutions to local contexts to improve school meal systems globally. See more here: https://schoolmealscoalition.org/about

Introduction

It is estimated that 733 million people faced hunger in 2023,[2] including 73 million children.[3] Worldwide, 148 million children are stunted, and 45 million children are wasted.[4] This negatively impacts children's ability to learn. It is particularly detrimental as education, central to human capital development, is the most effective way to escape poverty and malnutrition. Fortunately, there is a proven solution – school feeding. School feeding plays a crucial role in encouraging the poorest families to send their children, especially their daughters, to school. Once at school, meals help ensure that children are well-nourished and primed to learn.

Home-grown school feeding (HGSF) programmes are school feeding models designed to provide children in school with safe, diverse and nutritious food that is sourced locally.[5] While HGSF is defined and interpreted in different ways, descriptions converge towards school feeding with localisation of production and sourcing, particularly from smallholders, as well as increased community engagement.[6,7,8,9] In many cases localisation includes neighbouring countries. In this way, HGSF programmes strengthen the nexus between nutrition, health, education, agriculture, rural development and social protection with a return on investment of US$ 9 to US$ 1.[10] Expansion of current national school feeding programmes to universal coverage in support of initiatives that parents and communities are already taking to ensure their children's nutrition at school, would maximise benefits for a wide range of stakeholders across different sectors. The challenges related to expansion, and the opportunities they present are detailed below. What follows is an elaboration of the key themes; optimising sourcing and supply, sustainable production and systems transformation clean cooking and renewable energy, and lastly innovative finance for school feeding. An overview of the links between the key themes is followed by emerging collaborative actions from the workshop, before concluding with some outstanding questions.

2 FAO, IFAD, WFP and WHO, *The State of Food Security and Nutrition in the World 2024 – Financing to End Hunger, Food Insecurity and Malnutrition in all its Forms*, Rome, 2024, https://doi.org/10.4060/cd1254enWHH

3 UNESCO, UNICEF and WFP, *Ready to Learn and Thrive: School Health and Nutrition Around the World*, Paris, 2023, https://docs.wfp.org/api/documents/WFP-0000146478/download/?_ga=2.122863503.507366872.1744967849-67490945.1722329906

4 WHH, Concern Worldwide & IFHV, *Global Hunger Index: How Gender Justice Can Advance Climate Resilience and Zero Hunger*, Bonn/Berlin/Dublin/Bochum, 2024, https://www.globalhungerindex.org/pdf/en/2024.pdf

5 FAO & WFP, *Home-Grown School Feeding. Resource Framework. Synopsis*, Rome, 2018, https://openknowledge.fao.org/server/api/core/bitstreams/b1c248bf-c8e1-4969-acce-8020cbe4b2d1/content

6 FAO, IFAD, WFP and WHO, *The State of Food Security and Nutrition in the World 2024 – Financing to End Hunger, Food Insecurity and Malnutrition in all its Forms*, Rome, 2024

7 FAO, ABC/MRE and FNDE/MEC, *Sustainable State of Sustainable Schools 2021: Executive Summary*, Brasilia, 2022, https://doi.org/10.4060/cc0679en

8 FAO, *School Food and Nutrition Global Action Plan 2022-2026*, Rome, 2022, https://doi.org/10.4060/cc0919en

9 FAO and Procasur, *Compendium of Case Studies: Successful Practices, Tools and Mechanisms to Design, Implement and Monitor Home-Grown School Feeding (HGSF) programmes in Africa*, Nairobi, 2021, https://openknowledge.fao.org/server/api/core/bitstreams/df036ec3-02d2-452f-b86f-6a92853abf1e/content

10 UNESCO, UNICEF and WFP, *Ready to Learn and Thrive: School Health and Nutrition Around the World*, 2023.

Elaboration of key themes

The following key themes are expanded upon;

Optimising sourcing and supply

HGSF has been on the agenda for a long time, yet there are still many challenges in the quality, quantity and reliability of (local) supply chains. All sourcing models require clear procurement policies for actors supported by robust transparency and accountability mechanisms for effective and efficient HGSF programs.

Sustainable food production and food system transformation

Agricultural systems are becoming less resilient, particularly in regions that depend on rain-fed crops or where biodiversity plays a crucial role in maintaining balanced ecosystems. HGSF programs present an opportunity to facilitate a transition to more sustainable food systems that contribute to health, nutrition and climate change adaptation and mitigation.

Clean cooking and renewable energy

The development of clean cooking technologies, renewable energy sources for institutional kitchens, and sustainable biomass management mechanisms for rural and remote areas offer a pathway to a more sustainable and environmentally friendly approach to school feeding, while also promoting climate change mitigation and adaptation.

Innovative finance for school feeding

Universal coverage will require much larger investments than is currently provided by national governments. Stakeholders are exploring a wide range of innovative and blended finance mechanisms. Community ownership and parent contributions underpin national efforts and self-reliance.

Optimising sourcing and supply

HGSF has been on the agenda for a long time, yet there are still many challenges in the quality, quantity and reliability of (local) supply chains. Different countries and programmes use various approaches and different levels of (de-)centralisation to ensure a regular supply of both perishable and non-perishable foods to school kitchens and ultimately learners in school. Hybrid models often maximise benefits and enhance resilience of HGSF programs. All sourcing models require clear procurement policies for actors supported by robust transparency and accountability mechanisms for effective and efficient HGSF programs.

Demand for safe nutritious food

For positive health and nutrition impacts of HGSF programmes to be realised, food supplied to schools should meet health and nutritional standards. Diverse, locally accepted foods should be delivered in a timely manner, aligning with school feeding schedules and needs of children. There is a growing shift toward improving the nutritional quality of school meals, moving beyond calorie provision to include animal-sourced foods (like dairy and eggs), diverse vegetables, and (bio)fortified grains and pulses.[11] Governments and development partners are increasingly advocating for meals that deliver essential vitamins, minerals, fibre and proteins, especially in localities where children may lack balanced diets at home.[12]

Localising food production for school feeding programmes presents an opportunity to restore, promote and re-create demand for underutilised, nutritious crops that have been neglected over time. Many traditional crops, such as millet, sorghum, teff, and indigenous vegetables, are nutrient-dense, drought-resistant, and well-adapted to local climates. Incorporating nutritious, locally grown foods such as fruits, vegetables, legumes, and whole grains into these programs, governments can improve the dietary diversity of schoolchildren, addressing malnutrition and stunting while promoting lifelong healthy eating habits. Traditional crops may also have significant cultural, social and economic value in local communities, preserving important aspects of local heritage.

Sourcing models and procurement policies

There is a spectrum of sourcing or operating models employed in HGSF programmes are characterised by different levels of decentralisation and thereby different levels of local ownership. There are distinctions between who produces food and where it is produced, who trades it and how it is traded, who procures it on behalf of the school and how it is distributed. There is often market variability in terms of sourcing from informal and formal markets. Food in many HGSF programs originates from smallholder farms. It can be sold directly to schools or aggregated by farmers or other intermediaries. While the spectrum of models overlap, here, sourcing models are differentiated by who procures on behalf of school going children.

> The **Fortified Whole Grain Alliance** (FWGA), launched by the Rockefeller Foundation, which aims to replace overly refined flours with fortified whole grains. By improving processing methods, the Alliance helps retain nutrients and reduce absorption inhibitors in traditional grains such as millet or sorghum. The goal is not only to improve children's nutrition but also to shape healthier food preferences early on, creating demand for climate-resilient local grains and promoting lasting dietary change at the household level.

The highest form of decentralised models are farm to school models. Schools or implementing agencies source food directly from farmers (associations) within local communities. Food can also be procured from organised farmer groups or aggregators/traders who may be able to maximise their bargaining power and pool required resources to effectively meet HGSF market demand. Farm to school models are usually the shortest supply chains which can reduce delays and the need for heavy investments in cold chain transportation for perishable food, reducing overall costs and emissions. This sourcing model also encourages the use of culturally appropriate, diverse and nutritious food. However, reliance on local supply only can reduce the resilience of HGSF programs. Local supply may be irregular due to seasonal variability, also stemming from increasing climate change effects, and fluctuations in weather patterns affecting crop quality and quantity. Even under the best conditions, local farmers may have limited production and institutional capacity to fully meet school feeding market demands, including the appropriate storage and quality control systems. Where there are agreements in place, experience shows that farmers will sell elsewhere if prices are higher on the open market than in contracts/purchase agreements. Trust building, price transparency, timely payments, supportive (input) services and long-term partnerships can enhance adherence to supply contracts. In some cases, school gardens can supplement school meals with fresh, nutrient-rich ingredients. Decentralised procurement models can empower local communities; however, they place the administrative burden of procurement on communities and organisations like smaller local schools that may lack the institutional capacity to handle procurement sufficiently. Tasks like supplier selection, contracting, pricing negotiation and payment processing can be time-consuming and require trained personnel and clear procedures. Further, quality control testing services to

[11] UNESCO, UNICEF and WFP, 2023.
[12] UNESCO, UNICEF and WFP, 2023.

School gardens

School gardens increasingly feature as part of HGSF programs, offering a low-cost, high-impact way to improve child nutrition, education and community engagement. These small-scale plots are located within or near schools, are used to grow vegetables, fruits, herbs, and occasionally grains. They can also influence dietary practices at home. Globally, countries like Kenya and Uganda have incorporated school gardens into HGSF to reduce reliance on market purchases, teach agroecology and environmental stewardship, and promote local crop diversity. However, challenges such as water scarcity, lack of technical support, and limited integration into teaching schedules can hinder their sustainability. Best practices include aligning gardens with school meal planning, involving students, parents, and teachers, and using climate-smart, low-input techniques. Beyond nutrition, school gardens serve as hands-on learning tools that integrate agricultural, environmental, and health education into the curriculum, helping children develop life skills and a better understanding of food systems.

ensure food quality consistently meets standards can be difficult when working with a fragmented supply base of smallholder farmers or informal traders.

In semi-decentralised operating models, schools or agencies procure food from local vendors operating in nearby markets. Smallholders often sell food to intermediaries, traders or vendors who then supply schools, municipalities, or central/regional governments. These vendors may source produce from a mix of local or regional suppliers. This market-based procurement enables schools to access a variety of food items year-round and simplifies procurement for schools with limited capacity. At the same time, it may offer fewer direct benefits to smallholder farmers. It may also expose programs to price fluctuations and is once again affected by the institutional capacity to ensure consistent quality and provide nutritional oversight.

In centralised models, food is procured at national or regional level by central authorities like national governments or agencies often in bulk. The food is then distributed to schools through a centralised system. This model can reduce costs through economies of scale, ensure uniform quality standards and facilitate efficient management. However, centralisation can limit local economic/livelihood impact and will likely involve higher transportation costs and less flexibility in adjustment of quantities. It may also lack flexibility to adapt to local dietary preferences or seasonal availability.

In third party models, procurement is outsourced to service providers such as caterers for example, who then procure food from smallholder (associations) or market-based vendors. Service providers may provide efficiency gains; however, they can be very price sensitive which may limit their incentives to source from local communities. In these fully outsourced models, there is an increased risk of compromises in the origin, type and quality of food supplied.

The most suitable sourcing models for HGSF programmes typically depend on local capacity, market access, infrastructure and policy environments. In the East African context, hybrid or mixed models may be more suitable to overcome constraints of specific models, while enhancing resilience of HGSF programs. For example, staple foods such as grains may be sourced from centralised suppliers, while fresh fruits and vegetables are procured from local farmers and markets or grown in school gardens. Hybrid models can strike a balance between cost-efficiency, reliability and local impact. In this way, they allow HGSF initiatives to tailor procurement strategies based on food availability, infrastructure and (potential) institutional capacity.

Procurement, transparency and accountability

Robust transparency and accountability mechanisms support effective and efficient functioning of HGSF programmes. Key mechanisms for all HGSF sourcing and operating models include transparent procurement systems, monitoring and reporting, accountability in financial management, and community involvement. These mechanisms maintain public trust, reduce corruption and optimise programme delivery. Actors may require training and capacity building to fully appreciate guidance and processes as well as ensure they have the appropriate skills to manage relevant systems and tools.

All sourcing models for HGSF programmes require procurement policies that guide actors on what is expected from them and how they should carry out their tasks. Transparent procurement systems have clear processes for sourcing from local farmers. Open bidding and public disclosure of contracts can help prevent favouritism and corruption. Implementing traceability systems that allow tracking food from farm to school also ensures that food is locally sourced and meets quality standards and can allow authorities to verify that food purchased was actually delivered and distributed as intended.

Monitoring and reporting through independent audits and assessments of the program can ensure that the allocated resources are used appropriately, and that food is delivered to the right schools in the right quantities. Additionally, using real-time data collection, such as mobile apps or online platforms, allows authorities to monitor deliveries, track inventory, and identify potential issues early. Using digital platforms for monitoring the supply chain from farm to school can help streamline operations. These platforms also support inventory management and forecasting, ensuring timely restocking. Engaging local communities, including school management, parents, and local authorities, can provide an important voice and accountability mechanism, ensuring that the food program reflects the needs of the schoolchildren. Regular feedback from schools on the quality of food, delivery timelines, and other factors allows for continuous improvement of the system.

Regional Visioning Workshop on School Feeding insight: Could focusing on core, universal ingredients help build more predictable supply? Standardised procurement and clear quality standards seem essential. Supporting local farmers through aggregation, finance links, and technical assistance might boost capacity and production consistency. Innovations in inputs and storage, as well as leveraging existing processing capacity, could reduce losses and open new markets. Centralised procurement models and social protection for vulnerable families may also play key roles. Ultimately, building an enabling environment with cross-sector collaboration will be crucial to overcoming these barriers and strengthening school feeding supply chains.

Sustainable food production and food system transformation

Agricultural systems are becoming less resilient particularly in regions that depend on rain-fed crops or where biodiversity plays a crucial role in maintaining balanced ecosystems. HGSF programs present an opportunity to facilitate a transition to more sustainable food systems that contribute to food security, health and nutrition, farmers livelihoods, as well as positive climate and environmental impacts. Scaling up of climate smart and regenerative agriculture can provide the required diversity of food, safe for people and planet. However, farmers in many different contexts require support to make necessary investments and adopt better practices to realise both environmental and livelihood benefits.

Transforming current agri-food systems[13]

Food production systems face a number of crises that threaten and undermine progress made in increasing productivity and food and nutrition security over the past century. Intensive food production systems characterised by overuse of external inputs and resource extraction have led to declining soil health, micronutrient deficiency, pollution of ground water and loss of biodiversity.[14] Various shocks, trends and pressures such as climate change, conflict, rapid population growth and urbanisation, changing consumption patterns and unequal power structures, amongst others, have exposed vulnerabilities across global food systems.[15] These challenges have fuelled calls for change, highlighting the urgent need for transforming current agri-food systems.[16,17,18,19,20] These challenges equally threaten the reliability, diversity and quality of food supplied to schools. A sustainable and resilient agri-food system delivers food security and adequate nutrition for people in all their diversity in such a way that the economic, social and environmental based are safeguarded for future generations.[21] HGSF programs can contribute positively towards this transition by providing a market for food grown in sustainable and inclusive ways, ensuring that food supplied to schools not only feeds but nourishes children, and also supports healthy ecosystems, reduces carbon footprints and improves livelihoods of vulnerable groups.[22]

[13] See Figure 2 for SNV's systems transformation framework – the six dimensions

[14] Benton et al., *Food System Impacts on Biodiversity Loss, Three Levers for Food System Transformation in Support of Nature*, Chatham House, 2021, https://www.chathamhouse.org/sites/default/files/2021-02/2021-02-03-food-system-biodiversity-loss-benton-et-al_0.pdf

[15] FAO, *The State of Food Security and Nutrition in the World 2021*, FAO, 2021 https://www.fao.org/publications/sofi/2021/en/

[16] UNDP, *Development Challenges and Solutions*, UNDP, Accessed June 2024, https://www.undp.org/development-challenges-and-solutions

[17] United Nations, *The Sustainable Development Goals Report 2021*, United Nations, 2021, https://unstats.un.org/sdgs/report/2021/The-Sustainable-Development-Goals-Report-2021.pdf

[18] UNEP, 'Why do We Need to Change our Food System', UNEP, Accessed June 2024 https://www.unep.org/news-and-stories/video/why-do-we-need-change-our-food-system

[19] FAO, 2021

[20] Benton et al., *Food System Impacts on Biodiversity Loss, Three Levers for Food System Transformation in Support of Nature*, 2021.

[21] FAO, *Sustainable Food Systems: Concept and Framework*, Rome, framework, 2018, https://www.fao.org/3/ca2079en/CA2079EN.pdf

[22] FAO, IFAD, WFP and WHO, *The State of Food Security and Nutrition in the World 2024 - Financing to End Hunger, Food Insecurity and Malnutrition in all its Forms*, Rome, 2024, https://doi.org/10.4060/cd1254enWHH

Regenerative agriculture includes a set of farm and land management practices, principles and processes that restore and rebuild **health, resilience and biodiversity of ecosystems.** As a farming approach it emphasises **soil health improvement** as the foundation to a sustainable food system, biodiversity enhancement, water management, minimal disturbance, integrated livestock management, crop diversity, carbon sequestration, circularity and optimum use of resources/inputs, as well as the use of renewable energy. The overall objective is the enhancement of environmental, social and economic dimensions of sustainable food production outcomes.

SNV Regenerative Agriculture Position Paper.

HGSF for climate change adaptation and mitigation

School feeding programmes can drive sustainable food production by integrating sustainable agricultural practices into procurement processes and providing farmers with institutional support to meet school feeding demand. This includes a range of climate smart farming and trading practices that are resilient to climate impacts, such as droughts, floods and temperature fluctuations. School feeding programmes should incorporate other sustainability elements along supply chains such as waste management and incorporating the use of renewable energy. Regenerative agriculture offers a holistic approach to meet such sustainability ambitions. Regenerative agricultural practices and principles focus on rebuilding soil health, restoring eco-systems and increasing biodiversity. Practices such as crop rotation, agroforestry, no-till farming, composting, and cover cropping aim to restore the soil's ability to sequester carbon, retain water, and support diverse plant and animal life. Ensuring access to high-quality seeds, bio-fertilisers, and irrigation techniques can enhance the yield and quality of crops. Investment in technical expertise, infrastructure and access to finance is required to increase adoption of sustainable practices along food supply chains. Farmer associations like cooperatives can provide a platform for smallholders to effectively structure and receive training on sustainable farming practices. Farmer field schools for example, are a proven approach to building the capacity of smallholder farmers by promoting hands-on, experiential learning that enhances adoption of sustainable agricultural practices and improves productivity. The production of traditional crops can offer a viable alternative to the monocultures of industrial agriculture, which are often dependent on high water use and synthetic inputs.

Economic opportunities for smallholder farmers and communities

Smallholder farmers make up a significant portion of the agricultural workforce in many developing countries. When school feeding programmes are linked to local supply chains, they provide a reliable market for smallholder farmers' produce. This connection not only ensures a steady income for farmers but also helps empower them economically, enhancing their capacity to invest in sustainable farming practices, improve productivity, and build resilience to climate impacts. The success of these linkages depends on the development of effective aggregation systems, which bring together smallholder farmers to meet the supply demands and standards of school feeding programmes. Local farmers and suppliers may lack the necessary infrastructure, technology and logistical systems to meet these standards consistently. Reliability of supply is particularly impacted in rural or remote areas with poor infrastructure such as inadequate roads and the lack of refrigeration facilities. Farmer cooperatives, associations and other intermediaries like traders play a crucial role in facilitating aggregation. Aggregation reduces the transaction costs of sourcing food, ensures that smallholder farmers can deliver the quantities required by schools, particularly in times of increased enrolment or local shortages, and helps standardise the quality of the food produced. By pooling resources, farmers can collectively market their produce, improve their bargaining power, stabilise supply and invest in infrastructure that supports food storage and transportation.

HGSF programs can further strengthen income resilience for smallholders and other vulnerable groups through value addition. Developing local food processing capabilities is important for extending the shelf life of food and reducing the vulnerability of supply chains[23].

[23] FAO, IFAD, WFP and WHO, 2024.

For example, drying or canning fruits and vegetables can turn perishable goods into non-perishable ones. Studies have shown however, that costs of dried or preserved vegetables can be inhibitive for their inclusion in school meals.[24] On the other hand, opportunities like making tofu out of local soybeans can make protein more accessible and diverse.[25]

Socially inclusive and gender transformative supply chains

Women and youth are essential drivers of agri-food systems, contributing significantly to food production, value addition, and market distribution. They face persistent structural barriers – rooted in gender inequality and social norms which limit their access to resources, decision-making, and economic opportunities. Women produce 60-80% of food in developing countries, yet they have significantly less access to land, credit and inputs compared to men.[26] Women in agriculture also often face harsh working condition, despite agri-food systems being a more vital livelihood source for them than men in many countries. Youth (ages 15-24) make up nearly 20% of sub-Saharan Africa's population but face high unemployment and limited access to productive assets.[27] HGSF programs present a unique and scalable opportunity to advance gender equality and youth inclusion while strengthening local food systems. By supporting farmer organisations to adopt inclusive governance such as setting participation quotas and promoting leadership opportunities, HGSF initiatives can ensure that women and youth have a meaningful voice and equitable access to benefits. Additionally, HGSF programs can fund gender-responsive training and capacity-building, delivered at times and in formats that align with women's schedules and caregiving responsibilities. Gender-transformative agricultural interventions can increase farm productivity by up to 30%.[28] Facilitating access to finance, particularly through revolving funds or microgrants, enables women and youth to invest in productive assets such as improved inputs, technologies, and labour, unlocking their full potential as agri-food entrepreneurs. Investing in women and youth through HGSF is not only a matter of equity – it enhances the resilience, productivity, and sustainability of local food systems, delivering long-term impact and value for communities.

Regional Visioning Workshop on School Feeding insight: Sustainable production for HGSF requires a supportive enabling environment and functioning farmer service ecosystem. Fragmented systems, inadequate infrastructure, and weak policy implementation undermine efforts, while political interference, market imbalances, and limited investment in research further constrain progress. Reliance on non-resilient staple crops, poor knowledge and practices, inadequate input access and weak producer-consumer linkages contribute to inconsistent supply. Conversely, building climate-resilient systems through sound policies, resource allocation, and inclusive approaches, especially empowering women, youth, and vulnerable groups can unlock local potential. Research, traceability, and the integration of indigenous knowledge with technologies like AI and predictive models support smarter, adaptive production. Strengthening farmer organisations, ensuring access to affordable inputs, and fostering collaboration between sectors help align production with market needs. Ultimately, coordinated efforts in infrastructure, legislation, and innovation are key to transforming local food systems into resilient, sustainable foundations for school feeding.

Clean cooking and renewable energy

Traditional cooking facilities externalise many real costs. Deforestation and climate change are closely interconnected issues that have profound impacts on food security, agricultural production, and economic development, which in turn affect children's right to food and their overall development. Clean cooking technologies, renewable energy sources for institutional kitchens, and sustainable biomass management mechanisms for rural and remote areas offer a pathway to a more sustainable and environmentally friendly approach to school feeding, while also promoting climate change mitigation and adaptation.

The case for clean institutional cooking

Cooking in institutions like schools means regularly catering for large numbers. This constitutes a significant portion of the cooking fuel demand in communities.[29] Most school feeding programs rely on traditional firewood stoves and basic cooking facilities. In many cases families have been responsible for collecting cooking fuel – a time-consuming and labour-intensive task. Others purchase it, placing a financial strain on households that can negatively impact children's school attendance, performance, and ability to meet other basic

[24] JKUAT, *Feasibility Study for Inclusion of Traditional Vegetables in School Feeding Programs in Kenya*, Nairobi, 2023.
[25] Personal communication from EJASA project staff, Benin, 2023
[26] FAO, *The Status of Women in Agrifood Systems*, Rome, 2023, https://doi.org/10.4060/cc5343en
[27] ILO, *Global Employment Trend for Youth 2024: Sub-Saharan Africa*, Rome, 2024, https://www.ilo.org/sites/default/files/2024-08/Sub-Saharan%20Africa%20GET%20Youth%202024_0.pdf
[28] FAO 2023.
[29] WFP and MECS, *Clean and Modern Energy for Cooking: A Path to Food Security and Sustainable Development*, https://docs.wfp.org/api/documents/WFP-0000140194/download/?_ga=2.40787554.198472508.1744710822-67490945.1722329906

needs.[30] This affects the poorest households most, who are meant to benefit from the social safety net of school feeding. When firewood is scarce, schools may be unable to prepare meals properly, leading children to skip meals or consume undercooked food. Institutional cooking requires larger-scale energy solutions. Institutions, however, may be cautious about the risks that are introduced with large-scale more technological options like equipment failure or power outages, especially because there is limited flexibility in how and when meals are prepared. Rural or resource-limited schools, in particular, may therefore still opt for traditional cooking methods involving the use of firewood or other biomass fuels. The continued reliance on firewood contributes to accelerating deforestation. Deforestation is a major contributor to climate change. It often leads to soil erosion, loss of fertility, and disruption of water cycles, making it harder for farmers to grow crops. The resultant loss of biodiversity, changes in rainfall patterns, and disruptions to local climates, all have direct implications for food security and agricultural production.

Traditional cooking methods and systems, release harmful smoke and particulate matter. The smoke from burning firewood or other biomass fuels can have severe health impacts, particularly for the individuals directly exposed to it in school kitchens. The inhalation of smoke from cooking fires is linked to respiratory illnesses, cardiovascular diseases, and eye problems. Studies have shown that Prolonged exposure to indoor air pollution from traditional cooking methods is a leading cause of respiratory diseases, such as chronic obstructive pulmonary disease (COPD), lung infections, and asthma.[31] Chronic health issues for cooks and children may affect their ability to focus, attend school regularly, and for children ultimately affect their learning outcomes and development.

Sustainable biomass management strategies are being developed, particularly for rural and remote areas. This involves sourcing wood and other biomass fuels from well-managed, sustainable resources, such as community-managed forests or plantations. Additionally, the circular use of agricultural residues and organic waste as biomass or in biodigesters can help reduce the pressure on natural forests while providing a renewable source of fuel for cooking. Agroforestry, the practice of integrating trees into agricultural landscapes and reforestation, are other sustainable approaches to biomass management. It allows for the production of fuelwood while enhancing biodiversity, improving soil quality, sequestering carbon dioxide and restoring ecosystems. By integrating sustainable biomass management with climate change mitigation and adaptation strategies, communities can enhance their resilience to climate impacts while reducing their carbon footprint.

Clean cooking technologies

To further address health risks and environmental challenges, clean cooking technologies and renewable energy sources are being developed for use in large-scale institutional kitchen settings, including those for school feeding programs. These include technologies such as improved cookstoves, biogas stoves and electric cooking systems which aim to reduce harmful emissions, improve energy efficiency, and minimise the environmental impact of cooking while safeguarding the health of cooks and children. These technologies not only reduce the amount of firewood required but also lower the risks of indoor air pollution. For example, improved cookstoves use less wood and produce less smoke, while biogas stoves use organic waste to generate energy, offering a renewable and sustainable alternative to traditional biomass fuels. SNV experience shows that the construction and use of biodigesters have multiple benefits including job creation and increasing incomes for rural families[32]. In remote and off-grid areas, solar-powered cooking technologies are gaining traction as an alternative to firewood-based cooking or other biomass fuels. Ultimately, the choice of cooking system will depend on cost, energy access, environmental impact, local (and system) capacity, as well as cultural acceptability.

[30] WFP and MECS 2022.
[31] WFP and MECS, 2022.
[32] SNV, *Biogas Dissemination Scale-up Programme (NBPE+): Bio-digester End-user Business Cases*, Addiss Ababa, https://www.snv.org/assets/downloads/f/191310/x/56cf5c748d/nbpe-end-user-business-case.pdf

School feeding commitments from East-African governments in 2023

In 2023, the **Burundian Government** committed to double its school feeding program from US$ 2.5 million to US$ 4.5 million

The **Government of Kenya** will expand its school meals program to reach 10 million school children by 2030 with a universal school meals program. In 2023-2024, the Government allocated KSH 5 billion to the school feeding program as part of its broader budget of KSH 3.6 trillion. The **Government of Nairobi City County** committed EUR 11 million for the school feeding program and the national government matched that commitment.

Rwanda significantly increased its school feeding program budget from RWF 22.1 billion in the 2021/22 fiscal year to RWF 90 billion in the 2023/24 fiscal year allowing for an expansion of coverage.

Source: The Rockefeller Foundation, 2024, Governments and Partners Pledge to Double School Meals for Children in Hardest-Hit Countries by 2030, Rio De Janeiro, https://www.rockefellerfoundation.org/news/governments-and-partners-pledge-to-double-school-meals-for-children-in-hardest-hit-countries-by-2030/ (Accessed 10 April 2025), SMC, 2023, Investing in Future Generations: Human Capital, Sustainable Food Systems and Climate Change Action though School Meals, Paris, https://schoolmealscoalition.org/wp-content/uploads/2024/01/SMC_ParisSummit2023Report.pdf

Clean cooking technologies

Improved cookstoves present a more efficient cooking option by reducing firewood consumption and lowering harmful emissions. Scalable for bulk meal preparation, they are commonly adopted as an interim solution in regions where access to cleaner fuels remains limited.

Liquified petroleum gas (LPG) offers a much cleaner and faster alternative, significantly cutting down on both cooking time and air pollution. However, widespread use is often constrained by high fuel costs, unreliable distribution networks, and safety concerns, particularly in remote or underserved areas.

Electric cooking technologies, such as induction stoves and electric pressure cookers, provide a modern, low-emission solution where dependable electricity is available. These systems are best suited for urban or peri-urban schools connected to the grid, but are generally impractical in off-grid or low-power environments.

Solar-powered cooking solutions – including solar thermal systems and photovoltaic-powered electric cookers – are gaining traction as renewable and environmentally friendly options. While they have minimal operating costs and contribute to climate goals, they require substantial initial investment and meticulous design to ensure consistent performance at scale.

Biogas systems convert organic waste, such as food leftovers or animal manure, into methane for cooking. They can be especially effective in farming communities or schools with access to livestock, although their success depends on regular maintenance and a reliable supply of organic material

Source: WFP and MECS, 2022, Clean and Modern Energy for Cooking: A Path to Food Security and Sustainable Development, https://docs.wfp.org/api/documents/WFP-0000140194/download/?_ga=2.40787554.198472508.1744710822-67490945.1722329906

Innovative finance for school feeding

National governments are paying for the larger share of school feeding across the world. However universal coverage will require much larger investments. In support of national government budget allocation, stakeholders are exploring a wide range of innovative and blended financing mechanisms including climate and carbon financing, debt swaps and impact bonds, amongst others. Community ownership and parent contributions underpin national efforts and self-reliance. International Financial Institutions (IFIs) and philanthropic organisations can also play a role in the expansion of HGSF programs.

School feeding investments

Food costs feature high on the school feeding budget; however, other investments are also required. Schools require kitchens, storage facilities and safe preparation areas, which are infrastructure gaps that require significant investment. Investments in food procurement, transportation and logistics ensure that school going children receive safe, timely, nutritious school meals. Attention is also required for school physical environments, including water supply and sanitation. Funding is often required to enhance capabilities of actors, conduct research and evaluations, test new or innovative school meal initiatives, as well as strengthen linkages with and capacities in overlapping ecosystems such as agri-food systems.

Sanyu Babies' Home – a sustainable second chance

Energy-efficient solutions in institutional settings

Sanyu Babies' Home is a not-for-profit children's home care service provider that aims to reintegrate babies and children deprived of parental love into the community by reuniting them with their families. Participants were able to visit the Home during the regional visioning workshop.

The Home received a catalytic grant from SNV's Inclusive Markets for Energy Efficiency in Uganda (IMEU)'s Market Development Fund. This de-risked their investment in a solar-powered institutional cooking systems, including electric pressure cookers and lighting technology with thermal collectors, aimed at reducing operational costs and enhancing sustainability.

The use of energy-efficient pressure cookers and the comprehensive solar system at the Home has reduced their reliance on traditional fuels and improved overall living conditions for both staff and children. Firewood and charcoal expenses in the kitchen reduced from UGX 600,000 to just UGX 50,000. Concurrently, electricity costs were reduced from an average of UGX 1,500,000 to UGX 500,000. This represents substantial financial gains directly benefiting 50 babies at the home.

The interventions have notably improved health outcomes and saved valuable time for the Home caregivers, allowing them more time to focus on nurturing the children. As Christine Nalwanga, a Home Mother, shared, 'Our cooks are now experts in using the electric pressure cookers. Before, we would take four hours to prepare beans for the children, but now it takes only 30 minutes.' The Home's cooks also note that they have become skilled in dealing with energy efficiency, understanding how to work with solar capacity and battery back-up through timing of the different energy requirements of the kitchen and its overall operations. Beyond financial and health benefits, the shift away from firewood and charcoal significantly contributes to deforestation mitigation.

Impact at scale

The IMEU project, through its Market Development Fund, has successfully introduced and proven the viability of electric cooking in schools and other social institutions across Uganda. Pilot results demonstrate strong potential for wider replication. In partnership with IMEU, 87 social institutions, including schools, universities, and hospitals, have adopted energy-efficient technologies and practices, as well as commercial enterprises like hotels.

Improved institutional cookstoves are already being replicated beyond the initial IMEU project scope. For instance, Kasese Secondary School recently installed six institutional cooking stoves using volcanic rocks. This decision followed their observation of the positive impact at St. Lucia High School in Fort Portal, an IMEU project partner. Following successful installation in January 2025, Kasese Secondary School reported approximately 62% energy cost savings, directly contributing to providing nutritious meals for 1,500 students.

Looking ahead: innovation

During the field visit, participants explored additional energy solutions, including steam cooking systems widely used in Kenya's school feeding programmes, as a promising alternative. Carbon financing also emerged as a potential pathway for scaling up clean cooking technologies within institutions.

Sources of funding

Financial resources can be provided by one or a combination of four sources: public domestic, public foreign, private domestic and private foreign.[33] Most HGSF programmes combine public and private sources of funding (blended finance).

Many African governments have demonstrated their commitment to enhancing school meal access. According to the Global Child Nutrition Foundation (GCNF), on average, 70% of funding for HGSF initiatives currently come from governments.[34] In low-income countries however, governments accounted for only approximately one quarter of the school meals budget – demonstrating a significant financing gap.[35] These governments are faced with limited domestic resources given shrinking fiscal space and competing priorities.[36] In Tanzania for example, the government has struggled to provide consistent funding for its school feeding program, despite recognising its importance for education and health.[37] Though exact figures vary, governments usually make allocations for HGSF programmes through national and local government budgets.

International Financial Institutions (IFIs), other multilateral finance[38] and bilateral aid can play an important role in bridging financing gaps in the form of (low interest) loans, grants and technical support (technical expertise and capacity building to government to design, implement and monitor effective HGSF programmes). Donor support is often targeted toward specific programmes or regions and can be used to fund emergency feeding during crises or expansion of existing school meal programmes. While there are gaps and discrepancies in data on financial aid for school feeding, estimates show that aid donors currently provide around US$ 287 million in aid for school feeding – less than 0.1% of total aid.[39] Flows of (humanitarian) aid are becoming increasingly erratic and precarious with the donor landscape is subject to change,[40] urging governments and other actors to come up with innovative alternative funding sources.

Philanthropic funding is taking up an increasing share of finance for HGSF programs. Private and family foundations provide donations and grants specifically aimed at improving children's health, nutrition and education. This includes corporate philanthropy in the form of corporate social responsibility initiatives and campaigns. Like donor funding, philanthropic funding requires alignment with community or national needs and coordination and collaboration with relevant stakeholders to prevent fragmented efforts. Over-reliance on philanthropy may also reduce government incentives to invest in sustainable programs.

At the local level, individuals, communities or parent-teacher associations contribute to funding (cash) and resource mobilisation like volunteer labour or providing food and local resources such as firewood for cooking school meals. Community-based financing like community taxes, cost-sharing models or the productive use of school grounds (e.g. school gardens) have offered a popular and alternative pathway to strengthen HGSF programmes. These acts often go beyond charity and embody true solidarity, affirming a collective commitment to children's wellbeing. In many settings, mutual aid networks ensure that even families unable to contribute directly are supported by others, reinforcing inclusivity and cohesion. These structures not only enhance program accountability and responsiveness but also strengthen bonds between education, agriculture and civic life. In some countries (the proportion of) parent contribution is anchored in their school feeding policy.[41] Mandatory parent contributions in the poorest communities can risk excluding already vulnerable groups. Over-engagement of women in volunteer work for example may increase their burden of work and prohibit them from engaging in income generating activities.

[33] FAO, IFAD, WFP and WHO, 2024.
[34] SFI, *School Meals International Donor Analysis. Analysis of school feeding financing data systems: challenges and opportunities*, 2024, https://www.edc.org/sites/default/files/uploads/SF-School-Meals-International-Donor-Analysis.pdf
[35] SFI, *School Meals International Donor Analysis. Analysis of school feeding financing data systems: challenges and opportunities*
[36] WFP and RBD, *Ensuring Sustainable Financing for School Meal in West Africa: A Collaborative Effort by International Financial Institutions and Innovative and Sustainable Financing Schemes*, Dakar, 2024, https://www.wfp.org/publications/2024-ensuring-sustainable-financing school-meals-west-africa
[37] FAO & WFP, *Home-Grown School Feeding. Resource Framework. Synopsis*, Rome, https://openknowledge.fao.org/server/api/core/bitstreams/b1c248bf-c8e1-4969-acce-8020cbe4b2d1/content
[38] Key players include the African Development Bank (AfDB), Islamic Development Bank (IsDB), The International Fund for Agricultural Development, Global Partnership for Education (GPE), The World Bank's International Development Association and the International Monetary Fund are key players
[39] SFI, 2024.
[40] SFI, 2024.
[41] GCNF, *The Global Survey of School Meal Programs*, https://gcnf.org/wp-content/uploads/2021/03/CR_Rwanda_11_2020.pdf

Financing mechanisms, tools and models

Strategic investment mechanisms (SIMs) are designed to strategically channel large, long-term and often blended resources (public, private, philanthropic) towards specific development objectives.[42] They focus on unlocking and coordinating investment flows with a focus on scale, systems change and sustainability. SIMs may include blended finance facilities that combine concessional public or donor finance with commercial investment; catalytic funds that provide first-loss capital or technical assistance to accelerate scalable, locally driven innovations; and revolving funds that recycle capital (e.g., through cost recovery or post-harvest repayment schemes for farmer input support).[43] In this way SIMs can serve as a platform to facilitate blended financing approaches that de-risk investment, crowd in private sector participation (including related efficiency, technology and innovation gains), and enable coordinated, multi-stakeholder contributions. Additionally, pooled funds allow for harmonised donor alignment under national investment priorities. By structurally linking financial flows to national planning frameworks and delivery systems, SIMs enhance the predictability, efficiency, and impact of HGSF investments, while enabling strategic co-investment in critical areas such as smallholder procurement, school infrastructure, nutrition outcomes, and youth-led service delivery models.[44]

Typically integrated into SIMs, results-based or outcome-based financing (RBF) is a widespread financing tool that ensures financing is tied to measurable outcomes rather than traditional input-based funding. Service providers[45] are compensated only after independently verified results are delivered, such as the number of nutritious meals provided, improved school attendance, or measurable gains in child nutrition. This incentivises efficiency and accountability. RBF comes in various forms, including output-based aid (OBA) where payments are tied to service delivery; cash on delivery (CoD) which reward the achievement of specific targets; and development impact bonds (DIBs) where private investors provide upfront funding for a (development) project and if the project meets predetermined social outcomes, the government or a philanthropic organisation pays back the investor with a return.[46] RBF enables the linking of critical investments like rural infrastructure and the development of local value-chains directly to school feeding initiatives. However, RBF requires robust monitoring systems, clear performance metric and should also factor in longer-term, often harder to measure development goals.

Examples of innovative funding mechanisms in practice

Countries like Seychelles and Belize have implemented debt-for-climate swaps by redirecting saving from reduced debt payments into environmental and social projects. Funds in Seychelles were managed by a Trust that then allocates grants.

Egypt has utilised debt swap programs with Germany and Italy (approximately $720 million) to fund development projects across various sectors, including food security and education.

India has used DIBs to improve education outcomes.

Stakeholders are exploring a wide range of innovative financing mechanisms. These include:

- **Earmarked taxes** where designated specific taxes fund HGSF programmes can provide a dedicated revenue stream. This can include leveraging windfall gains from sectors like energy, minerals or commodities through taxation. Governments can also implement taxes on 'public bads' like tobacco, alcohol or high-sugar soft drinks to generate revenue. However, reliance on such taxes requires political will and may be subject to revenue volatility.[47]
- **Climate finance** refers to the broad set of financial resources dedicated to supporting climate mitigation and adaptation efforts. Within HGSF programmes, climate finance can play a critical role in promoting sustainability by funding climate-smart agriculture at the farm level – such as drought-resilient crops, improved food storage systems, and weather-indexed insurance – as well as investing in green infrastructure for schools, including clean energy solutions, efficient cookstoves, and solar refrigeration. A key mechanism within climate finance is the carbon market, which works by assigning a financial value to greenhouse gas emissions. In these markets, entities that reduce emissions through activities like agroforestry or renewable energy use can generate carbon credits, each representing one ton of CO_2 reduced or removed. These credits can then be sold to companies or countries seeking to offset their own emissions, thereby creating a financial incentive for low-carbon practices. By enabling the buying and selling of carbon credits, carbon markets channel funding into mitigation and adaptation projects while encouraging cost-effective emission reductions. Carbon finance could provide additional resources to help schools and farmers build climate resilience.

[42] SFI, 2024.
[43] FAO & WFP, 2018.
[44] FAO & WFP, 2018.
[45] Service providers can be public institutions, private actors or civil society organisations.
[46] British Asian Trust, *Case Study Report: Evidence and Insights From Paying for Outcomes in India*, Delhi, https://golab.bsg.ox.ac.uk/documents/case-study-report_go-lab-british-asian-trust.pdf
[47] WFP and RBD, *A Collaborative Effort by International Financial Institutions and Innovative and Sustainable Financing Schemes*, 2024.

- **Development impact bonds (DIBs)**[48] are result-based financial instruments that raise private capital to fund social programmes that achieve certain outcomes.[49] DIBs shift some of the risk from governments to private investors, encouraging innovation and efficiency. Upfront funding addresses challenges related to timely payments for service providers and local suppliers. However, setting up DIBs can be complicated and requires clear metrics of success. This can be challenging when trying to accurately assess and measure outcomes in complex social environments. With DIBs, community accountability must be built into service provider contracts or monitoring systems. Green bonds are also climate finance tools specifically earmarked to finance projects with positive environmental impacts, attracting investment for renewable energy, energy efficiency and sustainable infrastructure.[50]
- **Debt swaps** involve exchanging a portion of a country's debt for investments in social development projects, such as HGSF initiatives. Debt swaps can be particularly attractive for countries with heavy debt burdens and can ease fiscal pressure for governments. While these swaps present an opportunity to lessen the burden of debt repayments and redirect funds towards essential programs, it is crucial to recognise that they may not be feasible for many countries based on their creditors. Furthermore, engaging in debt swaps could complicate future borrowing for these nations, affecting their creditworthiness and access to financial markets. It is vital to carefully assess the implications and potential consequences before entering into such agreements.
- **Social impact funds** bring together financial contributions from a range of sources – such as governments, philanthropic groups, and private investors – to support social initiatives that deliver measurable benefits. These funds offer flexible financing options, helping governments secure the resources needed to implement and expand such initiatives. However, to achieve the greatest impact and ensure long-term success, it is crucial that the goals of the funds align closely with government priorities. For long-term sustainability follow up funding mechanisms that can sustain the maintenance of infrastructure investments and absorb (or supply) the increased running costs at scale can be included.

The recommended financial tools, mechanisms and models will depend on what the key financing constraints are and the objectives of HGSF initiatives. For example, grants can be more suited to pilots or emergency relief situations, while blended finance may be more suited for scaling innovations and unlocking private capital. Revolving funds may be attractive for input finance and farmer support that is very cyclical in nature. Public financing is considered more sustainable and with the use of bonds, this can allow large capital mobilisation that can be used for larger infrastructure projects or national scale up.

Financial disbursement and management models

The management and disbursement of funds for HGSF programs depends on the structure of the financing mechanism(s), the stakeholders involved, and the governance model adopted. Recommended arrangements are ones that balance government ownership with local-level accountability and efficient delivery mechanisms.[51] In all cases, integrated digital payment and tracking systems ensure transparency and accountability.[52] Management and disbursement of funds should account for the specific needs of each HGSF program and its stakeholders.

[48] DIBs include and a sometimes referred to as Green, Social, Sustainability and Sustainability-linked bonds (GSSS) or Social Impact Bonds (SIBs)
[49] WFP and RBD, 2024.
[50] FAO, IFAD, WFP and WHO, 2024.
[51] FAO, IFAD, WFP and WHO, 2024.
[52] WB Blogs, *The Potential of AI Can't Help Educate Kids if They're Hungry, Youth Transforming Africa,* 2025, https://blogs.worldbank.org/en/youth-transforming-africa/the-potential-of-ai-cant-help-educate-kids-if-theyre-hungry?cid=SHR_BlogSiteShare_EN_EXT

Finances for HGSF programs or related complementary initiatives[53] can be channelled through government budgets dedicated to HGSF (or support initiatives) at national and local level. Funds for HGSF are usually allocated through ministries of education but in some cases can be under other relevant line ministries such as ministries of gender, or social protection.[54] Funds are then disbursed to local governments, district education offices or directly to schools. Local authorities or school committees are then responsible for procurement, kitchen operations and payment to suppliers or caterers. Government-led but decentralised disbursement can encourage local ownership and accountability, while allowing for more context-specific procurement and menu design as well as reducing bottlenecks associated with central bureaucracy.[55]

Funds can also be channelled directly to dedicated HGSF programmes run by government, other organisations or development partners that implement HGSF initiatives. In this case a national coordinating unit or fund secretariat may be created to oversee financial flows and implementation. Development partners who also offer technical expertise may act as fund managers. Schools may have school management committee (SMCs) or parent associations to manage procurement, meal preparation and monitoring. SMCs create strong community ownership and alignment with local needs and empower parents to oversee food quality, attendance and delivery. However, SMCs require strong capacity and oversight mechanisms to avoid mismanagement.

Regional Visioning Workshop on School Feeding insight: Sustainable funding for HGSF relies heavily on an enabling environment that fosters coordinated action, transparency, and long-term commitment. However, barriers such as fragmented governance, weak political will, and power dynamics between ministries often hinder effective implementation, even when strong policies and research exist. The perception that education, and by extension, school meals, should be free can also limit community buy-in and funding innovation. Despite these challenges, enablers such as clear school feeding policies, multi-sector coordination, and strategic partnerships with governments and development partners can mobilise diverse funding streams. Community contributions, both in cash and kind, alongside initiatives like school gardens, promote local ownership. Advocacy supported by impact data and return-on-investment evidence strengthens the case for sustained investment. Regional learning, alignment with broader strategies, and the use of digital tools for transparency and accountability further support efficient, equitable funding. Reduced taxation on child nutrition products and a shared mindset of responsibility across sectors are also key to building resilient, well-financed programs.

Links and cross-cutting issues – the overall picture

HGSF programs can be a holistic approach to school feeding and accelerate positive nutrition, health, educational, rural, agricultural, socio-economic and environmental outcomes. Substantial strategic investments do not only cover direct costs of providing meals to children but also help create positive ripple effects that are vital to unlock potential. Investment in school feeding, therefore, extends beyond the immediate nutritional benefits to fostering adoption of environmentally friendly practices and enhancing local economic development. Legal frameworks and policies relevant for HGSF programmes should incentivise desired outcomes.

Investment for positive multiplier effects

School feeding offers an opportunity to integrate a number of positive and reinforcing outcomes. To maximise benefits, synergies with other sectors, programmes and complementary interventions is crucial. For example, basic health interventions aiming to provide access to clean water, age- and gender-appropriate sanitation facilities and products as well as hygienic measures like handwashing with soap can enhance positive outcomes. Nutritional awareness and education reinforce HGSF efforts as it creates a learning environment for children about healthy eating habits. This environment enables school children to become agents of change in households and communities for hygiene and nutrition awareness. School feeding programmes can contribute to the transition towards more sustainable food systems that are aligned with the principles of environmental protection and social inclusion. Investments in training, infrastructure, and policy support can help smallholder farmers and other actors transition to more sustainable practices.

Figure 1 illustrates sector overlaps and tapestry of HGSF. In delivering meals to school children, schools undertake key activities like food preparation. Food procurement is closely linked to food supply from agrifood production. Multiplier outcomes are reinforced by complementary activities in the health and education sectors. The HGSF ecosystem should endeavour to meet sustainability parameters around energy use and climate resilience, as well as equity and social inclusion. While each sector has its own legal frameworks, these should align with HGSF policies and frameworks. Sustainable finance is required for effective functioning. Principles like private sector engagement, civil society engagement and community ownership, mutli-sector collaboration and institutional capacity development underpin all activities.

[53] Complementary or support initiatives refers to activities in sectors that may not be directly involved in the implementation of a specific HGSF program but are mutually reinforcing positive school feeding outcomes for children and local communities. For example, complementary health and nutrition initiatives could focus on school-based deworming, WASH (water, sanitation and hygiene) or micronutrient supplementation.

[54] FAO, IFAD, WFP and WHO, 2024.

[55] FAO, IFAD, WFP and WHO, 2024.

The enabling environment

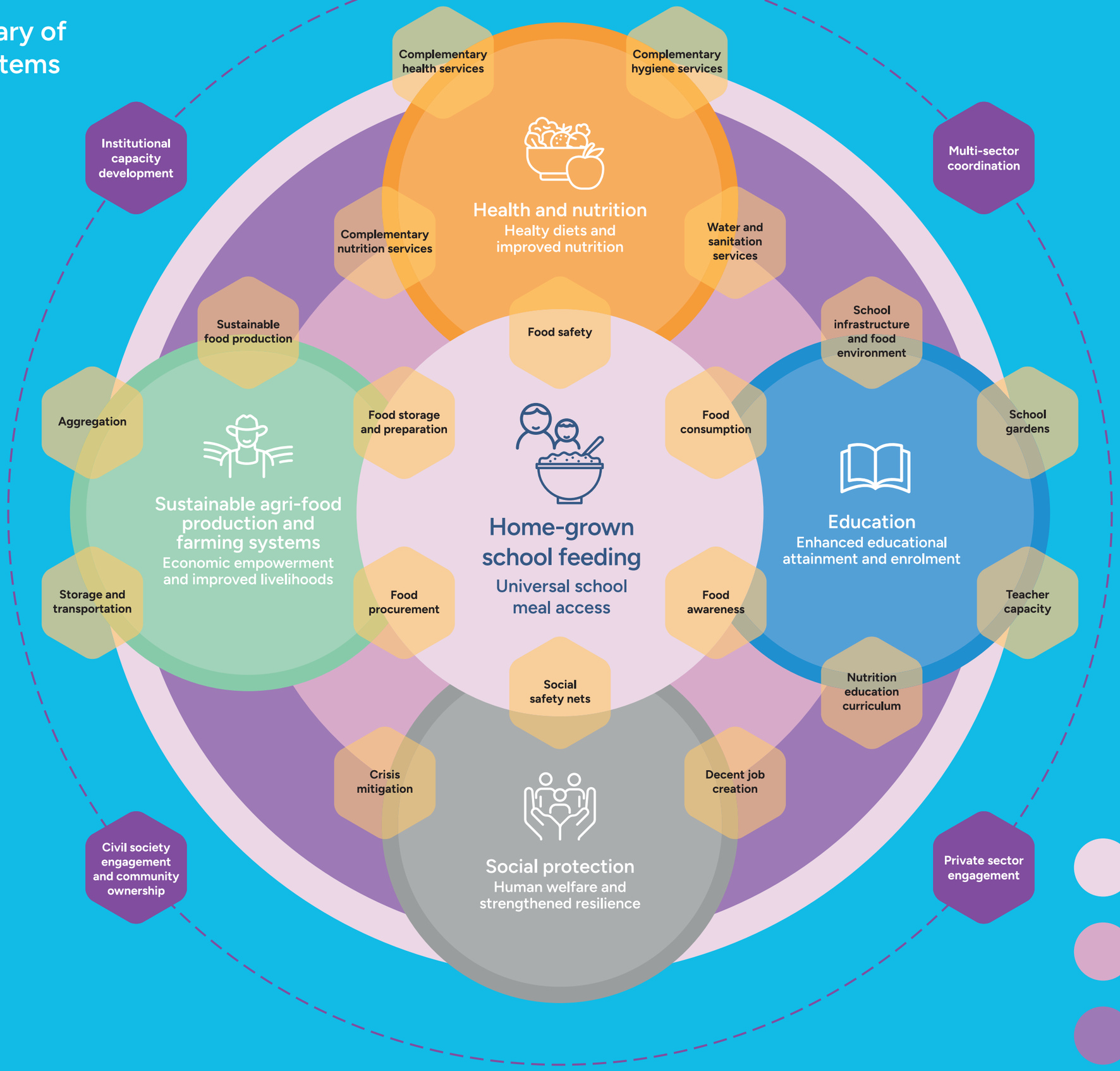
Appropriate policies and legal frameworks are critical to the success and sustainability HGSF programs. Inclusive procurement and operational policies that target sustainable smallholder food production and trade as well as the use of renewable energy support livelihood development and the well-being of the planet. Frameworks should also encourage environmentally sustainable, socially inclusive, and nutrition-sensitive practices, while ensuring quality and quantity standards are upheld. Alignment with national legal structures, complemented by engagement in regional trade frameworks and arrangements can strengthen supply chain resilience and affordability. For example, school feeding programs could spur regional free trade agreements for essential grains and other dry foods critical for school meals.

To maximise the multiplier benefits of HGSF, strong coordination between government ministries, including education, agriculture, health, and finance is essential, alongside collaborative engagement with development partners, civil society, and the private sector (see figure 1). Joint planning, design, and governance models at national and local levels are key to fostering shared ownership and accountability. Context-specific analyses are vital for selecting suitable implementation models, identifying entry points for collaboration, and adapting programs to different settings. For example, rural areas may face infrastructure or supply chain constraints that differ from urban environments, requiring tailored approaches. Community involvement at all stages – from planning to monitoring– is fundamental to ensuring local ownership, cultural relevance, and long-term sustainability.

Platforms for regional learning and South-South cooperation allow countries to exchange experiences and scale what works, while robust data systems are critical for evidence-based decision-making, monitoring progress, and optimising outcomes. In parallel, public-private partnerships (PPPs) can help unlock innovation and investment to improve program delivery and sustainability.

Regional Visioning Workshop on School Feeding insight: Shifting mindsets around homegrown school feeding requires more than good intentions, it demands informed advocacy, and investment in communication and infrastructure. Despite assumptions that parents, schools, and governments inherently prioritise children's nutrition and education, the reality often involves limited awareness, financial constraints, and competing priorities. Cultural beliefs, misinformation, and a short-term view can undermine support, while unclear guidelines and weak infrastructure leave schools ill-equipped to deliver meals. Yet, there is growing momentum. Behaviour change communication, supported by data-driven social research and evidence-based advocacy, plays a critical role in reshaping perceptions. Governments willing to engage, alongside networks of champions, media outreach, and visible role models, help internalise new norms. Collaborative action across government, funders, and multilateral partners can align production, sourcing, and school implementation. Incentives such as funding meals to boost enrolment, coupled with context-sensitive, human-centred approaches, further drive adoption. Ultimately, embedding school feeding in policy, ensuring consistent messaging, and demonstrating its development impact are key to sustaining behaviour change and transforming social attitudes.

Figure 1: Summary of overlapping systems



Emerging collaborative actions

An exploration of key dimensions for strengthening school feeding actions during the workshop converged around three main ideas given strong similarities and synergies.

Pitch 1: Supporting local production systems to supply safe nutritious food for school feeding programs in East Africa

Ensuring local production systems effectively supply safe and nutritious food for school meals requires coordinated action across stakeholders in East Africa. A joint (regional) strategy should focus on aligning production with school feeding needs, enhancing food safety, and building market incentives for local producers.

Key steps include:

- **Stakeholder mapping and engagement:** Establish a dedicated team to map all relevant actors within the school feeding system. This will identify who can address specific challenges and ensure their inclusion in decision-making and planning processes.

- **Prioritising nutritious foods for school meals:** Develop a clear list of priority foods suitable for school meals to guide local production. This will help align agricultural output with nutritional goals and create targeted incentives for farmers, positioning school feeding as an attractive and stable market. A regional strategy is also needed to balance supply and manage competition.

- **Clarifying the role of local producers:** There is a need to reassess assumptions around home-grown school feeding (HGSF). Does it exclusively imply sourcing from smallholder farmers? Are they resilient enough to meet school meal demands consistently? Including both smallholders and larger local producers may improve reliability and scale - what matters is that production remains local and inclusive.

- **Strengthening collaboration and food safety compliance:** Formalise partnerships through MOUs to improve coordination and food safety assurance. While standards exist, non-compliance remains an issue. This requires a deeper investigation into root causes beyond surface-level discussions. For instance, existing aggregation models have not yielded consistent results for school feeding. It's essential to explore why these models fall short and what systemic barriers are impeding local production from effectively serving school feeding programs.

Pitch 2: Strengthening the evidence base through data aggregation and collaboration

There is a wealth of data available on school feeding, but it remains fragmented. A key opportunity lies in **aggregating existing data resources** to identify both evidence gaps and priority areas for further research. One proposed solution is the creation of a **freely accessible dashboard** that compiles relevant data, literature, and impact assessments in one central location.

Companies such as Tetra Pak, which has a dedicated school feeding division, have expressed **willingness to contribute their datasets** to support this effort. In parallel, there is a growing consensus on the need to **scale up impact assessments** to better understand and communicate the effectiveness of school feeding programs.

To move this initiative forward, a **host organisation for the dashboard** must be identified. This platform would not only house aggregated data but also promote transparency, collaboration, and evidence-based decision-making. A follow-up meeting will be scheduled within the next two weeks to refine the collaboration framework, agree on next steps, and begin sharing available data to inform the dashboard's development.

Pitch 3: Envisioning what could a regional movement on school feeding movement look like

At the heart of any regional movement must be its benefit to school learners. While the Regional School Meals Coalition (RSMC) is viewed by some as the existing platform for advancing school feeding in the region, others see as of now, a lack of pluriformity in stakeholder engagement and insufficient clarity and communication on its agenda and operations. There is room for support, helping to strengthen these capacities.

A new regional movement should not duplicate but **rather complement the RSMC**, providing an inclusive, practitioner-driven platform for collaboration around three core pillars: **advocacy, access, and awareness.**

- *Advocacy* focuses on shaping regional school feeding strategies and influencing the RSMC's agenda.
- *Access* aims to increase the provision and consumption of nutritious meals, particularly through local, farm-to-school supply chains.
- *Awareness* involves knowledge-sharing on nutrition, sustainable financing, and monitoring progress toward learner-centered outcomes.

What would success look like? Success would mean shared learning, stronger networks, and clearly defined regional goals such as increasing the number of schools and children reached. Governments would be encouraged to commit publicly to these targets, supported by dedicated funding streams. Ultimately, success must be measured by improved nutritional and educational outcomes for learners. The impact on the child should remain the central metric.

How could a regional movement be organised?
The movement could take shape through quarterly, participant-led meetings, both virtual and in-person, to foster mentorship, co-learning, and strategic alignment. Ownership of the agenda by participants would be essential for ensuring relevance. Digital tools can enable cost-effective collaboration, while in-person engagements would help build trust and deepen relationships. Strategic support from partners such as the World Food Programme or the Rockefeller Foundation could strengthen this structure.

What is needed to make this movement happen?
A more structured approach to national school feeding is essential. At present, school feeding focal points often lack the mandate or resources to drive change. A formal dialogue with government officials could help institutionalise these roles and build accountability. However, no single actor can achieve this alone - institutional backing is key. Clear alignment between the RSMC and the new movement is also needed, including defined roles and mechanisms for collaboration. Practitioners, the private sector, and local actors must be engaged as active contributors, not just observers.

What gaps would the movement address?
This movement could bridge a crucial gap in grassroots and practitioner engagement, linking school feeding directly to curriculum, child-level outcomes, and national development goals. It would also offer practical benefits to participants: access to shared tools and data, visibility for promising models, opportunities for professional growth, and enhanced influence on policy. To be effective, the coordinating body must have both the mandate and convening power to unite stakeholders and drive collective progress. Above all, the movement must stay anchored in its core purpose: delivering nutritious meals to every child, every day, through a sustainable, locally driven system.

Figure 2: The six dimensions of SNV's systems transformation framework

Systems Transformation

What is it?

A fundamental shift in a system beyond the point of no return.
Smaller, incremental changes can lead to this shift that ultimately leads to a new way of working, a 'new normal'.

Policies: government, institutional and organisational rules, regulations and priorities.
Practices: activities of households, communities, institutions coalitions and networks.
Resource flows: how money, people, knowledge, information and other assets are distributed and allocated, alongside development of new inclusive markets.
Relationships and connections: quality of connections and communications among actors in the system.
Power dynamics: the distribution of decision-making power, authority, and influence among individuals and organisations.
Social norms, values and attitudes: beliefs, assumptions, and taken-for-granted ways of operating.

Conclusion

School feeding programs can be powerful tools for improved human capital development and integrated development. Well-nourished children learn better, face less exclusion and less dropouts thereby improving socio-economic outcomes. Collaborative efforts are required to unpack outstanding questions, develop tailored programmes and realise the full potential of HGSF.

1. What is needed to strengthen the policy environment for multiple synergetic HGSF benefits?
2. How can the opportunities for small holder farmer and food systems transformation best be promoted?
3. How can school feeding be better leverage for healthy well-nourished young generation
4. What is needed for an energy transition in school feeding?
5. What are the options for long-term financial sustainability?

Disclaimer: The views contained in this report do not necessarily reflect the views of SNV Netherlands Development Organisation.

SNV Impact that matters

SNV is a global development partner, deeply rooted in the countries where we work. We are driven by a vision of a better world: A world where across every society all people live with dignity and have equitable opportunities to thrive sustainably. To make this vision a reality, we need transformations in vital agri-food, energy, and water systems. SNV contributes by strengthening capacities and catalysing partnerships in these sectors. We help strengthen institutions and effective governance, reduce gender inequalities and barriers to social inclusion, and enable adaptation and mitigation to the climate and biodiversity crises.

Building on 60 years of experience we support our partners with our technical and process expertise and methodological rigour. We do this in more than 20 countries in Africa and Asia with a team of approximately 1,600 colleagues. By being adaptable and tailoring our approaches to these different contexts, we can contribute to impact at scale, helping to realise more equitable lives for all.

For more information,
contact: agri-food@snv.org

www.snv.org/sector/agri-food