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THE ROLE OF SOCIAL PROTECTION IN STRENGTHENING LOCAL FOOD SYSTEMS AND INCLUSIVE RURAL TRANSFORMATION

**A CASE STUDY OF THE KENYA HOME-GROWN
SCHOOL MEAL PROGRAMME**



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The views and summary analysis expressed in this report are based solely on those of the author and do not necessarily reflect those of stakeholders and partners associated with the Kenya Home-grown School Feeding Programme (HGSF).

Abbreviations and acronyms

ALV	African leafy vegetable
ASAL	arid and semi-arid lands
BOM	board of management
BFN	Biodiversity for Food and Nutrition
FAO	Food and Agriculture Organization of the United Nations
FNSP	Food and Nutrition Security Policy
g	gram
ha	hectare
kcal	kilocalorie
kg	kilogram
GDP	gross domestic product
HGSF	Home-grown School Feeding
HGSMP	Home-grown School Meal Programme
IAD	Institutional Analysis and Development framework
KES	Kenya shilling
MoA	Ministry of Agriculture, Livestock and Fisheries
MoE	Ministry of Education
MoH	Ministry of Health
NMK	Njaa Marufuku Kenya
PCD	Partnership for Child Development
SDG	Sustainable Development Goal
SMPC	School Meal Programme Committee
UN	United Nations
WFP	World Food Programme

Executive Summary

Home-grown school feeding (HGSF) programmes are a distinctive type of school feeding programme. They utilize the strategy of public food procurement in order to procure food from local smallholder farmers which is then provided to children through the schools they attend. These programmes have multiple objectives. Most often, the primary objective is to increase school enrolment and attendance, as well as complement children's food intake and thereby address hunger and malnutrition. In addition, when school feeding programmes are designed to be 'home-grown', they can also strengthen local food systems by encouraging local production and creating both on- and off-farm jobs across the school meal value chain. If particular attention is paid to procuring food from local smallholders, they can increase their income by providing a more favourable market channel characterized by more certainty around market access and the terms of exchange. Lastly, these programmes can also support climate-smart agriculture if complemented with the right agricultural inputs and services.

The Kenya Home-grown School Meal Programme (HGSMP) was launched by the Ministry of Education in 2009. However, school feeding has had a long history in Kenya, going back to 1980, when the programme was first initiated with the support of the World Food Programme (WFP). The WFP still plays an important role in terms of providing technical support to the Government of Kenya, even though all schools under the WFP school meals programme had been handed over to the government by 2018. The HGSMP is currently operational across 24 counties in Kenya's arid and semi-arid regions, which are characterized by high food insecurity and prevalence of malnutrition, as well as low school enrolment, attendance and completion rates. The stated objective is to provide at least one meal per school day to all children in pre-primary and primary schools. However, in 2020, the programme reached about 1.6 million children, or roughly 16 percent of primary school enrolled children, and provided meals for around 40 to 50 days per year. It is clear that the current budget of KES 1.8 billion is inadequate to supply all primary school children with one meal per school day.

The HGSMP has a strong policy and governance framework, with the Ministry of Education (MoE) as its lead implementing agency. Kenya's National School Meals and Nutrition Strategy, 2017-2022 was jointly published by three ministries: the MoE, the Ministry of Health (MoH) and the Ministry of Agriculture, Livestock and Fisheries (MoA). Although the Ministry of Labour and Social Development, which has the mandate of social protection, is not one of the publishers, the strategy is nonetheless aligned with the sectoral policies of education, health, social protection and agriculture. The strategy has the following three pillars:

1. Regular provision of meals every school day throughout the school year.

2. Acknowledgement of nutrition and nutrition education as core components of school meals.
3. Linking smallholder farmers to the demand for school meals by procuring directly from these suppliers where possible.

There are two main modalities for implementing the HGSMP: in-kind and cash transfers to schools. The rationale for adopting these modalities is based on the counties' agroecological conditions. The in-kind modality is implemented in arid counties with limited agricultural activities and long distances to reach markets. As food supply chains are not well integrated in these areas, the government, more specifically the Ministry of Education, undertakes procurement of food at the national or county level.

The food is then distributed to the subcounties and transported to schools for preparation. The cash transfer modality is implemented in semi-arid counties with relatively shorter distances to markets and relatively greater cultivation potential. Cash is disbursed to the schools and, thus, procurement is decentralized. Schools use the cash to buy school meal food commodities from local markets, and to then store the food, prepare and serve the meals, and maintain monitoring and accountability records.

The HGSMP in Kenya is promising in terms of its effects on food security, nutrition, school enrolment, economic well-being, environmental sustainability and community empowerment. However, this programme still faces a number of limitations. Support to smallholder farmers is critical for the successful implementation of the HGSMP. In fact, the proportion of food sourced directly from smallholder farmers is listed as an indicator with a target of 'at least 30 percent'. However, this target is merely an aspirational one. Programmatically, no set percentage is assigned for procurement from smallholders as opposed to traders and, unfortunately, the documents reviewed and interviews conducted did not shed light on the proportion of school meals nor the budget that was utilized for procuring directly from smallholders. The case study highlighted several hurdles that need to be overcome to increase the participation of smallholders. First, high transaction costs act as barriers for entry for smallholders as they struggle to meet the eligibility requirements for participating in the tendering system. Smallholders are required to hold a bank account, a business permit and registration, as well as several certifications, and need to demonstrate that they have been trading in food commodities for at least one year. Second, the programme rests on a competitive procurement process in which smallholders are at a disadvantage compared to traders in terms of business skills and financial requirements. This is especially problematic when it comes to the procedure of bundling different food items into one single tender floated by the school. When schools bundle all food items in one single contract, smallholders also need to bear the transaction costs of joining farmers groups and partnering with other businesses, especially to supply items such as salt and oil. Finally, low productivity and limited access to credit and other inputs, such as seeds and

fertilizers, is a constraint. In order for procurement to take place from smallholders, other agricultural support services are required so that they can be provided with access to productive inputs, and their access to financial services, such as credit, is facilitated. At the same time, their knowledge of improved production practices needs to be provided for and enhanced.

To realize the HGSMP's full potential and for it to yield multiple benefits, changes across three categories need to take place. First, the procurement process needs to be reformed in order to increase smallholder participation. Transaction costs need to be reduced by simplifying the procurement requirements. Not only should the number of registration requirements be reduced, but also the process and costs associated with these should be reduced for smallholders. Within the tendering process, specific mechanisms to give smallholders a competitive advantage should be emphasized and established. This can take the form of mandating that a certain quota of school purchases is to be allocated to smallholders. Additionally, on-time payments to suppliers, with clear and timely provision of information to schools, can help them plan better and help reduce costs. Unbundling the school meal basket into separate tenders can also increase smallholder participation. Additionally, a shift towards a more decentralized model which allows for more flexibility, by allowing food alternatives or variants of those specified in the school meal basket, i.e. focusing not on crop varieties, but instead on food groups, nutrient content and nutritional requirements, can not only increase smallholder participation. but also yield nutritional and environmental benefits. The move could also strengthen community ownership.

Second, increased funding for the HGSMP is required to ensure that all children in pre-primary and primary schools receive at least one nutritious meal per school day, as envisaged by the programme's strategy. A cost-benefit analysis showed that these programmes can generate benefits (across multiple sectors) of up to USD 9 for every USD 1 invested (WFP, 2020). The problem with programmes like the HGSF is that they are allocated funding within only one ministry, which has the mandate of improving outcomes in only one sector/dimension. This means that welfare enhancing outcomes in other sectors do not enter their cost-benefit analysis. The challenge lies in securing adequate funding for programmes that yield multiple benefits across different sectors with potentially very high returns. Evidence indicates that expenditure on the HGSMP is an investment with potentially high payoffs.

Finally, there is a need for increased strategic and structural investment. The HGSMP relies on an institutional, policy and programmatic environment; it does not exist in isolation and other processes and programmes already in place must be strengthened to create the enabling environment for the HGSMP to succeed. An integrated approach, and the role of partner ministries in improving the outcomes of inclusivity and sustainability, are essential. While the MoE implements the HGSMP and has the mandate to procure and distribute food, it is considered the MoA's mandate to ensure food availability. However, the MoA receives no separate budget for carrying out its functions

under the HGSMP, which are assumed to be part of its normal functioning within its overall mandate. While this is true, given that there is a need to integrate smallholders into the procurement process, a case can be made for considering both strategic investment in complementary interventions as well as structural investment. Examples of such investments include the development of national HGSMP standards and guidelines for the officers and county-level management of the Ministry of Agriculture to follow. Another important aspect that requires attention is the strengthening of the HGSMP's monitoring and evaluation system. While the MoE tracks schooling and nutrition indicators for children, indicators that track the participation of smallholders are currently lacking. At this time, there is no electronic system in place that captures the quantity and the profile of smallholders that have participated in the procurement process. Schools may have this information at their level, but there does not exist a database that can be utilized for planning purposes at the county or national level. In addition, a concerted effort to arrive at an agreed definition of who is a 'smallholder' and what is considered 'local' is quite crucial. In Kenya, there is currently a lack of consensus on a precise definition of a 'smallholder farmer', with different studies and organizations using different farm size ranges to categorize smallholders. The potential linking of MoE data with the single registry, being developed by the Department of Social Protection and the forthcoming national farmers' registry, would allow overlapping targeting between different programmes and effective monitoring.

1. Introduction

This case study was carried out in the context of the Food Systems Summit, convened in New York on 23 September 2021 by the United Nations Secretary-General António Guterres, as part of the Decade of Action to achieve the Sustainable Development Goals (SDGs) by 2030. It is one of four case studies undertaken as part of a joint research project of the Food and Agricultural Organization of the United Nations (FAO) and the Department of Science and Innovation–National Research Foundation Centre of Excellence in Food Security (DSI–NRF Centre of Excellence in Food Security (CoE–FS)) at the University of the Western Cape, Cape Town, South Africa. The purpose of the case studies is to illustrate how social protection programmes interact with agrifood systems, and highlight their potential contributions to increasing the inclusiveness and sustainability of agrifood systems. The intention is to provide social protection practitioners with a food systems perspective in their approach to social protection, and in the design and implementation of programmes and policies. It emphasizes a systems approach that builds on synergies and takes trade-offs into account.

This document focuses on Kenya’s national Home-grown School Meal Programme (HGSMMP). At the Food Systems Summit, home-grown school feeding (HGSF) programmes were considered to represent a ‘game changer’ for strengthening local food systems globally, through the multiple benefits offered by their pathways. Indeed, HGSF programmes are distinctive types of school feeding programmes that utilize the strategy of public food procurement for procuring food from local smallholder farmers, which is then provided to children through the schools they attend. The Home-grown School Feeding Resource Framework defines HGSF as follows: “Home-Grown School Feeding constitutes a school feeding model that is designed to provide children in schools with safe, diverse, and nutritious food, sourced locally from smallholders” (FAO and WFP, 2018, p.6). Public food procurement consists of “initiatives that aim to provide a market channel to smallholder farmers by removing key barriers to entry in public food procurement markets” (FAO, 2018, p.5).

School feeding programmes have multiple objectives, which include reducing hunger and malnutrition, and increasing school enrolment and attendance. When the programme concept is expanded to incorporate procurement from local smallholder farmers, it also serves to increase farmers’ incomes and to stimulate local agricultural growth by providing a more favourable market channel, characterized by more certainty around market access and the terms of exchange (FAO, 2018). This, in turn, can strengthen local food systems and shorten food supply chains by encouraging local production, thus creating local jobs across the school meal value chain, augmenting farmers’ and post-farm-gate incomes, and improving consumption of local foodstuffs by schoolchildren. The impacts of HGSF programmes have the potential to be multisectoral, spanning across education, health and nutrition, social protection and

agriculture. As per a cost-benefit analysis conducted using a sample of school feeding programmes covering around 200 million children in 14 countries across Latin America, South Asia and sub-Saharan Africa, these programmes can generate benefits (across multiple sectors) of up to USD 9 for every USD 1 invested (WFP, 2020).

School feeding programmes are also one of the most ubiquitous social assistance programmes, in terms of the numbers of implementing countries (over 90) and of children reached. Prior to the COVID-19 pandemic, around 388 million children globally benefited from school feeding programmes. Within the African continent, 39 countries currently implement school feeding programmes, of which 21, or over 50 percent, are HGSF programmes (WFP, 2020).

The methodology employed for the case study presented here was a desk-based review of key programmatic and sectoral documents, and key informant interviews of representatives of four main stakeholders – the Ministry of Education; the Ministry of Agriculture, Livestock and Fisheries; the Ministry of Labour and Social Protection; and the World Food Programme (WFP). The interviews were carried out online and lasted about one hour each. This case study does not purport to detail the food system or social protection system in Kenya. Rather, it intends to describe the design and implementation of the HGSMP, identify its entry points into the local agrifood system, and illustrate its potential contributions to the building of a more inclusive food system. Section 2 provides a brief description of the country context within which the programme is implemented. Section 3 describes the programme and its key features. Section 4 sets out the conceptual framework and pathways through which an HGSF programme interacts with a food system and can potentially meet multiple objectives. Section 5 analyses the design and implementation of the HGSMP, with a focus on three specific outcomes: economic inclusion, environmental sustainability and local community-level impacts. Section 6 identifies the strengths, constraints and opportunities of the HGSMP, while Section 7 provides a series of conclusions.

2. Kenya: country context

Kenya is a lower middle-income country located in eastern Africa. As per the World Bank's World Development Indicators database, Kenya's population in 2020 stood at 53.8 million, with a per capita gross domestic product (GDP) of USD 1 838. Over 37 percent of the population is estimated to be below the poverty line of USD 1.90 a day. Almost two-thirds of the population (72 percent) reside in rural areas. Agriculture, forestry and fishing contribute about 35 percent of GDP, while the sector provides employment to more than half the population, at 54 percent. This percentage is much higher in rural areas, where agriculture is the main employer.

A majority of farmers can be considered smallholders, although there is no consensus on the precise definition of 'smallholder farmer'.¹ A study conducted by Rapsomanikis (2015),² defined smallholder farm size as below 1.2 hectares (ha) and found the typical smallholder farm size to be 0.47 ha. Most of what these farms produce is retained for in-household consumption, and they sell less than a quarter of their produce on the market. However, according to the Kenya National Bureau of Statistics (2018), 'small farms' range from 0.2 ha to 12 ha and account for about 73 percent of Kenya's marketed agricultural crop. A maize-mix farming system exists, wherein maize makes up more than half of the smallholders' production. The rest consists of beans, potatoes, sorghum, millet, cassava and vegetables (Rapsomanikis, 2015).

As per the estimates for 2020, about one in five children under five years of age in Kenya experience stunting (FAO *et al.*, 2021). The Cost of Hunger in Africa study (COHA Kenya National Implementation Team, 2019) estimated that KES 373.9 billion (about USD 4.2 billion, according to the prevailing exchange rate in 2014), equivalent to 6.9 percent of Kenya's GDP, was lost in 2014 because of the social and economic impact of child undernutrition. This figure took into account the educational costs resulting from grade repetition, health costs and productivity-related losses. In terms of the total population, about one in four people in Kenya are undernourished, and the prevalence of severe food insecurity in the population has increased from 17.3 percent in 2014–2016 to 25.7 percent in 2018–2020, or 13.5 million people in terms of absolute numbers (FAO *et al.*, 2021). The food insecurity and nutrition situation is particularly challenging in the arid and semi-arid regions of the country, which make up 80 percent of the total land area (WFP, 2021). Between 2020 and 2021, the number of severely food-insecure people rose,

1 Different studies and organizations use different farm size ranges to categorize smallholders. Estimating the number of smallholder farmers in Kenya is difficult because Kenya has never conducted an agricultural census. For a discussion on the definition and number of smallholder farmers in Kenya, see Kisika (2019).

2 In the study conducted by Rapsomanikis (2015), smallholders in Kenya were defined utilizing the median-sized farm as a threshold, determined by ordering farms from smallest to largest. This means that half of the total land is cultivated by smallholders (those below the threshold), and the other half by other farmers. The median farm size in the study was 1.2 ha.

because of disruptions in seasonal rainfall, reduction in off-farm income-earning opportunities caused by COVID-19-related measures, and locust-induced pasture losses (IPC, 2021).

As per the estimates for 2015, provided in the World Bank's World Development Indicators database, only 34.5 percent of those in the poorest quintile had access to social safety-net programmes. To address these food insecurity and nutrition challenges, investment in social protection policies that build the resilience of local populations and strengthen local food systems is imperative. Kenya invests about percent of its GDP in social protection (State Department for Social Protection, 2017). The social protection sector in Kenya consists of policies that aim to address risks across a person's lifecycle. The policies are implemented across three categories:

1. Social assistance, which includes all non-contributory programmes, such as direct cash transfers and school feeding. The two largest programmes in terms of both coverage and budget are the Cash Transfer for Orphans and Vulnerable Children and the Older Person Cash Transfer, with more than 300 000 beneficiary households each.
2. Contributory social security programmes, which consist of the National Social Security Fund and the Civil Service Pensions Scheme.
- 3 The National Health Insurance Fund (NHIF).

Annex 1 of this case study provides a visual snapshot of the main social protection programmes in the country, along with the proportion of GDP spent on each. School feeding accounts for 0.02 percent of GDP. The Ministry of Labour and Social Protection is the main ministry responsible for building and strengthening Kenya's social protection system. The Ministry of Health and the Ministry of Education, respectively, implement two important programmes within the social protection sector: the NHIF and the HGSMF.

3. The Kenya Home-grown School Meal Programme

3.1 Evolution

In Kenya, the Home-grown School Feeding Programme (HGSF) was launched in 1980, with the support of WFP. At that time, the programme covered between 220 000 and 240 000 primary school children. The programme received a major boost in 2003, when the Government of Kenya made primary education free and compulsory. By 2007, with the support of WFP, the programme was reaching 1.2 million children across 3 847 primary schools. By 2008–2009, the coverage gradually increased to 1.5 million children. In 2009, the Ministry of Education launched the HGSMP as it stands today, with the intention of gradually transitioning school feeding from WFP to government ownership and implementation. In the first stage, funding and programmatic implementation for 538 000 schoolchildren in 1 777 primary schools were transferred to the Government of Kenya's HGSMP. About 50 000 children were to be transitioned annually from WFP's school feeding programme to the Government's HGSMP (Gituara and Yard, 2016). As a result, the proportion of children supported by the government, as opposed to WFP, and the number of counties transitioning to the HGSMP, steadily increased. By 2014, all semi-arid counties had transitioned to the HGSMP. In 2017, arid counties such as Isiolo, Samburu, Tana River and Marsabit also started transitioning to the HGSMP (Ochola, 2020). By June 2018, all schools under the WFP school meals programme had been transferred to the government (WFP, 2018c). However, WFP continues to provide the government with technical support.

3.2 Coverage

The HGSMP aims to target schools in food-insecure areas with low enrolment, attendance and completion rates and a high prevalence of malnutrition. It covers all primary schools in arid counties, and some counties in semi-arid counties. As of October 2021, it was operational across 24 out of 47 counties in Kenya.

In 2020, the programme reached about 1.6 million children. This is approximately the same number of children reached as in 2016/2017 and in 2018/2019. However, the budget has been contracting, implying that the government has had to reach the same number of children with a lower budget. The State Department for Early Learning

Table 1. Coverage and budget of Kenya’s Home-grown School Meal Programme

Year	Primary school children reached	Budget (KES)
2016/2017*	1.61 million	2.4 billion
2017/2018*	1.62 million	2.5 billion
2018/2019*	1.62 million	1.9 billion
2020†	1.6 million	1.95 billion
2021/2022**		1.8 billion (estimated)

Sources:

- * National Treasury. 2020. *Programme Based Budget of the National Government of Kenya for the Year Ending 30th June 2021*. Nairobi, Kenya. [PBB_July2021_Approved.pdf \(treasury.go.ke\)](https://www.treasury.go.ke/PBB_July2021_Approved.pdf);
- † Ouko, B. 2020 Kenya National Home-grown School Meals Programme. Conference presentation at Hybrid Learning Route on Successful Practices and Tools to design, implement and monitor HGSF Programmes. Lessons from Kenya. 7–12 December 2020. Rome. Virtual Experience Fair hosted by FAO and Procasur;
- ** National Treasury, 2021. *Budget Statement FY 2021/22: Building back better. Strategy for resilient and sustainable economic recovery and inclusive growth*. Nairobi, Kenya. <https://www.treasury.go.ke/wp-content/uploads/2021/06/FY-2021-22-Budget-Statement.pdf>

and Basic Education received about KES 2.4 billion (about USD 24 million) in 2016/2017.³ This decreased to about KES 1.9 billion (about USD 19 million) in 2018/2019. The budget statement of 2020/2021 shows that expenditure on the school feeding programme has further decreased, to KES 1.8 billion (National Treasury, 2021).

The insufficient funding also implies that there is a trade-off of scale versus depth, in terms of either increasing the number of counties and schools the programme expands to or making the programme more comprehensive in the schools where it is already functioning. The 2017 Kenya Social Protection Sector Review Report noted that while the WFP, in its implementation, offered children meals on 195 days per year, the Government of Kenya’s HGSMP offers meals for 40 to 50 days per year (Ministry of Labour and Social Protection, 2017). The HGSMP’s overall budget needs to be increased to be able to cover greater numbers of schools, children and meals. The National School Meals and Nutrition Strategy 2017–2022 states that the objective is to ensure that all children in pre-primary and primary schools receive at least one nutritious meal per school day. Overall, Kenya had about 10.1 million primary school enrolments in 2019 (Ministry of Education, 2019). Thus, the HGSMP covers about 16 percent of children enrolled in primary school. If the coverage of the HGSMP has to increase by over six times, from the current 16 percent to nearly 100 percent of primary school children, then the budget would also need to increase correspondingly by over six times to KES 11.3 billion, assuming prices and per unit costs remain constant.⁴

3 Using an estimated exchange rate of USD 1 = KES 100 for the years referenced.

4 This is a simplistic assumption because the unit cost per child will vary depending on the degree of the region’s remoteness.

3.3 The Home-grown School Meal Programme food ration

The lunch or midday meal provided under the HGSMP is often the first meal of the day for most children (WFP, 2018b). The HGSMP intends to provide one-third of the daily energy kilocalories (kcal) required for a growing child, which amounts to about 706 kcal, 23 grams (g) of proteins, and 11 g of fat per pupil per day (Odhiambo, 2020). Table 2 provides details on the contents of the HGSMP meal basket. Food procurement occurs on a termly basis and the termly food requirement is calculated as: number of children enrolled in the school by ration per child per number of days in school (Ouko, 2020).

Parents are encouraged to complement the food basket with fruits and vegetables. For children aged four and five years, they are also expected to provide a mid-morning snack (porridge) consisting of 40 g of a corn soya blend of flour per child per day. Where possible, micronutrient powders are added to cooked school meals before serving. The school meal basket contains two fortified commodities: vitamin A fortified vegetable oil and iodized salt. In addition, the Division of Nutrition and Dietetics within the Ministry of Health has developed a school meals menu guide that includes suggestions for nutritious meals to complement the HGSMP food ration, guides school personnel in preparing meals and promotes the utilization of locally available food commodities (Odhiambo, 2020).

Table 2. The Home-grown School Meal Programme food basket

	Commodities	Rations for children aged 4 and 5 years (g per child per day)	Ration for children aged 6 to 13 years (g per child per day)
1	Cereals (maize, rice, sorghum, millet, etc.)	100	150
2	Pulses (beans, pigeon peas, cowpeas, soya beans, etc.)	20	40
3	Vegetable oil	5	5
4	Iodized salt	2	2

Source:

Odhiambo, L.A. 2020. Nutritional Aspects of Home-Grown School Meals Program. Conference presentation at Hybrid Learning Route on Successful Practices and Tools to Design, Implement and Monitor HGSF Programmes. Lessons from Kenya, 7–12 December 2020. Rome. Virtual Experience Fair hosted by FAO And Procasur.

3.4 Policy and institutional framework

In Kenya, the policy and governance framework for the HGSMP is well articulated, consisting of a set of legislative statutes, intersectoral policies, and strategy and guidance documents. A list of these components is provided in Annex 2 to this publication. The successive development of these components demonstrates the political will behind the HGSMP. Of the component documents, the most important is the National School Meals and Nutrition Strategy 2017–2022,⁵ which is jointly published by three ministries: the Ministry of Education, the Ministry of Health and the Ministry of Agriculture, Livestock and Fisheries. The Ministry of Education is the lead ministry, and the strategy document was developed by its School Health, Nutrition and Meals Coordination Unit, with inputs from partnering ministries, counties, subcounties, schools and other development partners. The strategy is aligned to sectoral policies for education, health, social protection and agriculture. It also recognizes the role of non-governmental organizations, the private sector, academia and research institutions, and development partners.⁶ The WFP has been a critical development partner in providing technical support on programme design and policy development, capacity-strengthening initiatives at multiple levels of the government, and joint and regular monitoring of the HGSMP.

The strategy is based on three pillars and six strategic objectives. The three pillars are:

1. regular provision of meals every school day throughout the school year;
2. acknowledgement of nutrition and nutrition education as core components of school meals; and
3. linking smallholder farmers with the demand for school meals by procuring directly from these suppliers, where possible.

The six strategic objectives are to:

1. increase awareness and intake of adequate, locally available and nutritious foods among schoolchildren and their communities;
2. improve the enrolment, attendance, retention, completion and learning of schoolchildren with equity;

5 Note that the National School Meals and Nutrition Strategy uses the nomenclature “National School Meals and Nutrition Programme” and “Home-grown School Meal Programme (HGSMP)” interchangeably.

6 The private sector and non-governmental organizations are recognized for their investments in food storage infrastructure, kitchens and water access. Academic and research institutions undertake research on the nutrition value of crops, crop quality improvement and standards, supply chain analyses and evaluation, and evidence generation relating to different aspects of programme implementation. Development partners provide technical support on all aspects of the HGSMP and policy, in partnership with the government and civil society.

3. promote local and inclusive development;
4. develop and implement a sustainable national school meals and nutrition programme;
5. promote partnerships and multisectoral coordination for complementary support and effective implementation of the school meals and nutrition programme; and
6. strengthen governance and accountability in implementation of the school meals and nutrition programme.

The National School Meals and Nutrition Strategy 2017–2022 also establishes the intersectoral coordination framework for the implementation of the HGSM (see Annex 3 of this case study). The framework clearly defines roles and responsibilities across the different ministries and units involved. At the national level, the School Health, Nutrition and Meals Unit of the Ministry of Education convenes and chairs the inter-ministerial committee, which plays the coordinating role between partners. These are: the Ministry of Health (co-Chair); the Ministry of Agriculture, Livestock, and Fisheries; the Ministry of East African Community, Labour and Social Protection; the Treasury; county representatives; and development partners. The responsibilities of the inter-ministerial committee include formulation of policy and guidelines; information sharing; budget preparation and disbursements; capacity development; resource mobilization; oversight of school meal and nutrition interventions countrywide; planning; and monitoring and evaluation. While the Ministry of Education has the responsibility to prepare the national budget and source finances for the HGSM, the Ministry of Health and Ministry of Agriculture are expected to complement the programme budget. As per the key informant interviews, the committee meets on a quarterly basis. Inter-ministerial committees also sit at the county and subcounty levels. Their responsibilities include defining the role of the school committees, providing complementary budgets for school meals, and monitoring programme implementation and adherence to quality assurance and standards.

At the school level, School Meal Programme Committees (SMPs), sitting within schools' boards of management (BOMs), have the overall responsibility of managing the school meals programme. This includes: the preparation of procurement plans; advertising and evaluating tenders; record keeping and reporting to the Ministry of Education and other stakeholders; inspecting food supplies; advocacy and fundraising; and mobilization of parents. The SMP chairperson reports to the school BOM. The headteacher performs a prominent role in the SMP by participating in procurement decision-making and ensuring proper storage and stock management. The local community – comprising parents, farmers, traders, local leaders and other citizens – also plays a part in managing storage, kitchen and sanitation facilities; providing firewood, cooking and serving utensils; providing funds to pay cooks and security services; supplementing school meals with vegetables from kitchen and school gardens; and contributing food, should the food run out before the end of the school term (Ochola, 2020).

Promotion of and support to smallholder farmers and capacity development in general are identified as key for the successful implementation of the HGSMF. It is expected that the agricultural sector will develop the capacities of smallholders for food production and “will offer complimentary support to school meals through financial and technical advice on farming initiatives as well as on how to diversify meals by incorporating varieties of tubers, vegetables, pulses and cereals” (National School Meals and Nutrition Strategy 2017–2022, p. 36). Further, the strategy emphasizes that: “Training for smallholder farmers on diverse issues must be a continuous effort led by the agriculture sector of both national and county governments. Training and extension must address capacity development, support for creation and development of cooperatives and associations, access to inputs such as credit, facilities, technologies and seeds, and support on production planning, marketing and access to markets. The education and health sectors must cooperate in the efforts for comprehensive planning of required training for smallholder farmers and procurement of food for schools” (National School Meals and Nutrition Strategy 2017–2022, p. 23). The strategy also lists the following complementary actions that must be undertaken to procure local produce from smallholder farmers to harness the maximum potential of the HGSMF (National School Meals and Nutrition Strategy 2017–2022, p.29):

- technical support for smallholder farmers for production, management and access to structured markets;
- targeted access to financing, seeds, inputs and technology; and
- support to access markets such as provision of other public procurement opportunities besides school meals.

4. Entry points of home-grown school feeding programmes within the local food system

This section illustrates the entry points of HGSF programmes within the local food system. Figure 1 presents a simplified and modified version of the widely used Institutional Analysis and Development (IAD) framework designed by Elinor Ostrom and colleagues (Ostrom, 2009), and the food systems conceptual framework provided by the High Level Panel of Experts on Food Security and Nutrition (HLPE, 2017).

Social scientists have used the IAD framework to understand the institutional arrangements through which individual and collective choices occur, and how and why changes in those arrangements take place over time. The IAD framework provides a general language for describing how a set of contextual factors (rules,⁷ physical and material conditions, and attributes of a community) affect the structure of action arenas (social spaces where actors with diverse preferences interact, strategize, exchange goods, services and information, solve problems, dominate one another, or fight); the incentives that actors face; and the resulting outcomes. The outcomes feed back into the action situations and actors, and may transform both over time. The outcomes may also slowly affect some contextual variables. The IAD framework has been applied for decades to settings of human–environment interactions, in order to understand the complexity that underlies them. As such, it can be utilized to understand the dynamics of food systems and identify mechanisms that lead to their sustainable management.

The HLPE framework identifies five main categories of drivers of food system changes: biophysical and environmental; innovation, technology and infrastructure; political and economic; sociocultural; and demographic drivers. The framework provided in Figure 1 groups the latter three into a single category – socioeconomic conditions – and adds rules (including institutional arrangements) as an explicit driver, borrowing from the IAD framework. The HLPE then focuses on three core constituent elements of food systems: food supply chains, food environments and consumer behaviour, all of which can be considered together as the action arena in the IAD framework.

7 In the IAD framework, there are seven categories of rules: position, boundary, scope, authority, information, aggregation and payoff. Each of these can be used to analyse particular settings.

The bottom panel of Figure 1 displays the entry points, or nodes of interaction, of the HGSF programmes with their local food system. A useful way to think about the framework is to envisage HGSF programmes as a specific type of ‘action arena’ where actors respond to the incentives they face within the boundaries or constraints set by their particular context. The rules that a specific type of a HGSF programme establishes, its institutional arrangements and the incentives it creates, affect each element of the food system, from supply chains to food and consumer behaviour. For example, the production support offered to smallholders, the procurement process (with its incumbent effect on the competitiveness of smallholders and the transaction costs required to participate in the procurement process) and the design of the school meal basket all shape the school meal value chain. In turn, this value chain, in combination with the rules for selecting suppliers and food quality and safety rules, determine physical and economic access to food. The school meal value chain and the food environment determine consumer behaviour, where the consumers are both schoolchildren and the local smallholders that produce the food supplied.

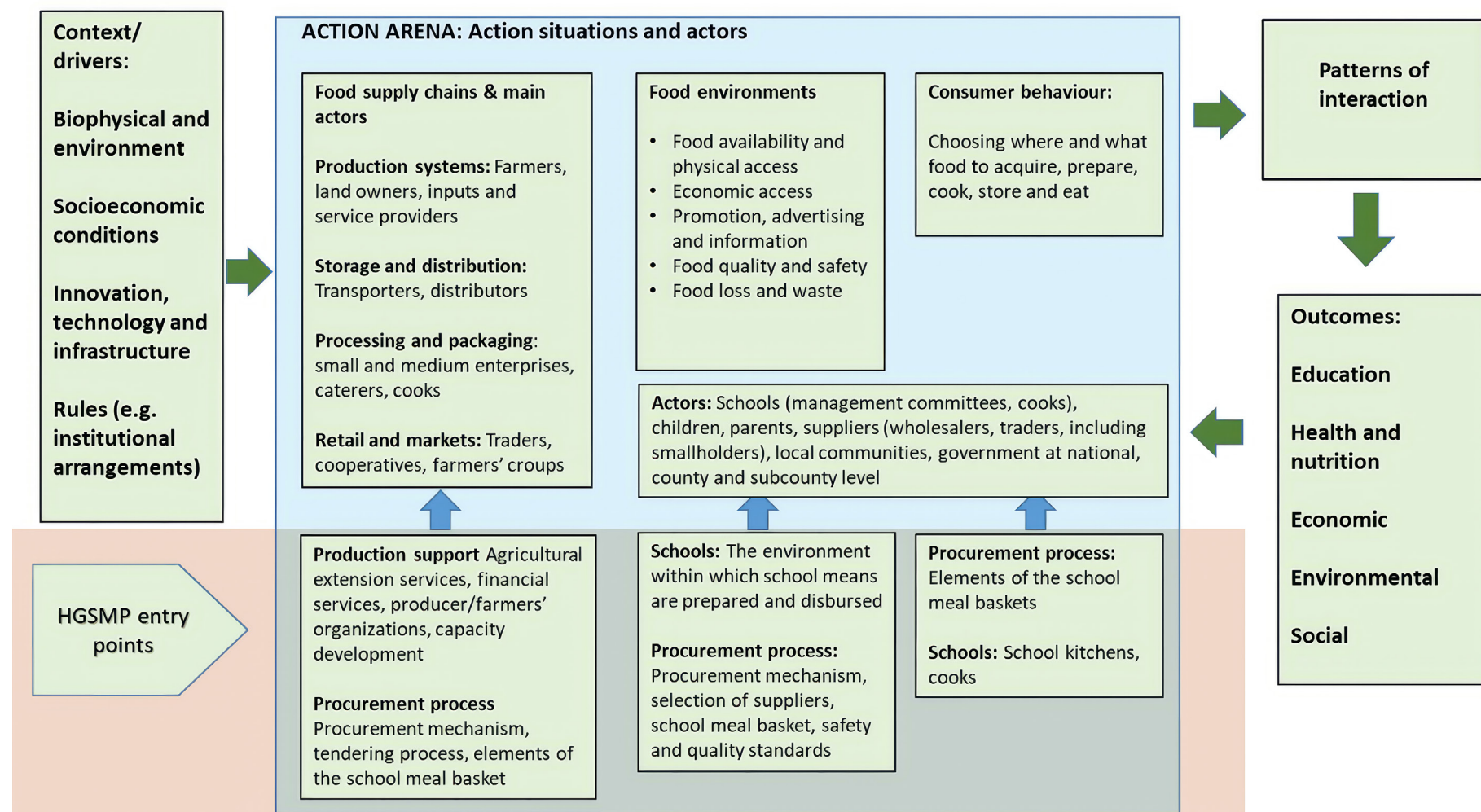
Figure 1 lists the multiple outcomes resulting from the interactions that take place within the action arena. The literature describing the pathways of impact has been well captured in previous studies focusing on best practices for public food procurement (Miranda, 2018; FAO, 2018); the reader is referred to these for a more detailed theory of change for how public food procurement can address each outcome. In this case study, a brief summary is provided, also noting that from the perspective of programme designers, these outcomes manifest as objectives.

Typically, the primary objective of HGSF programmes is to increase enrolment, attendance and retention rates by attracting children to school, including girls. Reduced hunger also leads to better concentration and can lead to an impact on completion rates.

Second, school meals can contribute to the health and nutrition status of children through increased calorie intake and promotion of healthy eating habits, with a preference for fresh locally available food. This can occur when school meal baskets are composed of local fresh foodstuffs and are combined with nutrition-sensitive activities, such as nutrition education within schools, including school gardens. Also, combining the HGSF programme with health initiatives can potentially supply a diverse diet and complement the intake of vitamin A and iron.

Third, by linking school meals with local supply, HGSF programmes can create market opportunities for local farmers, if barriers to entry are removed. This can enable farmers to undertake investments and increase their income. When the procurement involves local farmers that are smallholders, this can lead to poverty reduction. Further, an increase in production and sale at the local level can give rise to spillover or ripple effects, creating jobs across the supply chain (such as for traders, transporters, caterers and cooks), including for women. This leads to a multiplier effect on the local economy, leading to local economic development.

Figure 1. Conceptual framework for analysing how social protection programmes, such as home-grown school feeding programmes, interact with local food systems



Source:

Adapted from HLPE. (High Level Panel of Experts). 2017. Nutrition and food systems. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. HLPE Report 12. Rome, FAO. fao.org/3/a-i7846e.pdf; and Ostrom, E. 2009. Understanding Institutional Diversity. Princeton, USA, Princeton University Press.

Fourth, these programmes can also be part of a strategy to respond to challenges related to climate change. They shorten supply chains, which reduces transportation emissions; and if complemented with the appropriate agricultural inputs and services, they can also support climate-smart agriculture. For example, in certain subcounties, the HGSMP has acted as a catalyst for promoting agroecological approaches to producing local food crops, such as African leafy vegetables (ALVs), and increasing biodiversity.

Finally, the institutional requirements for implementing these complex programmes can lead to strengthened capacity at the community level. For example, meetings between school officers, parents and farmers (who are also parents of the children attending the schools) concerning school gardens, nutrition education and other such complementary activities, reinforces community cohesion and increases engagement and ownership among community members. Similarly, in order to participate in the tendering process, smallholder farmers must form producer and marketing groups to be able to supply the required quantities. They also need to establish systems for adhering to the quality and safety standards required for procurement. In this way, an HGSF programme can act as an impetus to strengthening linkages between different community actors, building institutions at the local level and increasing the resilience of communities. However, it can also be argued that these are contextual factors that are prerequisites for the success of an HGSF programme. The key aspect is to acknowledge that outcomes and contextual factors interact. The HGSF programme can generate outcomes that over time, are able to slowly transform action situations and change the context within which the programme is operating.

5. The specific case of the Home-grown School Meal Programme

This section investigates the entry points and pathways outlined in the previous section with specific regard to the HGSMP. Past evaluations (Otsola and Dunn, 2017) have found that the HGSMP is associated with an increase in enrolment, attendance and student attentiveness in class because of reduction of short-term hunger. It was found that only half of the surveyed children ate a meal at home before coming to school (Otsola and Dunn, 2017). Despite increases in attendance, learning outcomes did not show improvement. However, another evaluation (WFP, 2018b) found increases in numeracy and literacy in some schools where the HGSMP was implemented. It also found some evidence on school meals contributing to acceptable consumption scores, although there was no direct evidence on improving nutrition outcomes, such as improved diet diversity or reducing micronutrient deficiency. For the purposes of this case study, the focus was on three outcomes: economic inclusion, environmental sustainability and local community- level impacts.

5.1 Economic inclusion: linking procurement with smallholders

As mentioned, the HGSMP targets counties with high food insecurity. As seen in Figure 2, there are two main modalities for implementing the HGSMP: in-kind and cash transfers to schools. The rationale for adopting these modalities is a function of the counties' agroecological conditions. The light green region, where the in-kind modality is adopted, depicts the arid north of the country.⁸ This area of the country is relatively more underdeveloped, with severe living conditions and proneness to drought, which makes agricultural livelihoods more difficult. The darker green depicts the semi-arid counties where the cash modality is in place. Together, both arid and semi-arid lands (ASALs) make up 80 percent of the country's land area, with limited agricultural cultivation potential and more suitable for pastoralism. They account for 60 percent of total livestock in Kenya, and produce over 50 percent of the meat consumed in the country (the Kenya Agri-Nutrition Implementation Strategy 2020–2025). While it was not possible to verify the proportion of the budget dedicated to each modality from budget

8 The in-kind modality operates in eight counties: Garissa, Isiolo, Mandera, Marsabit, Samburu, Tana River, Turkana and Wajir. The cash modality operates in Elgeyo Marakwet, Embu, Kajiado, Kilifi, Kitui, Kwale, Laikipia, Machakos, Makueni, Narok, Nyeri, Taita Taveta and Tharaka Nithi. The counties of Baringo and West Pokot have both modalities operating across its subcounties.

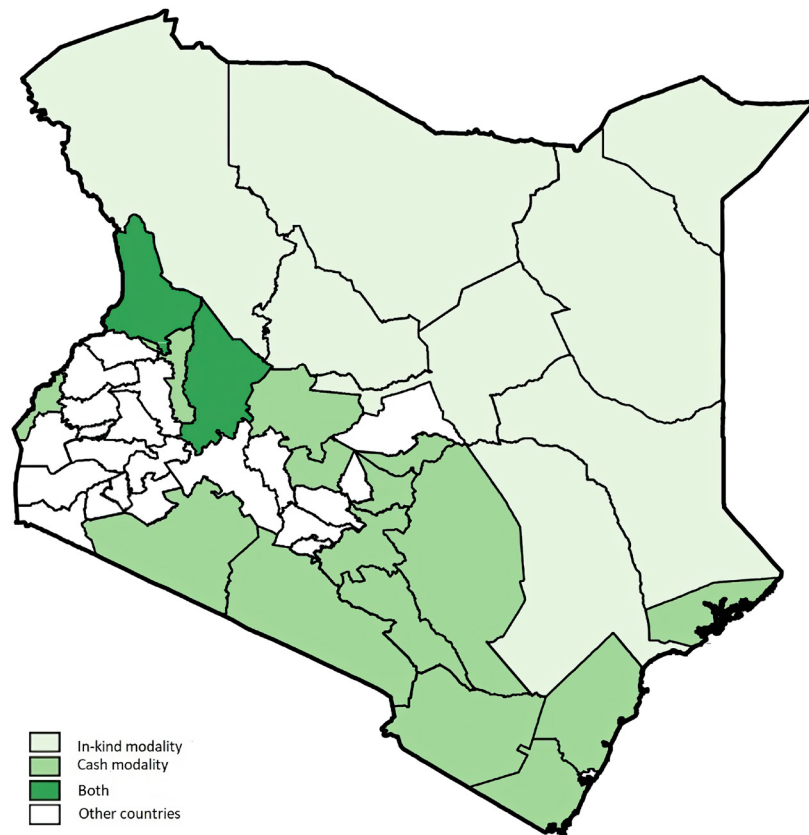
documents, key informant interviews indicated that because the in-kind modality covered a larger region, an approximate estimate of its share of the budget was in the range of 60 to 70 percent, compared to 30 to 40 percent for the cash modality.

The in-kind modality is implemented in arid counties with limited agricultural activities and long distances to markets. As food supply chains are not well integrated in these areas, the Government, specifically the Ministry of Education, undertakes procurement of food at the national or county level. The food is then distributed to subcounties and transported to schools for preparation.

The cash transfer modality is implemented in semi-arid counties with relatively shorter distances to markets and relatively greater cultivation potential. Cash is disbursed to SMPCs within schools; thus, procurement is decentralized. Schools use the cash to buy school meal food commodities from the local market, store the food, prepare and serve the meals, and maintain monitoring and accountability records. Cash is transferred based on the unit cost of KES 10 per child per day, the number of children enrolled in the previous term, and the number of feeding days by the school in the term. As procurement takes place within the local market, there is the potential to source from smallholder farmers and traders. Further, jobs are created across the value chain, from procurement, transportation, storage to meal preparation. The SMPCs run a competitive tendering process, which involves the following a step-by-step process, adhering to the following procurement guidelines developed by the Ministry of Education (Ouka, 2020):

- The SMPC calculates how much food is needed for the term and prepares a procurement plan and budget. Schools are encouraged to procure cereals and pulses based on local availability and the lowest price possible.
- The SMPC announces the tender for the calculated quantity of food commodities.
- This announcement is posted in the school, the office of the District Education Officer and other public places, such as churches and mosques. Schools can also request a specific supplier to submit a quotation.
- A period of 14 days is given for suppliers to submit quotations to the school.
- Suppliers must submit their bids in sealed envelopes clearly labelled "Quotation for Food Commodities". They cannot write their names on the sealed envelope.
- The bids and quotations received must be stored in a safe place. A tender box is recommended.
- Farmer groups or traders from within the county can compete. Each supplier must submit the following documents:
 - supplier information form and financial quotation;

Figure 2. Country map of Kenya showing the counties covered by the Home-grown School Meal Programme



Source:

Author's construction using Stata 16.0 and shape files obtained from <http://www.gadm.org/>

- a valid business permit;
 - a valid business registration certificate;
 - a valid Kenya Revenue Authority tax compliance certificate (waiver for farmer groups);
 - a valid certificate from the Public Health Office certifying that the food will be fit for human consumption;
 - evidence of an operational business bank account; and
 - evidence that the supplier has been trading in food commodities for at least one year.
-
- Fourteen days after the tender announcement and when at least three quotations have been received, the SMPC meets to open and evaluate the bids and

quotations, and to select and award the contract to the lowest bidder who has submitted all required documents. The tender opening meeting takes place under the supervision of WFP, the Ministry of Education and county education teams. At least five members of the SMPC are required to be present at the meeting.

- The SMPC awards the contract, places the order and agrees on the delivery period with the supplier. The supplier is responsible for delivery and cannot charge schools for transportation. They must factor transport costs within their quotations. The delivery time must be specified in the contract and within working days and hours.
- The SMPC receives the food and verifies quality and quantity.
- Payment to the supplier is made after one week.

In addition to the two main modalities described above, counties and schools may also use two other modalities: outsourced catering services and a community-based modality. However, the use of these modalities is not widespread; detailed information on where they are operating and procedures established for their implementation could not be found. In the case of outsourced catering services, schools may decide to contract out not only the procurement of food, but also the procurement of services such as food storage and preparation. In the community-based modality, parents and local communities play an important role in the management and implementation of school meals, and contribute with either food or money to school meal and nutrition activities. School farms can supplement school meals and use the farming initiatives as learning projects to educate children about health and nutrition (FAO and PROCASUR, 2021a). Finally, a school may combine the in-kind or cash modality of procuring food with in-kind donations from the community or a school garden. The food rations provided by the government do not include fruits and vegetables, and school gardens can be an effective way of incorporating these into the meals' dietary sustainability. This can enable the provision of a nutritionally diverse, locally sourced and balanced meal for schoolchildren.

The key innovative feature of how HGSP programmes are able to make local food systems inclusive is to link public procurement with smallholders. Section 3.4 sets out the six strategic objectives of the National School Meals and Nutrition Strategy 2017–2022, the third of which is to promote local and inclusive development. The strategy lists the following targets for the activities and indicators established to achieve this objective:

- Proportion of counties sensitized on the value of an HGSP for local economic development – target: 100 percent.

- Proportion of food for the National School Meals and Nutrition Programme sourced directly from smallholder farmers – target: at least 30 percent.⁹
- Percentage of schools purchasing or receiving foods directly from smallholder farmers – target: 100 percent.
- Percent increase in small and medium enterprises processing and supplying food to school meals programmes – target: to be determined.

However, the target of procuring 30 percent of foods from smallholders is aspirational. In the course of this study, it was not possible to verify the proportion of school meals obtained, or budget utilized for procuring directly, from smallholders. Programmatically, there is no set percentage target for procuring from smallholders, as opposed to traders. The documents reviewed (FAO and Procasur, 2021; Otsola and Dunn, 2017; WFP, 2018b; Gituara and Yard, 2016) and interviews conducted indicate that currently, several hurdles must be overcome to increase the participation of smallholders. These hurdles can be categorized into four groups:

1. High transaction costs. The complexity of the tendering system and the requirements for participation are barriers to entry for smallholders. Smallholders must hold a bank account, a business permit and registration, and several certifications. In addition, they must prove that they have been trading in food commodities for at least one year. As such, smallholders generally cannot comply with these regulatory requirements. For procurement from smallholders to take place, the procurement requirements should be simplified and tailored to their circumstances. Their transaction costs to enter this market should be reduced.
2. Competitive procurement. The procurement process is a competitive system in which traders have disproportionate advantages over smallholder farmers, who face a number of constraints. Smallholders are expected to outperform traders in meeting business skills and financial requirements, and in navigating regulations and information technology interfaces, in order to secure the necessary permits and certifications.
3. Bundling of different food items into a single tender. Schools award the tender to a single supplier. Given the size of their landholdings and scale of their operations, smallholders need to organize themselves into farmers' groups or cooperatives. Further, because two items of the school basket (salt and oil) are not grown

⁹ Brazil is a good example of a country that has instituted such a mechanism. It requires that at least 30 percent of the federal budget allocated for the purchase of school meals be dedicated to contracts with family farmers and rural entrepreneurs. There are legally established criteria for qualifying as a family farmer or family rural entrepreneur. Goods must be purchased directly from those who qualify as such or formal organizations thereof, and not from intermediaries.

locally, the farmers' groups must be able to purchase these from local traders and businessmen. Unbundling the basket and making it possible to supply individual items in the school meal basket may increase smallholder participation.

4. Low productivity and limited access to credit and other inputs, such as seeds and fertilizers. Again, for procurement from smallholders to occur, they need to be supported by agricultural services that provide them with access to productive inputs, facilitate access to financial services such as credit, and provide knowledge of improved production practices.

A WFP evaluation (WFP, 2018b) listed the following concerns with regard to programme implementation:

- Interviewees reported that because of the complexity of procurement procedures, only large traders and farmers could qualify for supplying food. This has reduced the level of benefit to local communities.
- While community engagement is strong, in some instances the participation of parents in cooking food has adversely impacted food quality and safety, as they lacked the necessary training.
- External factors such as droughts and floods have led to increased food prices. Thus, the Ministry of Education has considered switching to central procurement and the in-kind modality, instead of the cash modality, in some subcounties. While this is understandable, some schools and parents reported that this change would be undesirable, as it would reduce the involvement of the local community and further decrease the likelihood of local farmers and traders participating. In addition, a 2015 evaluation of the transitional Cash Transfer to Schools (CTS) pilot in Isiolo County found that cash transfers to schools allowed them to purchase food at a cost that was 24 percent cheaper than in-kind transfers. It also found that food delivery was more reliable, strengthened community ownership and produced added value through transfers to traders and local farmers.
- The monitoring systems of HGSMPS schools must be strengthened. Communication about disbursement of funds from the government to counties and schools was weak. Delays in disbursements have meant that food items have been bought at higher prices and thus reduced the number of feeding days possible. Lack of clarity on the relevant timeline from the Ministry of Education made planning exercises at the school level pointless.
- Challenges with respect to weak communication, limited capacity and insufficient funding were reiterated, as in past studies (Otsola and Dunn, 2017).

With regard to production support, the National School Meals and Nutrition Strategy 2017–2022 and the Ministry of Agriculture (Mutua, 2020) recognize that smallholders need to be provided with production support in the form of:

- agricultural extension workers targeting smallholders, to guide them on productivity technologies such as better irrigation (this is especially true for counties in Kenya that are dependent on rain-fed agriculture);
- creation of groups or cooperatives;
- building the capacity of farmers' organizations in modern agricultural practices, such as irrigation, nutrition-sensitive agriculture, post-harvest handling and food safety, quality and standards management, business planning, resource mobilization, and trade and marketing;
- supporting the development of school gardens;
- linkages to financial entities to provide credit and loans at attractive rates;
- linkages to suppliers of other farm inputs, such as seeds and fertilizers; and
- providing support across the value chain, including sorting, cleaning, milling, fortifying, packaging, branding and transportation.

However, in terms of HGSMP implementation, the Ministry of Agriculture receives no separate budget for carrying out these functions; they are assumed to be part of its overall mandate. While this may be true, given that smallholder farmers are being excluded from the procurement process, there is scope for considering strategic investment.

This was done in the Njaa Marufuku Kenya [Eradicate Hunger in Kenya] (NMK) programme implemented by the Ministry of Agriculture in 2005 (Gituara and Yard, 2016). The NMK programme provided schools with financial support to procure school meals over a three-year period. In the first year, a midday meal of 700 kilocalories was provided for 100 percent of the children in targeted schools; in the second year, to 75 percent; and in the third year, to 50 percent. In addition to procurement of school meals, programme funds were also used for complementary activities, including: initiating agricultural production on school gardens or model gardens within the community to act as demonstration plots for suitable agricultural practices; giving agricultural extension support to farmers whose children attended the schools; and linking the farmers with agencies that provided inputs such as fertilizers, seeds and equipment. Procurement was carried out locally, either from the school garden or by parents. After the end of the three-year period, the schools were phased out and new schools entered the programme.

The assumption was that after three years, the NMK activities would have improved the community's ability to sustain the school meals after the funding ended, and parents would have realized the value of providing midday meals and organized to continue

the practice independently. After reaching some degree of scale,¹⁰ the NMK programme was discontinued because of budget constraints.

One of the key differences of the NMK programme, compared to the HGSMF, was that the NMK did not have to follow a rigid procurement system. Funds were transferred to the bank accounts of the target schools and each school, through its SPMC which designed its own procurement procedures. In terms of coordination, in addition to the SPMC, registered farmers' groups and private sector organizations also played important roles. Another key difference was that the NMK programme targeted schools in high- to medium-agricultural potential areas (albeit with high poverty and low academic performance). The decentralized nature of the programme and the agroecological areas in which it was implemented also made it possible to include fruits and vegetables in the school meal basket, unlike the HGSMF.

However, sustainability proved to be a challenge, as some schools and communities were unable to provide school meals after the three-year support period ended. An evaluation conducted of the NMK programme found that most schools were still procuring food from local traders and not from local smallholders, as local farmers still found it difficult to produce surpluses that could be procured by NMK schools. Despite not being able to market their produce to schools, local farmers did report benefits from the NMK programme, such as adoption of better agricultural practices, increased nutritional awareness and greater community engagement. The programme was also found to contribute to increased attendance and improved nutritional status (Gituara and Yard, 2016). This suggests that a more decentralized, flexible and holistic approach that includes targeted investment in complementary activities can work well. However, greater investment over a longer period is needed for smallholders to reach the scale required to participate in school meal public procurement.

5.2 Environmental sustainability: linking procurement with biodiverse crops

A key innovative feature of HGSMF programmes that enables local systems to be more environmentally sustainable is to encourage the cultivation of specific crops that are local, nutritious and conserve biodiversity, through the mechanism of public procurement. This is essentially a process of building the value chain of identified local crops, a process that begins with gathering scientific evidence on their nutritional value, incorporating them into procurement guidelines and the school menu, and offering production, marketing and consumption support to actors across the value chain.

¹⁰ In 2013, the NMK programme was operational in 93 primary schools across 25 counties (Gituara and Yard, 2016).

The feasibility of such an approach was demonstrated by the Biodiversity for Food and Nutrition (BFN) project. From 2015 to 2017, the BFN project conceptualized and tested a new model of the HGSM, aiming at promoting biodiversity at the territorial level through school feeding in Busia County. The area is one of the poorest and most food-insecure counties in Kenya, despite having a variety of agroecological zones suitable for cultivation. In addition, land fragmentation in the area has contributed to low agricultural productivity. The implementing actors were Biodiversity International, the Kenyan Agricultural and Livestock Organization (KARLO), farmer groups (SINGI) and public schools.

The project's innovative idea was to develop a biodiversity conservation policy at the county level, based on scientific evidence of the nutritional value of ALVs, and linking it to institutional food procurement. KARLO collected and analysed data on the nutritional value of ALVs, and then identified priority species. The research highlighted the importance of conserving nutrient-rich traditional foods such as cowpea leaves, amaranth, slender leaf and spider plant, to increase diet quality and access to key micronutrients, particularly for mothers and children. The data helped persuade Busia to endorse a biodiversity conservation policy, becoming the first Kenyan county to do so. Importantly, the County Integrated Development Plan and Budget for 2018–2022 acknowledged the use of school meals as a social protection mechanism, and as a way of promoting the sustainable use of indigenous biodiversity for conservation purposes and providing market access to small-scale farmers (FAO and Procasur, 2021).

Further, to strengthen the supply chain and ensure a steady supply of ALVs, the BFN provided production support to local smallholder farmers in the form of supply of improved seeds; training on sustainable agricultural production; integrated pest management; and use of seasonal calendars to plan and guide production. A farm business school was established to develop farmers' capacity to form farmers' groups, build profitable farming enterprises, respond to market demands and participate in tenders. An example of farmers' groups was the SINGI farmers' group, a registered community-based organization composed in turn of 50 groups. SINGI promoted the cultivation of nutritious drought-tolerant indigenous vegetables, as well as the use of organic manure to promote soil health and organic pesticides. Agricultural extension officers provided support to the farm business school and functioned as facilitators and trainers. On the demand side, school staff were trained in running a robust and transparent public procurement system, and were educated about the nutritional value of ALVs and cooking methods in order to stimulate demand. A successful example is the Namalenga Farmers' Group, part of SINGI. In 2016, the Namalenga Farmers' Group won a tender from Mundika Secondary School to supply 128 kilograms (kg) of assorted indigenous vegetables at KES 35 (about USD 0.50 per kg). In total, SINGI has produced 1 440 tonnes of ALVs over eight seasons, and 30 percent of the community members had improved their nutritional status by 2018. As per one interviewee (FAO and Procasur, 2021), the key success factors in mainstreaming ALVs into public procurement were community engagement, formulation of a participatory process in drafting the

procurement policy and engagement of key actors – such as elected county members and the Ministry of Agriculture – in adopting and implementing the policy.

5.3 Impacts at the level of the local community

The operationalization of the HGSMP requires parental and local community participation across all modalities. This is also true in the centralized in-kind model, in which parents play an important role in monitoring and ensuring the food is stored, cooked and provided appropriately. Parents and local communities also contribute by financing, establishing and maintaining school feeding kitchens. While it is important to encourage and celebrate the involvement of parents, the value of their labour must also be recognized. In some cases, women are given cooking jobs and training courses at the schools. Jobs for the community are also created across the value chain, from smallholders (to the extent that they supply directly to farmers' groups or traders) to transporters.

Another important vehicle for increasing community engagement and ownership is the emphasis placed on school gardens, which serve as a platform for providing both nutritional and vocational education for children involved in their maintenance. These gardens benefit from inputs from the local community, such as deploying gardening tools and implements, and involving smallholders in their construction and maintenance. The Kenya Agri-Nutrition Implementation Strategy (ANIS) 2020–2025 (Ministry of Agriculture, Livestock, Fisheries, and Cooperatives) assigns targets for the percentage of schools engaging in nutrition-sensitive agricultural projects, such as school gardening (50 percent by 2023–2024), through collaborations between the Ministry of Agriculture, the Ministry of Health, the Ministry of Education and development partners. However, no separate budget has been created for this purpose. In addition, Kenya also implements 4K Clubs, that started in the 1990s and was designed to encourage youth to engage in agriculture. One of the activities envisioned under 4K Clubs is to reenergize the production of fruits and vegetables in schools. A communication strategy has been drafted to help schools understand their roles within 4K Club initiatives.

Finally, SMPCs are an essential link between the school and the community. The SMPCs are made up of teachers, parents and other community members. They are the key bodies implementing the procurement process at the school level, from drafting tenders, inviting and reviewing bids, awarding contracts, monitoring, and ensuring accountability and transparency.

Local economy effects

One source of information for the impact of the HGSMF is the Global Survey of School Meal Programmes, conducted by the Global Child Nutrition Foundation and sponsored by the US Department of Agriculture. The results of the survey, which collected data on jobs created by school feeding in a sample of 48 countries, were presented in WFP's 2020 State of School Feeding Worldwide (WFP, 2020). In particular, it was found that school feeding programmes led to the creation of 1 668 jobs, on average, for every 100 000 beneficiary children (WFP, 2020). The data for Kenya showed that a total of 31 300 jobs were created, split across cooks and food preparers (4 300), transporters (300), food packagers and handlers (20 000), monitoring (2 000), and safety and quality inspectors (5 000). However, the data only covers implementation jobs created by the programme, and not employment generated through mechanisms such as local farmers' or traders' participation in the school meal value chain through an HGSMF model.

This latter phenomenon can also be thought of as a multiplier effect, as has been estimated for a number of cash transfer programmes (Thome *et al.*, 2016). The logic, when applied to an HGSMF programme, remains the same. When cash is disbursed to schools for undertaking procurement, these schools ideally buy from local farmers, farmers' groups, or traders in the local economy. In Kenya, it is generally traders who benefit, as local farmers are unlikely to have the scale, and the financial and technical capacity, required to participate in the tender process. However, these traders purchase from wholesalers who, in turn, source from local farmers. Farmers increase their supply to meet the greater demand. This enables them to raise their own household income. The households, in turn, spend their income, creating a new round of income gains. This process is known as the income multiplier effect.

A local economy-wide impact evaluation of the HGSMF was conducted by the University of California, Davis (Taylor, 2019), in collaboration with WFP and the Government of Kenya, to assess if it had created income multiplier effects in rural Kenya. The study found that every KES 1 transferred to a HGSMF school created KES 1.27 of additional real (inflation-adjusted) income in rural Kenya. Interestingly, the study showed that about 13 percent of this impact was not located in the HGSMF subcounties, because traders sourced part of the food from other regions with a higher agricultural output. The study also found that higher multipliers could be obtained when simulating the effects under three different scenarios (Taylor, 2019):

1. A 'buy local' modification of the programme, such that schools necessarily had to purchase ten percent of their order from local farmers. This would lead to a seven percent increase in the impact on total real income. Every KES 1 shilling transferred to a HGSMF school creates an additional KES 1.35.

2. A food basket diversity modification, under which schools spend 10 percent of their allocated funds on an expanded basket of foods, including drought-tolerant crops and animal products. This would lead to a 38 percent increase in the impact on total real income compared to the status quo. Every KES 1 transferred to an HGSMPS school creates an additional KES 1.75.
3. A “make farmers more productive” modification whereby there is a ten percent increase in funding on complementary interventions to HGSMPS schools and farmers’ productivity is assumed to rise by ten percent. The simulations show an extraordinary increase in the impact on total real income of 917 percent, compared to the *status quo*. Every KES 1 transferred to a HGSMPS school creates an additional KES 12.9.

6. Strengths, constraints, and opportunities

The Kenya HGSMF has several strengths. Specifically, the government has demonstrated commitment to and ownership of the programme. The National School Feeding Strategy was written in consultation with key partners, and clearly describes the roles and responsibilities of each ministry. Importantly, the strategy states that the objective is to ensure that all children in pre-primary and primary schools receive at least one nutritious meal per school day. Article 43 of the Kenyan Constitution states that: “it is the right of every person ... to be free from hunger, and to have adequate food of acceptable quality”. While Article 53, specifically applying to children, states: “Every child has the right ... (b) to free and compulsory basic education; (c) to basic nutrition, shelter and health care” (Republic of Kenya, 2010, p.36). These constitutional measures are important because they provide legal grounds for guaranteeing children’s access to food and education, and government bodies are obligated to provide adequate funding in support of policy action to meet these commitments (Vargas *et al.*, 2020).

Further, the strategy states that at all levels of government, the health, agriculture, water, irrigation and social protection departments will provide support to the HGSMF. It clearly outlines the roles and responsibilities expected from each department, at the national, county, subcounty and school level. Several strategic policy documents exclusively focusing on the HGSMF and with linkages to other sectoral plans are available. Coordination mechanisms at the national, county, subcounty and school levels have been established to allow for multistakeholder engagement across relevant ministries.

However, there is a need to translate the intentions and objectives captured in the policy and institutional framework into reality. Currently, only about 16 percent of children enrolled in primary school receive a school meal, and for only 40 to 50 days per year (see Section 3.2). From an economic inclusion perspective, which is the main focus of this paper, the target of sourcing 30 percent of the school meals from smallholders is aspirational. As explained in Section 5.1, the reasons for this are: (1) high transaction costs acting as barriers for entry for smallholders, who struggle to meet the eligibility requirements for participating in the tendering system; (2) as schools bundle all food items in one single contract, smallholders also have to bear the transaction costs of joining farmers’ groups and partnering with other businesses, especially to supply items such as salt and oil; (3) smallholders are at a disadvantage compared to traders in terms of business skills and financial requirements; and (4) low productivity and limited access to credit and other inputs such as seeds and fertilizers, further limit smallholders’ competitiveness vis-à-vis traders.

These challenges are not specific to the Kenya HGSMP, having been observed in several public procurement programmes (including HGSF programmes) across several countries. Both the HGSF Resource Framework (FAO and WFP, 2018) and FAO's Policy Guidance Note 11 on strengthening sector policies for promoting food security and nutrition (FAO, 2018) provide recommendations for addressing barriers to entry. The following need to be considered in the case of the Kenya HGSMP:

1. Reduce transaction costs by simplifying procurement requirements. As seen in previous sections, in order to participate in the Kenya HGSMP, a supplier must have multiple certifications, including a business permit and a business registration certificate. The number of registration requirements should be reduced. In addition, the process and costs associated with these should be reduced for smallholders. The waiver of the tax compliance certificate for farmer groups is a step in the right direction. In order to avoid the long and costly process of registering a business, some countries – such as Brazil, Paraguay and Rwanda – have waived this requirement too, opting for registration with the Ministry of Agriculture instead (FAO, 2018). Similarly, the need to produce evidence that the supplier has been trading in food commodities for at least one year should be reduced or substituted by a declaration. Finally, farmers' organizations need to be provided with targeted capacity development for complying with the requirement of certification by the Public Health Office, confirming that the food is fit for human consumption.
2. Within the tendering process, establish specific mechanisms providing smallholders a competitive advantage. These can take the form of 'reservations' or 'set-asides', whereby a certain quota of school purchases is allocated to smallholders. Alternatively, the school can subcontract, that is, it can "establish a fixed quota which must be subcontracted or procured from targeted suppliers or producers" (FAO, 2018, p. 18).¹¹ The purpose of this is to achieve the target of sourcing 30 percent of school meals from smallholders. However, it would need to be converted from being a desired target to a mandated one. Preferential treatment can also take the form of bid price preference: bids from smallholders or farmers' organizations that comprise smallholders are discounted by a set percentage point to make them more competitive. Otherwise, instead of relying only on lowest price, the tender may include additional award criteria that give further weight to bids from smallholders or take into account social, economic and environmental aspects (FAO and WFP, 2018).
3. Definition of both 'smallholder' and what is 'local'. In order to implement the recommendations made thus far, there must be a clear definition of who is a

¹¹ An example of the subcontracting model is the Ghana School Feeding Programme, wherein the government awards the tender to caterers who then must procure 80 percent of the commodities for school feeding from smallholder farmers that are preferably located within the same district (FAO, 2018).

'smallholder' and what is considered to be 'local'. In Kenya, there is currently no consensus on a precise definition of 'smallholder farmer',¹² with different studies and organizations using different farm size ranges. The Ministry of Agriculture needs to provide an official definition of both smallholders and local commodities. In the former case, women smallholders may be given further preference. In the latter, the following needs to be considered: within what radius of the school can produce be considered local, and how does this need to change depending on the potential of the local catchment area to supply the food needed at reasonable prices? Should the definition of local be homogenous across the country, or should the area radius change depending on the agroecological region and its potential to locally supply the food? Schools could grant preference to farmers in the same county, and then gradually expand to neighbouring counties or to the region until an acceptable bid is presented. There is a need to identify models that work in low-potential areas, such as drought-tolerant crops, and to utilize specific agricultural practices. In addition, these elements should be scaled, so that farmers are practicing and producing such crops in sufficient numbers to be able to form groups and supply at a competitive price.

4. Ensure on-time payments to smallholders. As per the rules outlined for the HGSM, payments to suppliers must be made after one week. This is a strength of the programme, as it ensures that suppliers do not have to wait long to receive payment – this feature is especially favourable to smallholders, who generally have immediate cash needs and are strapped for liquidity. However, as mentioned in Section 5.1, there have been delays in disbursements. This would adversely affect smallholders vis-à-vis traders. Moreover, the delays have had negative repercussions for programme impact, because they entailed buying food items at higher prices, which reduced the number of feeding days. In addition, there was lack of clarity on the Ministry of Education's timeline, which made planning exercises at school level difficult (WFP, 2018b).
5. Unbundling the school meal basket into separate tenders may increase smallholder participation. As mentioned in Section 5.1, schools award the tender to a single supplier; smallholders are unable to win because of the limited size of their landholdings and the smaller scale of their operations. Recognizing these difficulties, the Ministry of Education and the WFP have partnered with the Partnership for Child Development (PCD) within Imperial College London to

12 In Latin America, Argentina, Bolivia, Brazil (Plurinational State of), Paraguay, Uruguay and Venezuela, specific laws establish the formal definitions and criteria concerning family farmers. National registration systems are also in place, usually under the ministry of agriculture, certifying smallholders and farmer organizations. Having a registration system already in operation facilitates the procurement process, as it removes the need to verify eligibility each time a bid is submitted. For example, in Brazil, farmers are certified through a declaration, the Declaração de Aptidão ao PRONAF [Declaration of Eligibility for PRONAF], which is issued by local authorities. Registration through the declaration is the only requirement for participation in the Programa de Aquisição de Alimentos [Food Acquisition programme] and the Programa Nacional de Alimentação Escolar [National School Feeding Programme]. The declaration also contains other useful information, such as the classification of farmers according to their income, and the identification of women and female-headed households (FAO, 2018).

develop a mobile platform where farmers and schools can interact seamlessly. The platform will be used for advertising food requirements and facilitating smallholders' ability to bid for individual items without necessarily requiring all the documentation. This is a new system that at the time of writing this paper had just been developed and not yet piloted. However, the PCD has selected a number of schools and are currently training schoolteachers on how to use the app. There is also a concurrent effort by WFP and PCD in one county (unspecified during the interview) to link the mobile app with Kenya's national education management information system. The precise mechanics of how the app will work and its feasibility are still to be determined. Bundling allows suppliers to adjust the margins they make on each of the food items in the food basket, in order to submit an overall, more attractive bid (for example, the lower margin on maize can be made up by the margin on salt). If the basket is individually tendered, and – for example – maize and pulses are awarded to local farmers, then it might not be possible to find traders who supply only salt or oil, because the latter commodities are required in very small amounts. In addition, it is prudent to be cautious, as digitalization might run the risk of being more exclusionary than inclusive. If not accompanied by a concurrent effort to enable digital access, people who are relatively more vulnerable and do not have access to the technologies required will be excluded and access will be restricted to certain classes and categories of people (for example, male farmers will have greater access than women). There is a need for clear evidence that the process will be inclusive.

6. More flexibility in providing food procurement specifications. To provide schools with more flexibility to procure from smallholders, it is useful to consider allowing food alternatives or variants of those specified in the school meal basket. For example, in Brazil, the Programa Nacional de Alimentacao Escolar does not specify crop varieties. Rather, it focuses on food groups, nutrient content and nutritional requirements. In the case of the HGSM, this would mean that schools could procure orphan crops such as green grams, sorghum, millet, cowpeas and pigeon peas, instead of maize. As seen in the preceding sections, HGSM school menus consist largely of cereals such as maize or rice, and pulses. Fruits and vegetables are missing from the school meal basket, presumably because of transportation and storage challenges as well as inadequate budgets and the limited ability to produce them in arid areas. The communities and school gardens provide such produce on a voluntary basis. The World Food Programme had tried a pilot for procuring drought-tolerant crops; however, the effort encountered a trade-off with price. Maize is generally more affordable compared to sorghum, and cowpeas are more expensive than beans. Because the priority is that every child should receive at least a basic basket, it was decided to revert to the standard basket and wait to receive additional funding. Still, while there may be an initial investment in introducing drought-resistant crops or orphan crops, these in fact may turn out to be more cost-efficient in the long run. In fact, these crops were traditionally produced in Kenya, and were displaced by maize over the last 30 years (Gituara and Yard, 2016). An additional advantage of

diversifying the school meal basket to include crops other than maize and rice is that crops such as maize are controlled, in most countries, by men. Instead, where the food basket is expanded to include pulses, poultry, eggs, vegetables and fruits, women's participation is higher (FAO, 2018).

7. Increase funding for the HGSMP. The HGSMP provides funds for food procurement only. No additional funds are provided for infrastructure, storage, fuel-efficient stoves or cooks. The National Education Sector Plan for 2013–2017 highlighted how the low level of funds allocated to the programme – a problem exacerbated in recent years by high food prices – has restricted the number of school meals provided. Further, the HGSMP operates at a flat rate of KES 10 per school meal in semi-arid lands, whereas costs vary across counties and is relatively higher in arid counties (Mutua, 2020). In addition, delays in disbursement generated an increase in costs because of procurement at higher prices. This impeded the ability of schools to plan ahead and provide regular meals, leading to school dropouts in the case of nomadic communities (WFP, 2018b; Mutua, 2020).
8. Strengthen the monitoring and evaluation system of the HGSMP. Robust monitoring is necessary, not only for schoolchildren but also for smallholder farmers. In Kenya, while the Ministry of Education tracks schooling and nutrition indicators for children,¹³ and can consolidate these at the national level and disaggregate them at the county and subcounty level, it cannot yet do so for indicators tracking smallholder participation. There is currently no electronic system in place that captures the number and profiles of smallholders that have participated in procurement processes. Schools that engage in procurement activity may hold such information at their level. However, there is no database that can be used for planning at the county or national level. Currently, a process to digitize the programme data – from procurement to the number of children fed – is under way, enabling generation of reports at school level from the ministry headquarters.
9. Link smallholders to complementary interventions and create a single registry. Policy documents acknowledge that production support must be provided to smallholders in order to meet the demands created by the HGSMP. There has also been a concerted effort to link interventions to smallholders, with the deliberate intent of enabling them to participate in the HGSMP. Examples in this respect are the NMK programme (described in Section 5.1) and the BFN project in Busia County (Section 5.2). This process would be considerably facilitated if a unified or single registry database existed that identified smallholders and households participating

13 Other items that are monitored include details of the tendering process and conditions in schools, in particular: flow of funds from ministries to schools; adherence to procurement procedures; proper completion of apposite forms and their submission to relevant authorities; number of schoolchildren covered by the programme on a daily basis, against the number of school days in a term; rations served; hygiene and sanitation of the kitchen, food stores and toilets; medical examinations of food handlers within the school; and contributions from the community or parents towards the HGSMP, for ownership purposes (Gituara and Yard, 2016). Information on the profile of suppliers themselves does exist; however, it is mostly at the school level and in paper format, and does not percolate upwards.

in social protection strategies and capacity development programmes. For example, in Brazil, the Declaração de Aptidão ao PRONAF [Declaration of Eligibility for PRONAF] was combined with the Cadastro Único [Single Registration] (social protection registry) to “strengthen synergies between agricultural interventions, the Programa de Aquisição de Alimentos [Food Acquisition Programme] (PAA) and social protection programmes and increase their impact on poverty reduction and food security and nutrition” (FAO, 2018, p. 33). Importantly, in the case of Kenya, there is an opportunity to link the digitization effort planned by the Ministry of Education with developments in other sectors, notably the single registry being created by the Department of Social Protection and the forthcoming creation of a digitized national farmers registry. Currently, the monitoring and evaluation framework of the National Social Protection Secretariat includes the following smallholder farmer-related inclusivity outcome: “Outcome statement 4. By 2022, vulnerable HH [households] and individuals have access to livelihood strategies through complementary Programs” (National Social Protection Secretariat, 2020, p.7). It also features Indicator 4C, on the “Proportion of small holder farmers receiving subsidized inputs & agricultural insurance” (National Social Protection Secretariat, 2020, p.36), for which the Ministry of Agriculture is the responsible agency. There is potential for linking to the monitoring and evaluation framework of the Ministry of Education, and including indicators such as proportion of HGSMF meals procured from smallholders, when such a capability is introduced in both systems. Other outcomes and indicators suggested by the HGSMF Resource Framework (FAO and WFP, 2018) include: volume and value of sales from smallholders to aggregators; number of smallholders who sold food to aggregators; indicators that capture the diversity of crops and animal products produced; and number of farmers who received support to increase and diversify production and improve productivity.

10. Capacity development of officers involved to increase awareness of procuring from smallholders. In terms of trainings, one inference that can be drawn from the documentation reviewed and the key informant interviews is that while there is strong collaboration between the Ministry of Education and the Ministry of Agriculture at the national level, especially at inter-ministerial committee meetings, greater coherence at the local level is required. The Ministry of Education, with technical support from WFP, carries out capacity support trainings for SMPCs (about four counties per year are targeted). In these trainings, the school managers are made aware of the existence of smallholders and the importance of activities such as posting tender notices in areas that smallholders can access. However, these trainings are held on an as-needed basis; sometimes, up to two or three years can pass before a training takes place again in a given county. Moreover, there is potential to involve local officials from the Ministry of Agriculture at the county level. The Department of Social Protection (such as through community development assistants) should also be included in these trainings. Currently, the Ministry of Agriculture does not have national HGSMF standards

and guidelines for its officers and county-level management to follow. While local officers do undertake specific capacity-development activities targeted at smallholder farmers to help them form groups and increase their awareness of market opportunities, and there is a concurrent effort to establish one-stop shops called Huduma centres (which provide business registration and other services), these are conducted as part of the normal mandate of the Ministry of Agriculture. If the Ministry of Agriculture were to establish national standards and guidelines for county and subcounty officials on the HGSMMP specifically, it would help promote such capacity development.

7. Conclusion

Inclusive food systems empower the rural poor – especially those considered ‘low potential’ and who are not yet included in the mainstream economy – to take advantage of opportunities and to participate, both as suppliers to earn income and as consumers of high-quality diversified diets. Home-grown School Feeding (HGSF) programmes can strengthen local food systems, making them more inclusive and sustainable by creating linkages to smallholders, encouraging the cultivation of local and nutritious crops, and increasing community empowerment. As mentioned earlier, the UN Food Systems Summit held in September 2021 recognized HGSF programmes as a game-changing solution. Such programmes have the potential to address each of the five action tracks established at the Food Systems Summit:

- Action Track 1: Ensure access to safe and nutritious food for all.
- Action Track 2: Shift to sustainable consumption patterns.
- Action Track 3: Boost nature-positive production.
- Action Track 4: Advance equitable livelihoods.
- Action Track 5: Building resilience to vulnerabilities, shocks and stress.

In its national food systems dialogue, Kenya emphasized school meals and many of the initiatives complementing the HGSMF referred to in this paper, such as 4K Clubs, digitization and investing in technologies suitable for ASALs as policy tools to make its food system inclusive. The statement delivered by the Government of Kenya at the Food Systems Summit referenced the country’s Agricultural Sector Growth and Transformation Strategy 2019–2029, which has identified pathways to transform its agriculture sector and achieve 100 percent food and nutrition security. This strategy prioritizes three anchors to drive the ten-year transformation, with specific targets for the first five years:

- **Anchor 1:** Increase small-scale farmer, pastoralist and fisherfolk incomes: raise average annual small-scale farmer incomes by ~40 percent from KES 465/day to 625/day (~35 percent increase); directly benefit ~3.3 million Kenyan farming households.
- **Anchor 2:** Increase agricultural output and value add: expand agricultural GDP from KES 2.9 trillion to KES ~3.9 trillion (~6 percent compound annual growth rate [CAGR]); grow contribution of agro-processing to GDP by KES ~130 billion over five years (~50 percent from KES 261 billion today).

- **Anchor 3:** Increase household food resilience: reduce the number of food-insecure Kenyans in the ASAL regions from 2.7 million on average to zero, while reducing the cost of food and improving nutrition; protect households against shocks, both environmental and fiscal.

Source:

Government of Kenya. 2021. Kenya's Pathway to Sustainable Food Systems: National Position Paper. Nairobi, Kenya.
<https://summitdialogues.org/wp-content/uploads/2021/09/Kenya-FSS-Dialogue-Series-National-Position-Paper.pdf>

As discussed, the HGSMP can play an important role in contributing to all of the action tracks and anchor targets. However, to realize its full potential and yield multiple benefits, some design features of its cash modality must be changed. In addition, programmatic and structural investment must increase. This would help strengthen not only the HGSMP, but also other programmes operated by the Ministry of Education, the Ministry of Agriculture and the Department of Social Protection.

First, already within the existing budget, the procurement process can be reformed to increase smallholder participation. The current target of 30 percent of total procurement being sourced directly from smallholder farmers is aspirational. This target must be made realistic by introducing reforms, such as reducing transactions costs for smallholders and providing them a competitive advantage. Additionally, ensuring on-time payments to suppliers and provision of clear and timely information to schools from the Ministry of Education will promote better planning and reduce costs. Unbundling the school meal basket into separate tenders can also increase smallholder participation. Importantly, past experiences (such as the NMK programme and the BFN project) have shown that a more decentralized model that grants more flexibility to SMPCs can not only increase smallholder participation, but also yield nutritional and environmental benefits. It would also lead to strengthened community ownership. This can be done by allowing food alternatives or variants of those specified into the school meal basket, that is, focusing not on crop varieties but rather on food groups, nutrient content and nutritional requirements. Based on WFP's experience, there is evidence that procuring drought-tolerant crops can lead to a trade-off with price in the short run. However, this option may be more cost-efficient in the long run, especially if coupled with a more decentralized approach. Further investigation is required on this front.

Interestingly, as per simulations of the local economy-wide impact evaluation of the HGSMP, a 'buy local' modification of the programme requiring schools to purchase ten percent of their order from local farmers would lead to a seven percent increase in impact on total real income compared to the status quo (Taylor, 2019). Further, a food basket diversity modification requiring schools to spend ten percent of their allocated funds on an expanded basket of foods, including drought-tolerant crops and animal products, would lead to a 38 percent increase in impact on total real income compared to the status quo. This evidence indicates that purchasing from local suppliers and having a more diverse food basket pays off.

Second, it is clear that in order to meet the objective of ensuring that all children in pre-primary and primary schools receive at least one nutritious meal per school day, the budget must be increased. Currently, only about 16 percent of children enrolled in primary school receive a school meal, for only 40 to 50 days per year. The insufficient funding indicates that there is a trade-off between scale versus depth: either the programme is expanded to other counties and schools, or it more fully meets the needs of students in schools where it is already functioning. However, a rights-based approach and a long-term investment horizon are required. A cost-benefit analysis has showed that these programmes can generate benefits (across multiple sectors) of up to USD 9 for every USD 1 invested (WFP, 2020).

However, the challenge facing programmes like the HGSP is that they are allocated funding within only one ministry, which has the mandate of improving outcomes in only one sector or dimension; welfare-enhancing outcomes in other sectors do not enter their cost-benefit analysis. The challenge lies in securing adequate funding for programmes that yield multiple benefits across different sectors with potentially very high returns.

Third, there is need for increased strategic and structural investment. The HGSP relies on a specific institutional, policy and programmatic environment. It does not exist in isolation; the other processes and programmes in place must create the enabling environment for the HGSP to succeed. While the Ministry of Education implements the HGSP and has the mandate to procure and distribute food, it is considered the Ministry of Agriculture's mandate to ensure food availability. Similarly, it is the mandate of the Ministry of Labour and Social Development to enable the economic inclusion of vulnerable people through its policies and programmes. However, the Ministry of Agriculture receives no separate budget for carrying out these functions, which are assumed to be part of its overall mandate. While this is true, given that smallholder farmers are being excluded from the procurement process, there is a case to be made for considering both strategic investment in complementary interventions and structural investment. The latter can take the form of the creation and interoperability of the single registry and national farmers' registry with procurement data of the HGSP. This would allow for overlapping targeting between different programmes and effective monitoring. An integrated approach, and the participation of partner ministries in improving inclusivity and sustainability, is necessary. The third simulation of the local economy-wide impact evaluation of the HGSP entailed a modification to increase farmers' productivity, which allowed for a ten percent increase in funding on complementary interventions for HGSP schools. In this scenario, farmer productivity was assumed to rise by ten percent (Taylor, 2019). The simulation showed that every KES 1 transferred to an HGSP school created an additional KES 12.90, an extraordinary multiplier effect (Taylor, 2019). This indicates that expenditure on the HGSP must be viewed as an investment with potentially very high payoffs.

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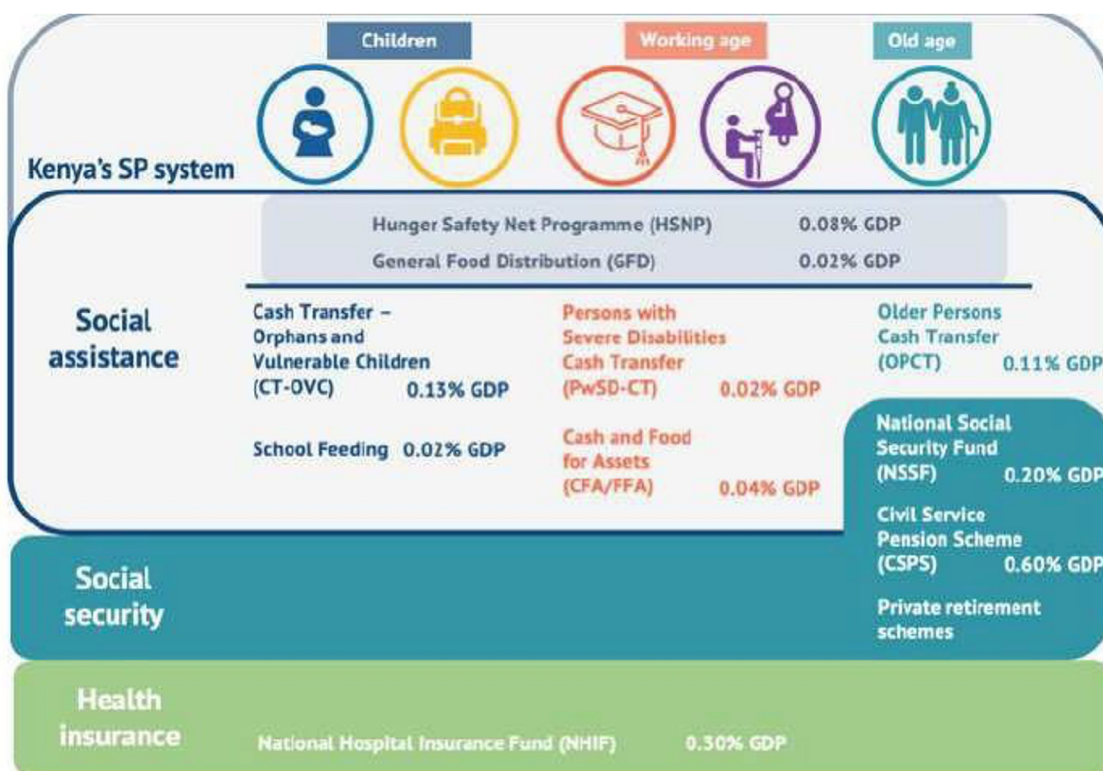
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ANNEXES

Annex 1. Kenya's national social protection (SP) system



Source:

Ministry of Labour and Social Protection, 2017. The Kenya Social Protection Sector Review Report, 2017. State Department for Social Protection. Nairobi, Kenya.

Annex 2. Policy framework for the school feeding programme

The National School Meals and Nutrition Strategy 2017–2022 provides guidance for the implementation of Kenya’s HGSMMP at pre-primary and primary schools, with the aim of making it robust, nationally owned, sustainable and cost-effective, while delivering on the objectives of education, health and nutrition for children and developing the local supply chain by generating structured demand for smallholders.

Chapter 4 of the Kenyan Constitution of 2010, containing the Bill of Rights, guarantees all Kenyans’ basic rights to health, education, food and decent livelihoods. Article 43 of the Constitution states that “it is the right of every person ... to be free from hunger, and to have adequate food of acceptable quality”. Article 53 b and c, specifically applied to children, states that “Every child has the right ... (b) to free and compulsory basic education; (c) to basic nutrition, shelter and health care”.

Kenya’s Vision 2030 aims to provide all Kenyans with a high quality of life by 2030. It recognizes the HGSMMP, targeted to socioeconomically disadvantaged and nutritionally vulnerable children in pre- primary and primary schools in ASAL districts, as an important vehicle for achieving the goals of food security and access to education.

The National Food and Nutrition Security Policy (FNSP 2011) is coordinated by the multisectoral Food Security and Nutrition Secretariat, and highlights the importance of school meals and nutrition education in schools.

National Food and Nutrition Security Policy Implementation Framework 2017– 2022 is a multisectoral policy document based on the FNSP 2011. It recognizes the success of the school meal and nutrition programme in Kenya as a successful institutional meal programme but also acknowledges the need to extend its coverage to all parts of the country.

The Kenya National Nutrition Action Plan (KNAP) 2018–2022 builds on the 2012–2017 Action Plan, the operationalized FNSP 2011 and its Implementation Framework for 2017–2022. Implemented by the Ministry of Public Health and Sanitation, these plans are multisectoral, with coordination systems at the county level. From a school-feeding perspective, they outline guidelines for school/institutional feeding to promote adequate nutrition.

The Kenya Agri-Nutrition Implementation Strategy (ANIS, 2020–2025) is based on the FNSP, the FNSP Implementation Framework and the KNAP. The ANIS offers technical guidance from an agricultural perspective based on the entire food value chain, from production to consumption. It focuses on nutrition-sensitive agriculture to reduce malnutrition and is geared towards initiating local food systems to produce nutrient-

dense foods. It assigns targets for the percentage of schools engaging in nutrition-sensitive projects, such as school gardening (50 percent by 2023–2024), through collaboration between the Ministry of Agriculture, the Ministry of Health, the Ministry of Education and development partners. However, no budget has been assigned for this purpose. The ANIS also assigns targets for the percentage of vulnerable households of farmers, pastoralists and fisherfolk incorporated into social protection programmes (40 percent by 2023–2024), with an assigned budget of KES 215 million each year from 2020/2021 to 2023/2024. This is to be carried out in partnership with the Ministry of Agriculture, the Ministry of Social Protection, National Drought Management Authority and WFP.

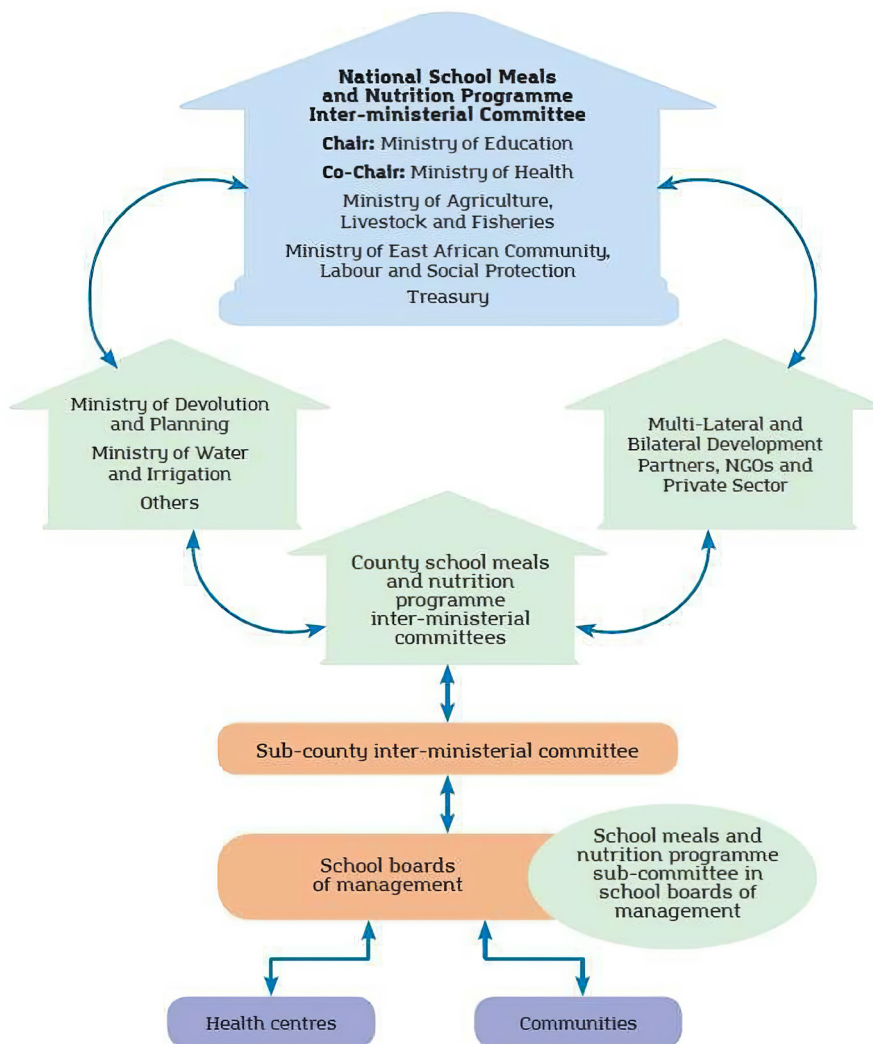
The Kenya School Health Policy, 2018, is the second edition of the School Health Policy that was first formulated by the Ministry of Education and the Ministry of Health in 2009. It recognizes schools as an ideal platform for the provision of health and nutritional services, and includes school meals as a strategy for ensuring children’s right to access these services.

The National Education Sector Plan (NESP) 2013–2017 and the **National Education Sector Strategic Plan (NESSP, 2018–2022)**, which builds on the NESP 2013–2017, are also relevant documents. The NESSP mentions the provision of school meals to children from marginalized and vulnerable communities as one strategy to reduce disparities in access to primary education. However, the NESP 2013–2017 highlighted the role of the HGSMF in not only promoting better access to education, but also increasing access to markets, spurring agricultural growth and long-term economic development. The link between school meals and agricultural development is highlighted, as well as the role of school meals in improving nutrition and building healthy eating habits. It is linked to the FNSP and the National School Health policy (2009), and outlines strategies for the School Health Nutrition and Meals Initiative.

The National Social Protection Policy (2011) recognizes the role of school meals in providing a safety net for schoolchildren and their families.

The Ministry of Agriculture, Livestock and Fisheries Strategic Plan (2017–2022) identified low involvement of youth in agriculture as an issue. In order to improve nutrition and generate income for schools, the plan included the establishment of irrigation projects, tree planting, fish ponds and water harvesting in secondary and primary schools as one of its objectives, with a budget allocation of KES 20 billion each year from 2015/2016 to 2017/2018.

Annex 3. Intersectoral coordination framework for the Home-grown School Meal Programme



Source:

Ministry of Education, Ministry of Health & Ministry of Agriculture, Livestock and Fisheries. National School Meals and Nutrition Strategy 2017-2022. p. 33. Nairobi, Kenya. docs.wfp.org/api/documents/WFP-0000070917/download/?_ga=2.212219348.175616743.1681903094-2048080078.1673354762

