



SUSTAINABLE SCHOOL FEEDING ACROSS THE AFRICAN UNION

ADDIS ABABA, JANUARY 2018



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STUDY ON SUSTAINABLE SCHOOL FEEDING ACROSS THE AFRICAN UNION

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FOREWORD

It is with immense pleasure that I am presenting this African Union Study on Sustainable School Feeding in Member States. The information it contains sheds a clear light on the contribution that school feeding makes to inclusive quality education in Africa. It also draws the connection between how the productivity of the sectors including nutrition, health, agriculture and local development can be linked to sustained school feeding programmes across Africa.

I am pleased to express appreciation to the World Food Programme (WFP) and its Centre of Excellence in Brazil for sponsoring this study, continued collaboration and technical support.

The African Union adopted the **Continental Education Strategy for Africa 2016-2025 (CESA 16-25)** as a regional operationalization framework for SDG number 4 to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”. Moreover, CESA 16-25 is a key policy tool for AU’s Agenda 2063 aimed at fostering the skills, human capital, and education revolution in Africa.

CESA’s Strategic Objective 2 aims to “build, rehabilitate, preserve education infrastructure and develop policies that ensure a permanent, healthy and conducive learning environment in all sub-sectors and for all, to expand access to quality education”. For advancing this objective and committed to strengthening school feeding as a critical action, the AU Heads of State and Government instituted the 1st March as the African Day of School Feeding, through the Decision of the Assembly/AU/Dec.589 (XXVI), and recommended this continental study of school feeding.

The study recognises that there are several diversities in school feeding programmes across Africa and leverages on experiences of existing programmes to identify best practices that have worked across the board, thus serve as a useful resource for the development of school feeding programmes across Africa.

School feeding is a key investment in our youthful population. The study suggests strengthening multisectoral approaches by using quality and accountability mechanisms in School feeding programmes.

I therefore call on all Member States and stakeholders to embrace this study and utilize it in their efforts to optimize and build new school feeding programmes that improve education and all its linked sectors.



H.E. Prof. Sarah Anyang Agbor
Commissioner, Human Resources Science and Technology
African Union Commission

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We would also like to express our gratitude to the valuable partnership with the staff of the WFP Liaison Office to the African Union, specifically, Ms. Angelline Rudakubana, Mr. Thomas Yanga and Ms. Wanja Kaaria. We thank the crucial assistance from the whole staff of the WFP Centre of Excellence against Hunger in Brazil, particularly, Mr. Daniel Balaban, Mr. Peter Rodrigues, Ms. Sharon de Freitas, Ms. Gabriela Marques, Mr. João Cavalcante, Mr. Vinicius Limongi, Ms. Mariana Rocha, and Ms Christiani Buani, as well as the technical support of the Projects, Operations, and Communications teams, which have contributed greatly in assisting this research project.

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Summary

School feeding programmes have been consistently proving to advance education, health and nutrition outcomes of school going children. Moreover, if well designed with the addition of home-grown food supply component, these programmes have the potential to benefit entire communities through stimulating local markets, facilitating agricultural transformation and enabling households to invest in productive assets. Acknowledging these impacts, and driven by a desire to make progress towards the African Union's (AU) Agenda 2063, the Continental Education Strategy for Africa 2016-2025 (CESA 16-25) and the Sustainable Development Goals (SDGs), many African countries have successfully implemented school feeding programmes at national and sub-national levels. Some of them have already developed into home-grown school feeding programmes. Observing this rapid expansion of school feeding programmes on the continent, the AU, guided by its Commissioner for Human Resources, Science and Technology intensified its support to member states in the design and implementation of national, innovative and home-grown school feeding (HGSF) programmes.

As part of concrete efforts to augment school feeding's position on the African continent, the Heads of State and Government of the AU, in a landmark decision during the AU Assembly in 2016, established the 1st of March as the official African Day of School Feeding. Moreover, this Assembly called for the establishment of a multi-sectoral technical committee to support and promote sustainable school feeding. As an important first step, the Assembly requested the African Union Commission (AUC) to research school feeding's impacts on inclusive, quality education in AU countries, and how school feeding can facilitate progress across a range of sectors, including education, nutrition, health, and agriculture and local development. This research, alongside analysing the returns from school feeding across these sectors, generated entry point recommendations for AU member states in optimising and enhancing their own national school feeding programmes. To carry out that Assembly's decision, the AUC and the World Food Programme Centre of Excellence against Hunger in Brazil (hereafter the "WFP Centre of Excellence") commissioned the Economic Policy Research Institute (EPRI), a global institute based in Cape Town, South Africa, to conduct the study.

Purpose and outline of study

Overall, this study synthesises the outcomes of and multi-sectoral returns from school feeding in AU member states. It relies on both secondary sources, as part of a structured desk review, and primary data, as qualitative research to construct a high-level landscaping of the state of school feeding in the AU. The study then takes the evidence and best practices revealed by the desk review and primary research to develop a conceptual framework for sustainable school feeding that operates from a systems approach, and to generate entry point recommendations. These operational outputs present broad indicators progressing towards more nationally owned, integrated and sustainable school feeding programmes. Complementary to this study document, a report with case studies on 20 selected AU member states allows for further elaboration and reflection on the diversity of and innovations within school feeding programmes across the continent. To ensure equitable representation of school feeding programmes, the focus countries for case studies were selected in accordance with the AU's five geographic regions and in proportion to linguistic representation of the AU's official languages.

In line with the above, this study consists of three chapters:

An overview of school feeding in Africa, its sectoral (education and learning, health and nutrition, and agricultural and economic development) evidence base and programmes' design and implementation features that contribute to sectoral impacts;

A conceptual framework, linking school feeding to continental and international development agendas, including Agenda 2063, the SDGs and CESA 16-25; and

A set of seven core entry point recommendations for AU member states, translating into a series of indicators and outputs connected to each recommendation what school feeding policymakers could consider to successfully reach scale and contribute to their country's development.

Chapter 1: School feeding in the African Union

School feeding programmes encompass a diverse array of designs, implementation arrangements and management structures. These programmes can either be nationally owned or administered by international organisations. Occasionally, they can be run through a partnership between a national government and international or non-governmental organisations. Furthermore, school feeding programmes in Africa operate in a range of contexts and under various constraints, which further add to the programmatic diversity on the continent. However, despite the diversity, there are common trends and features that emerge across AU school feeding programmes. This conclusion is revealed by a high-level desk review and primary, qualitative research conducted through in-country missions, consultations with national stakeholders and a survey distributed to AU member states. These commonalities underscore the current state of school feeding in Africa, as well as where school feeding is headed, and include some of the following observations:

- Almost all school feeding programmes target primary school students;
- Most school feeding programmes further target geographically, often based on vulnerability assessments;
- School feeding programmes primarily serve in-school meals;
- Complementary health and nutrition interventions are present in nearly all school feeding programmes, with deworming, micronutrient fortification and trainings being the most common;
- National school feeding policies exist or are in the process of being elaborated/adopted in the clear majority of AU countries;
- Ministries of education and/or the World Food Programme are generally the main implementers for school feeding;
- Communities are involved in the implementation for nearly all school feeding programmes, primarily in meal preparation and serving, giving in-kind or monetary contributions and procurement;
- Rate of enrolment, rate of attendance and other education and learning outcomes are the most common objectives/indicators for school feeding programmes, though a host of school feeding programmes also feature health and nutrition outcomes as objectives; and

- The expansion of HGSF elements, increased cross-sectoral cooperation and transitioning to national ownership are indicated to be the focus areas for future policymaking on the continent.

While the above pinpoint common design and implementation features, a deeper review of sectoral evidence across the education and learning, health and nutrition, and agriculture and local economic development sectors is essential to further understanding the state of school feeding in Africa.

Sectoral evidence

In general, the strongest sectoral outcomes measured from school feeding programmes are associated with education and learning. These outcomes include increased attendance and enrolment rates at schools; reduced repetition and dropout rates; and improved retention, cognitive performance (as evidenced through test scores), and completion and promotion rates. Within the health and nutrition sector, evaluations on school feeding programmes have shown positive outcomes on schoolchildren's anthropometric measurements, such as height, weight, and body mass index; micronutrient status; reported short-term hunger; and incidence of illness. Evidence of school feeding programmes' impacts on the agriculture and local economic development is limited, however, evaluations on HGSF programmes reported more productive and expanded smallholder cooperative societies, as demonstrated through increased yields, and greater feelings of community empowerment.

While the above and other sectoral outcomes support school feeding's potential to productively contribute to several multi-sectoral development goals, more efforts are needed to better and more comprehensively measure the returns from school feeding, particularly over the long-term.

Review of school feeding in the African Union

Despite the strong outcomes across various sectors that school feeding programmes in AU member states have already realised, the desk review of existing international evidence and primary research uncovered some general shortcomings, gaps and areas of improvement in African school feeding programmes. There are also positive generalisations to be made about school feeding in AU member states, such as the near-universal uptake of complementary interventions. Suitably, the below list summarises some matters that merit future consideration if school feeding policymakers wish to amplify the positive outcomes and effects from school feeding programmes:

- Education-based objectives and indicators remain the most common means for measuring outcomes from school feeding programmes in AU member states, with little integration of cross-sectoral indicators and/or objectives.
- A single line ministry, primarily the Ministry of Education, and/or WFP are the sole financing and implementation agencies for school feeding programmes.
- Low application of Monitoring and Evaluation (M&E) for school feeding programmes on a national scale, with limited usage of automated feedback systems to contribute to policymaking.
- Lack of large-scale structured demand programmes and supply-side responses to support the expansion of HGSF and local production capacities.
- Cross-sectoral coordination and integration of school feeding into national development plans and agendas are still at nascent levels of uptake.

- Achievement of complete national ownership of school feeding programmes is a persistent challenge and rarely seen.

The identified gaps and challenges to school feeding programmes in Africa are not insurmountable. Consecutively, a systems approach to national and African development can facilitate improvements to these and other issues.

Chapter 2: A conceptual framework for sustainable school feeding

The highlighted sectoral outcomes in Chapter 1 demonstrate that school feeding programmes are already effective on their own in *driving* sectoral outcomes. Though policymakers may design programmes to specifically achieve these aims, it is necessary to acknowledge a school feeding programme’s ability to *enable* returns across interventions and sectors. This acknowledgement can maximise school feeding’s relevance to a country’s development agenda and to furthering a systems approach to development.

Accordingly, Chapter 2 elaborates a conceptual framework for school feeding in AU member states to guide policymakers. As policymakers are the target audience, this study’s conceptual framework is organised around policy themes and builds innovatively on the renewed School Feeding Policy from the World Food Programme (2013) and on the World Food Programme-World Bank’s Systems Approach for Better Education Results (SABER) research framework on school feeding and health. Additionally, although this study’s focus is on school feeding in AU member states, the conceptual framework is designed to be accessible enough to possess relevance to policymakers in other parts of the globe who wish to integrate school feeding programmes into multi-sectoral development plans. The conceptual framework figure is displayed below:

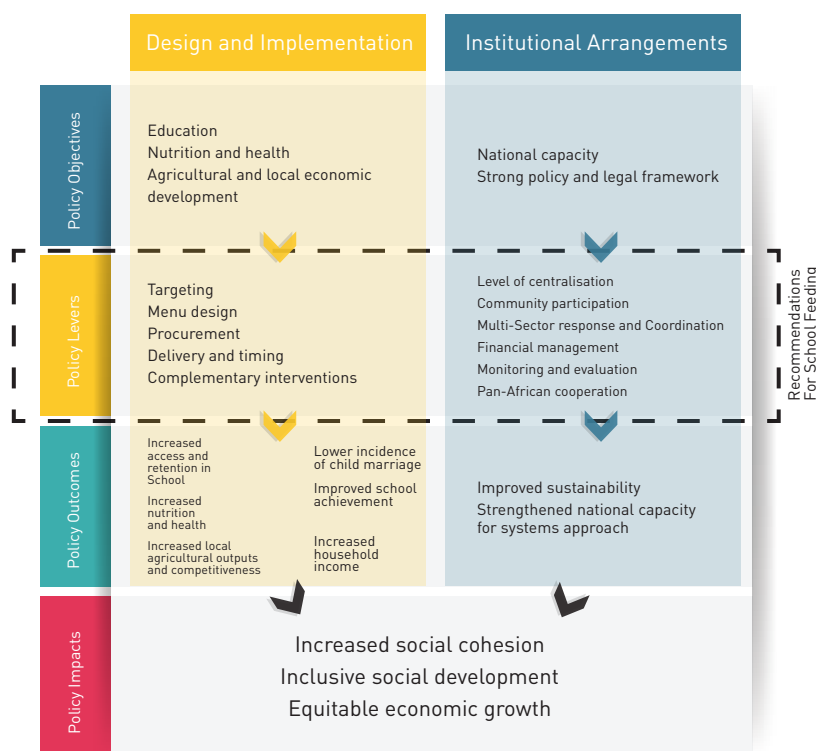


Figure 1. Conceptual framework for sustainable school feeding

The figure itself is divided into four rows, defined as follows:

- **Policy objectives** stand for thematic areas that school feeding programmes are designed to address. The policy objectives listed in the conceptual framework are education and learning, nutrition and health and agricultural and local economic development, which correspond to the sectors discussed in Chapter 1; and national capacity and strong policy and legal frameworks, which refer to how well-designed, multi-sectoral interventions can build national and institutional capacity levels to design, implement and manage such interventions.
- **Policy levers** refer to the mechanisms and/or strategies through which policy objectives can be achieved. The levers in the left-hand column match school feeding programme design features presented in Chapter 1, while the levers in the right-hand column signify strategies that policymakers can use to ensure optimal implementation of integrated school feeding programmes.
- **Policy outcomes** refer to more short-term effects from school feeding programmes and cross-sectoral development programmes. In the right-hand column, the highlighted policy outcomes reflect reported outcomes and linkages between those outcomes from school feeding programmes, as discussed in Chapter 1. In the left-hand column, the policy outcomes suggest the results of well-executed development programmes and the connection between high-performing programmes and improved sustainability and national capacity.
- **Policy impacts** characterise the longer-term impacts of school feeding programmes embedded into cross-sectoral development programmes that continuously produce positive outcomes, both in terms of human capital development and national capacity levels.

Having a clear understanding of the concepts presented in the conceptual framework is essential to their practical application and execution, which is what the entry point recommendations contained in Chapter 3 aim to support.

Chapter 3: Recommendations for school feeding in the African Union

The study closes with a list of seven core recommendations (hereafter referred to as the “core 7”), targeted at guiding countries in building national, sustainable school feeding programmes, operating within a systems approach to development. As such, the foundation for the recommendations has two dimensions. First are the concluding observations from Chapter 1, which speak to outstanding gaps or shortcomings in school feeding programmes in AU member states that policymakers need to confront should they wish to position school feeding as an enabler of returns. Second, the conceptual framework in Chapter 2 aims to address the shortcoming and gaps while simultaneously providing policymakers with an outline for realising school feeding’s full utility as an enabler for sustainable development, given its promise for cross-sectoral outcomes on the education and learning, nutrition and health, agriculture and local economic development sectors, as well as on national capacity development. With these two sides in mind, Chapter 3 responds to the issue at hand by operationalising the conceptual framework into a series of entry point recommendations for AU guidance for member states, presented below:

1. Link school feeding programmes to international, continental and national development agendas.
2. Design and implement school feeding programmes to achieve cross-sectoral policy objectives.
3. Invest in and empower multi-sectoral response and coordination mechanisms.
4. Commit to developmental procurement strategies that exert a strong focus on increasing local production capacities.
5. Innovate financial arrangements by diversifying sources of financing for school feeding programmes and/or putting into place co-financing mechanisms.
6. Devote resources to stronger M&E systems and automate feedback processes to improve policy outcomes.
7. Deepen and learn from South-South and pan-African cooperation to optimise policy impacts.

Concluding thoughts

Going forward, African policymakers and countries should strongly consider school feeding's place, and its home-grown component, in strategic conversations on improving human capital, increasing access to income-generating activities, boosting national production and reaching desired impacts across the education and learning, health and nutrition, and agricultural and local economic development sectors. Building the skill levels of national workforces through better education and health outcomes is particularly critical, given the more knowledge and services-focused trajectory of the global economy; while improving agricultural production and farming capacities are important aspects for the livelihoods and food security of many Africans who depend on agriculture as their primary source of income and food. The goals and objectives of the SDGs, Agenda 2063 and CESA 16-25 help set benchmarks for African policymakers' development plans, but the path to reaching those benchmarks will require a set of adaptable and progressive interventions guided by a systems approach to development. However, in the continent's desire to foster social cohesion, promote inclusive social development and achieve sustained equitable economic growth, school feeding is well positioned to facilitate progress across goals, objectives and development agendas

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LIST OF ACRONYMS AND ABBREVIATIONS

App	(Mobile) Application	MDG	Millennium Development Goal
AU	African Union	NaSIS	Namibian School Feeding Information System (Namibia)
AUC	African Union Commission	NCD	Non-communicable Disease
BMI	Body Mass Index	NEPAD	New Partnership for Africa's Development
CAADP	Comprehensive Africa Agricultural Development Programme	NGO	Non-governmental Organisation
CAR	Central African Republic	NMK	<i>Njaa Marufuku Kenya</i> (Kenya)
CBO	Community-based Organisation	NSFP	Namibia School Feeding Programme
CESA 16-25	Continental Education Strategy for Africa 2016-2025	NSNP	National School Nutrition Programme (South Africa)
COHA	Cost of Hunger in Africa study	PAA	Food Acquisition Programme (Brazil)
CSB	Corn-Soya Blend	PCD	Partnership for Child Development
DRC	Democratic Republic of Congo	PIP/CS	<i>Programme Intégré de Pérennisation des Cantines Scolaires</i> (Côte d'Ivoire)
EMIS	Education Management Information System	PNAE	National School Feeding Programme (Brazil)
EPRI	Economic Policy Research Institute	PSDP	Primary School Deworming Project (Kenya)
FFE	Food for Education	PTR	Pupil-to-Teacher Ratio
GDP	Gross Domestic Product	RCT	Randomised Controlled Trial
GE	General Equilibrium	REC	Regional Economic Community
GSFP	Ghana School Feeding Programme	REPANS	<i>Réseau panafricain pour l'alimentation et la nutrition scolaires</i>
HGSF	Home-grown School Feeding	RoC	Republic of Congo
IDP	Internally Displaced Person	SAFE	Safe Access to Fuel and Energy
IP	Implementing Partner	SDG	Sustainable Development Goal
LEWIE	Local Economy-wide Impact Evaluation	THR	Take-home Rations
M&E	Monitoring and Evaluation	WFP	World Food Programme
MENA	Middle East and North Africa	WTP	Willingness to Pay
MDA	Ministry, Department or Agency		

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1. Introduction

Given the inter-related nature of prolonged malnutrition, lower school attendance and completion rates, and their effects on the positive development of future human capital, school feeding programmes are emerging as an ever-expanding policy option to address these issues on the African continent and beyond. The long-standing presence of school feeding programmes in Africa and recent policy efforts to expand programmes underscore the wide recognition that school feeding programmes enjoy as effective tools to achieve cross-sectoral objectives. Home-grown school feeding (HGFS) programmes, in particular, are gaining traction, as they aim to promote local economic development and agricultural transformation through establishing linkages between the school feeding programme's demand for food and the supply of locally grown food. In response to the burgeoning popularity of school feeding programmes across Africa, and aimed at supporting youth-focused under the African Union's (AU) 2017 Theme Harnessing the Demographic Dividend Through Investments in Youth, the AU has intensified its support to member states in the design and implementation of national school feeding programmes.

This support has been demonstrated in various and significant ways, and the adoption of Agenda 2063, the AU's 50-year vision and action plan, in January 2016 by the Heads of State and Government of AU marked an important step. Specifically, Agenda 2063 unpacks the AU's vision of an integrated, peaceful and prosperous Africa, driven by its own people to take up its rightful place in the global arena.¹ Accordingly, Agenda 2063 translates the ideals for Africa's future development and progress mentioned in the AU's 50th Anniversary Solemn Declaration into concrete objectives, milestones, goals, targets and measures. Agenda 2063 embodies Africa's aspirations for a better world, through transformative investments and inclusive growth, with human resource development through an education and skills revolution listed as key components of attaining this vision.

Shortly following the elaboration and adoption of Agenda 2063, the United Nations (UN) released its Sustainable Development Goals (SDGs), a set of 17 goals to end poverty, protect the planet and ensure prosperity for all as part of a new sustainable development agenda for 2030. The SDGs, in addition to calling for an end to poverty, call for sustained and inclusive economic growth, the end of hunger, the achievement of food security and improved nutrition, the promotion of sustainable agriculture, and inclusive and equitable quality education for all, among other dimensions for human protection, provision and empowerment. School feeding has been cited as an important tool for building countries' capabilities to transition to sustainable development², thereby contributing to the realisation of the SDGs.

As a way to link Agenda 2063 and the SDGs, and to provide a strategic framework for the education and skills revolution called for by Agenda 2063, the AU adopted the Continental Education Strategy for Africa 2016-2025 (CESA 16-25) as a regional operationalisation framework for SDG number 4 ("ensure inclusive and equitable quality education and promote lifelong learning opportunities for all").³ Within a set of guiding principles, pillars and strategic objectives for member states, CESA 16-25 identifies some initiatives already in place on the continent as being vital to the improvement of education and training. In particular, to achieve CESA's strategic objective ² ("build, rehabilitate, preserve education infrastructure and develop policies that ensure a permanent, healthy and conducive learning environment in all sub-sectors and for all, so as to expand access to quality education"),⁴ the AU identifies strengthening school feeding as a critical point. Indeed, the Heads of State and Government of the AU, in a landmark decision during the 2016 AU Assembly, established

1 (African Union, No date)

2 (WFP Centre of Excellence against Hunger, 2015)

3 (African Union, 2015)

4 (African Union, 2015)

the 1st of March as the African School Feeding Day. This decision further recognises school feeding as an important instrument for ensuring inclusive development, health, rural development, gender equality, and inclusion in education, especially for poor, socially marginalised and economically constrained communities.

Parallel to these international, institutional demarches, South-South and triangular cooperation became tools for linking development initiatives to international, continental and national development agendas. This modality of cooperation facilitates connections and networks for learning from successful experiences and best practices from the Global South to optimise local socio-political impacts advancements. Responding to this, the AU, the World Food Programme (WFP) and the government of Brazil – which is a benchmark for the successful implementation of a national school feeding programme linked to local agriculture and integrated into wider food and nutrition security strategies – have established partnerships to generate and disseminate knowledge, provide technical assistance and strengthen national policies in a range of sectors, including education, nutrition, health, agriculture and local development, on the African continent.⁵

For operationalising these activities in Africa, WFP and the Brazilian Government partnered for the creation in Brazil in 2011 of WFP's first Centre of Excellence against Hunger (hereafter referred to as the “WFP Centre of Excellence”). Supporting governments in realising the Agenda 2030, the WFP Centre of Excellence became a global hub for South-South cooperation and knowledge building, capacity development and policy dialogue on food and nutrition security, social protection and school meals. It supports countries in their efforts towards establishing, enhancing and expanding HGSF programmes as interventions integrated into policies and programming on social protection and food and nutrition security, and for strengthening structured demand for local and smallholder farming.⁶

Suitably, the WFP Centre of Excellence's work in Africa impacted the AU's declaration of HGSF programmes as a continental strategy to enhance retention and performance of children in schools, and to boost income generation and entrepreneurship in local communities. Within this decision's framework, the AU called upon member states to bolster school feeding programmes throughout the continent, in recognition of HGSF's integration with local agricultural production and as a fruitful vector of inclusive development.⁷ As a major additional contribution, the WFP Centre of Excellence pushed for the establishment of a continental network for school meals, which was established within the AU. The *Réseau panafricain pour l'alimentation et la nutrition scolaires* (REPANS), chaired and led by governments, combines efforts to support governments establish and strengthen national school meals programmes. Such achievements, amongst others, underpin stronger government-led policies to tackle hunger and poverty.⁸

However, support to African school feeding programmes must extend beyond simply highlighting best practices, sharing knowledge and capacity building of national actors: it must also include support to mitigate the potential challenges posed by school feeding programmes, including challenges on the educational supply-side, such as inadequacy of infrastructure and scarcity of teaching personnel.^{9,10} Through acknowledging and finding solutions to these challenges, the goal of school feeding programmes should be to present sustainable responses that contribute to multi-sectoral outcomes, while simultaneously contributing to national development agendas and local economic growth. Given the diversity of environmental, political, cultural, geographic and demographic contexts in Africa, there is no one-size-fits-all for a national school feeding programme. Nevertheless, by analysing and studying the experiences of existing school feeding programmes on the continent, best practices can be identified for implementing school feeding in a variety of environments and overcoming challenges.

5 (WFP Centre of Excellence against Hunger, 2012)

6 (ASUL & WFP, 2017)

7 (African Union, 2016)

8 (WFP RBP, 2017)

9 (World Bank, 2012)

10 (World Bank, 2012)

To this end, this study and the research contained herein aims to capitalise on the exchange of knowledge and ideas through increased South-South engagement vis-à-vis school feeding by presenting evidence on and real-life examples of innovations in school feeding programmes across the AU. This study organises and analyses an array of empirical data in order to construct a high-level landscaping of the state of school feeding in Africa, a conceptual framework for sustainable school feeding and a set of entry point recommendations enabling AU member states to advance their programmatic efforts in school feeding and achieve the development goals mentioned in Agenda 2063, CESA 16-25 and the SDGs.

1.1 Purpose of the Study

The purpose of the study originates in a 2016 AU Assembly decision, in which it called for the establishment of a multi-sectoral technical committee to support the development of sustainable school feeding programmes. The Assembly also requested the African Union Commission (AUC) to conduct an analysis of how school feeding contributes to inclusive, quality education in the AU, and how it facilitates progress across a range of sectors, including education, nutrition, health, and agriculture and local development. Ultimately, this research supports the AU in generating entry point recommendations that enable member states to optimise their programmatic efforts in school feeding. To implement the Assembly's decision, the AUC and the WFP Centre of Excellence, the AU's partner for this development goal, commissioned the Economic Policy Research Institute (EPRI), a global institute based in Cape Town, South Africa, to conduct the study.

Overall, this study synthesises the outcomes of and multi-sectoral returns from school feeding in AU member states, relying on both secondary sources as part of a structured desk review and primary, qualitative research in order to construct a high-level landscaping of the state of school feeding in the AU. The study then takes the evidence and best practices revealed by the desk review and primary research to develop a conceptual framework for sustainable school feeding that operates from a systems approach; and to generate entry point recommendations, with broad indicators, for progressing towards more nationally owned, integrated and sustainable school feeding programmes. Specifically, the design of the conceptual framework aims to meet the following objectives:

- Demonstrate that school feeding, through its multidimensional sectoral outcomes and impacts across education and learning, health and nutrition, and agriculture and local economic development, combined with extensive national capacity development, can act as an enabler for African human capital development;
- Provide tools to assess the sustainability of current school feeding programmes; and
- Based on the findings, recommend entry points in school feeding programmes, to receive support from the Africa Union to build sustainable, nationally-owned programmes.

Complementary to this document, a report with case studies on 20 selected AU member states allows for further elaboration of and reflection on the diversity of school feeding programmes across the continent. To ensure equitable representation of school feeding programmes, the focus countries for case studies were selected in accordance with the AU's five geographic regions¹¹ and in proportion to linguistic representation of the AU's official languages, as shown in Figure 2 and Table 1.

¹¹ There are officially six AU regions; the sixth is the African diaspora.

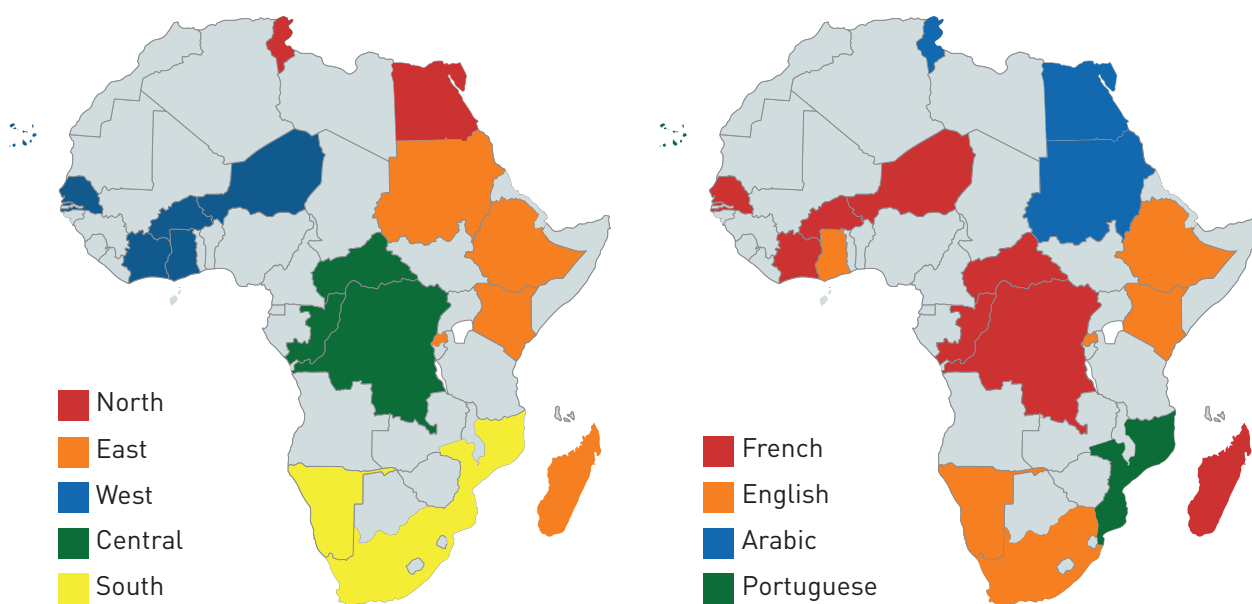


FIGURE 2. Focus country selection by region and language

Table 1. Focus country selection

Regions		Languages	
North (2)	Egypt	English (7)	Ethiopia
	Tunisia		Ghana
East (5)	Ethiopia		Kenya
	Kenya		Lesotho
	Madagascar		Namibia
	Rwanda		Rwanda
	Sudan		South Africa
	West (6)		Burkina Faso
Cabo Verde			Central African Republic
Côte d'Ivoire			Côte d'Ivoire
Ghana			Democratic Republic of Congo
Niger			Madagascar
Senegal			Niger
Central (3)	Central African Republic		Republic of Congo
	Democratic Republic of Congo	Senegal	Egypt
	Congo	Senegal	Egypt
	Republic of Congo	Senegal	Egypt
South (4)	Lesotho	Portuguese (2)	Sudan
	Mozambique		Tunisia
	Namibia		Cabo Verde
	South Africa		Mozambique

Before progressing farther into the document, it is worthwhile to note that this study is neither a comparative analysis of school feeding programmes between AU member states nor between the AU and other parts of the world. Rather, this study, and the case study companion, functions as a resource guide to school feeding, both outlining multi-sectoral returns and innovative design features, as well as pathways through which countries can adjust and enhance existing programmes in line with desired developmental objectives and current contexts.

1.2 Outline of the Study

The study consists of three chapters:

1. An overview of school feeding in Africa, its sectoral (education and learning, health and nutrition, and agricultural and economic development) evidence base and programmes' design and implementation features that contribute to sectoral impacts;
2. A conceptual framework, linking school feeding to continental and international development agendas, including Agenda 2063, the SDGs and CESA 16-25; and
3. A set of seven core entry point recommendations for AU member states, translating into a series of indicators and outputs connected to each recommendation what school feeding policymakers could consider to successfully reach scale and contribute to their country's development.

In the first chapter of the study, the focus is on addressing the question of 'what works, when and how?' in school feeding by providing a high-level landscaping of the programmes present in AU member states. The chapter assesses the state of school feeding on the continent and provides an overview of the sectoral evidence on the impacts of these various African programmes, analysing returns in sectors including education and learning, health and nutrition, and agricultural and local economic development. Linking the evidence on sectoral impacts subsequently to an analysis of these programmes' design and implementation features, the first part culminates in developing a thorough understanding of considerations in programme design and implementation, as well as broad gaps and areas of improvement within school feeding programmes.

In the second chapter, the study broadens its scope and provides a conceptual framework outlining how – through building on the findings of the first part – school feeding can contribute to African development. It commences by linking the presented sectoral evidence from school feeding to continental and national development agendas, including the SDGs, Agenda 2063 and CESA 16-25. Chapter 2 makes the case for a systems approach to school feeding programmes, as well as the necessity to implement and finance programmes based on a comprehensive evaluation approach, focusing on programme returns. Importantly, throughout the second chapter, selected examples from the 20 focus countries provide practical examples of the discussed theory, supporting the conceptual framework for the AU through real-life policy contexts.

In the third and final chapter, the study translates the findings from the first and second chapters into a series of seven core recommendations for school feeding programmes for school feeding programmes to successfully reach scale and contribute to their country's development. Acknowledging the diversity of the continent, also in terms of the different points of departure from which AU member states can use the study to improve their school feeding inputs, the recommendations are modeled to remain accessible enough for all states under AU guidance, with indicators and outputs connected to each recommendation grounding and concretising the recommendations into actionable points. Chapter 3 also mentions the establishment of a School Feeding Cluster within the AU, tasked with monitoring the progress of school feeding programmes across the continent in meeting the core seven recommendations and in contributing to overall development.

2. Methodology and Data Sources

The study adopted a mixed methods approach to generate the evidence base on school feeding across the African Union, build a conceptual framework for school feeding on the continent, and finally provide suitable entry points for AU recommendations for its member states at different stages of their school feeding efforts. The mixed methods comprises:

- A desk review of existing literature and data on school feeding programmes;
- In-country missions to 12 AU member states to carry out qualitative research activities;
- Interviews and discussions with governmental and non-governmental stakeholders during international and national conferences on school feeding and child nutrition – which also served to present and validate preliminary study findings; and
- Primary data collection on current school feeding activities in all AU member states through the administration of a continental survey.

For Chapter 1, an extensive review of **existing** operational and non-operational literature and data on school feeding programmes was conducted. Amongst others, a plethora of programme evaluations were reviewed and assessed to generate an evidence base of what works, when and how. This review utilised different qualitative and quantitative methodologies to evaluate particular programmes. Guiding this assessment, Chapter 1 utilises an outcome-oriented framework of analysis, in line with how school feeding programmes to date have typically been evaluated. The framework divides the assessment of school feeding programmes into various sectoral outcomes, which was found to adequately reflect the objective of the assessment on how school feeding programmes are contributing to African development, as the latter would naturally be outcomes-focused as well.

In addition to a review and assessment of various types of literature and existing secondary data on school feeding programmes, Chapter 1 is complemented by primary data collected through the in-country missions and the continental survey on school feeding. **In the course of the study**, in-country missions to 12 out of the 20 focus countries (see above) were conducted to carry out qualitative research activities. This includes key informant interviews and group consultations with involved government ministries, departments and agencies (MDAs), development partners, non-governmental organisations (NGOs) and civil society organisations (CSOs). Moreover, schools, farmers' organisations and cooperative unions, warehouses and storage facilities, among others, were visited to gather a deeper understanding of the supply-side provisions of school feeding programmes – that is, the prevailing infrastructure and arrangements at school-, community-, regional-, and national-level.

Finally, the continental survey on school feeding served to gather information on existing programmes and efforts for all AU member states, even the non-focus countries, so that a high-level landscaping of school feeding activities and trends across the continent could be developed. The survey was developed for this study and comprises sections on institutional arrangements, design, monitoring and evaluation, as well as future plans for the school feeding programme. Concluding, Chapter 1 integrates primary and secondary data to provide an overview of school feeding on the continent, and what works, when and how.

It follows Chapter 2, which provides a conceptual framework for school feeding in Africa, linking school feeding to continental and international development agendas, including Agenda 2063, the SDGs and CESA 16-25. This chapter draws largely on the evidence base on school feeding, established in Chapter 1. Moreover,

a further literature review of relevant articles served to introduce the systems approach to school feeding, and particularly the cross-sectoral integration of school feeding programmes. The conceptual framework was subsequently developed through this cross-sectoral lens on school feeding. Throughout the chapter, examples from the various case study countries serve to exemplify how the theory presented in the framework can be realised in practice. The information utilised in these country examples stems from primary data, collected and collated through the in-country missions and survey.

The study concludes with Chapter 3 presenting the aforementioned set of seven core recommendations for AU guidance. Therewith, this chapter further elaborates on the theoretical framework presented in Chapter 2, and concretises the framework through practical recommendations. The recommendations largely build on, and emerged from, best practice models found during the in-country missions, explorative discussions with stakeholders during these missions, exchange of ideas and receipt of feedback during conferences and workshops, and findings of Chapter 1 as to what works, when and how.



Chapter

1

School Feeding Within
the African Union

Chapter

1

School Feeding Within the African Union

This first chapter of the study assesses the state of school feeding on the continent and provides an overview of the sectoral evidence on the impacts of these various African programmes, analysing returns in sectors including education and learning, health and nutrition, and agricultural and local economic development. Hence, the chapter addresses the question of ‘what works, when and how?’ in school feeding. It does so by providing a high-level landscaping of the programmes present in AU member states and by building upon the available country-level information and existing evidence on outcomes of school feeding programmes. To guide and structure the analysis, the chapter commences by providing clear definitions on school feeding and related concepts, as well as a framework for analysis, which draws upon the prevailing sectoral view of evaluating school feeding programmes. Finally, linking the evidence on sectoral outcomes and impacts to an analysis of these programmes’ design and implementation features, this chapter culminates in a thorough understanding of ‘what works, when and how?’.

1. Making Sense of School Feeding

To elucidate the terminology and concepts utilised in the study, key terms and concepts related to school feeding are introduced and described below. Furthermore, to provide a framework for the forthcoming assessment of existing school feeding programmes across the African Union and their respective evidence on sectoral outcomes and impacts, an overview of how school feeding programmes are typically evaluated, focusing on the methodology, instruments, as well as indicators, is outlined.

1.1 Definitions and Concepts

School feeding can be broadly defined as the availability and the provision of adequate food – in terms of quantity, quality, safety, as well as socio-cultural acceptability – for schoolchildren. Commonly, school feeding refers to meals served on school premises; nevertheless, complementary modalities of feeding, such as take-home rations (THR), exist. While the concept of in-school meals implies the provision of food to pupils in school, THR are provided to the children’s families, usually conditional upon their children attending school.

Both modalities come in multiple forms, wherein in-school meals can be, among others, hot cooked meals; dry meals; or snacks, such as biscuits, which are oftentimes fortified. In various countries, in-school meals are

combined with THR for particularly vulnerable students, particularly girls, to generate greater impacts on school enrolment and retention rates and reduce gender or social gaps. As THR are usually not implemented as a stand-alone intervention, but rather in combination with in-school feeding, policymakers could consider adding THR as a complementary intervention to the existing school feeding programme, rather than an alternative intervention¹².

While this study presents evidence from a multitude of school feeding programmes and pilots implemented by different governmental and non-governmental stakeholders, the survey reveals that the majority of countries in the African Union have an operational national school feeding programme, or aspire to have one in the near future by increasing government ownership in current efforts. This study defines a ***national school feeding programme*** as a programme that is managed by the government, either alone or with support from WFP or other development partners, and provides food on a regular basis to schoolchildren¹³.

Additionally, with their objective of promoting local economic development and agricultural transformation, ***Home-Grown School Feeding*** programmes are increasingly gaining traction. HGSF can be defined as a school feeding programme that provides food produced and purchased from within a country, especially from smallholder farmers. More specifically, this study defines HGSF as produced and purchased locally, that is, nearby the area of the schools served under the programme. The main objective of HGSF programmes is to link school feeding with local agricultural production, building upon the assumption that households, local farmers and small businesses may benefit from the structured market that a school feeding programme presents to sell their goods¹⁴. Therefore, in the set-up of HGSF programmes, it is vital that procurement mechanisms are designed to increase the farmers' and producers' ability to access the market. Moreover, additional support for farmers and producers to increase and optimise their production could be planned in coordination with a HGSF strategy, including for instance agricultural extension services and the establishment of linkages to a country's industrial strategy.

Box 1. School feeding terminology

Nutrition-specific interventions: These address the immediate causes of undernutrition, such as inadequate dietary intake and some of the underlying causes, including feeding practices and access to food. (UNICEF)

Nutrition-sensitive interventions: These address the underlying and basic causes of malnutrition by incorporating nutrition goals and actions into a wide range of sectors. They can serve as delivery platforms for nutrition-specific interventions. (UNICEF)

Fortification: The practice of purposefully increasing the micronutrient content (including Vitamin A, iron, iodine or zinc) of foods, such as biscuits or maize meal. (World Health Organization, 2006)

Deworming: A drug treatment to control intestinal worm infections, as recommended by the World Health Organization. (World Health Organization, 2005)

Smallholder farmers: Semi-subsistence farmers who cultivate fewer than five hectares of land, although most farm two hectares or less. The precise definition may vary by country and region. (World Food Programme, 2012)

12 (World Food Programme, 2013, pp. 3-6)

13 (World Food Programme, No date)

14 (World Food Programme, No date)

Box 2. School feeding as social protection

Oftentimes, school feeding programmes are classified as social safety nets, that is, as a means to provide assistance to poor and food insecure people, and predominantly schoolchildren. In emergency and crisis situations the provision of food to address food insecurity might still be the main objective of school feeding programmes. However, nowadays, most school feeding programmes, particularly national programmes, are implemented with the objectives of positively impacting various education- and/or health- and nutrition-related indicators of school children. In addition, school feeding programmes, and particularly HGSF, can aim to achieve outcomes and impacts in the areas of agricultural and local economic development by providing local farmers and producers access to the market for their commodities, that a school feeding programme might constitute.

Hence, in social protection terms, school feeding can have multiple objectives and therewith the potential to achieve multiple outcomes and impacts on different beneficiaries, including school children, caterers and cooks, local producers and farmers, among others, through various pathways. Thus, school feeding programmes go beyond merely providing assistance to poor and food insecure children. Instead, by improving education-, nutrition-, and health outcomes of children, school feeding acts as a preventive mechanism – preventing hunger, malnutrition destitution and mortality in the long run. Going one further, school feeding even acts as a promotive and transformative measure, by positively impacting education indicators of schoolchildren, oftentimes particularly focused on girls, by supporting livelihoods development of farmers and producers, and by employing caterers or cooks. Consequently, simply classifying school feeding programmes as social safety nets might be too narrow, failing to acknowledge the preventive, promotive and even transformative impacts that school feeding can have. Thus, this study conceptualises school feeding as an all-encompassing social protection intervention, which can achieve preventive, protective, promotive, and transformative impacts on multiple actors, through various pathways. (Sabates-Wheeler, 2010)

1.2 Assessing What Works, When and How

School feeding programmes have been implemented across the world for decades and thus a number of evaluations, utilising various methodologies, are available. Typically, these evaluations focus on assessing school feeding outcomes and impacts in the sectors of education, health, nutrition, and agricultural and local economic development. In doing so, various methods and instruments are utilised, including methods of qualitative nature, such as interviews and focus group discussions, as well as randomised controlled trials (RCTs). RCTs constitute one of most common evaluation methods in social sciences and correspondingly a variety of school feeding programmes across the continent have been evaluated with the help of RCTs. As an evaluation tool, RCTs can be effective at establishing a cause-effect relationship between interventions and outcomes by isolating study groups into control and treatment groups, and assessing heterogeneous trends over time.

However, in spite of the existence of international evidence from school feeding programmes' various sectoral

outcomes and impacts, evaluations that comprehensively and cross-sectorally cover these outcomes are difficult to find. This can be attributed to the inherent difficulty in evaluating complex, multi-sectoral interventions like school feeding. Moreover, the full range of school feeding programmes' impacts may only be seen over the long-term, as, for instance, the impacts of increased years of schooling on an individual's earnings potential would only be revealed over the course of a lifetime. Undertaking multi-sectoral, long-term evaluations requires the investment of significant time, expertise and resources, and school feeding programmes may face budgetary constraints in allocating sufficient resources to this pursuit.

As such, school feeding programmes are typically evaluated in absence of complementary interventions targeted to the demand- or supply-side, which, as found by various studies, significantly strengthen the impact of the programmes. Simultaneously, school feeding programmes can strengthen returns to these complimentary programmes by, in the example of deworming programmes, ensuring that more pupils get dewormed through the school feeding programmes' impact on school enrolment. It is exactly these synergies that are often not captured by evaluations, and subsequently may underestimate the impact of school feeding. Finally, not all school feeding programmes evaluated have reached full implementation or optimisation levels. For example, some school feeding programmes evaluated may not serve meals for the entirety of the school year or may not be able to adhere to school menus. As such, these evaluations might not assess the impact of a mature, national programme at scale like the ones increasingly seen on the continent.

Consequently, while RCTs can produce strong results as described above, it is fair to say they can also pose limitations and underestimate the programmes' true impacts. RCTs are oftentimes restricted in scope, both in terms of time, depth and breadth of information collected. These limitations may help isolate cause-effect relationships on restricted groups over a given period of time, but may not collect the full range of outcomes from a complex, long-term intervention such as school feeding. Second, evaluating school feeding programmes with an RCT requires the evaluation to isolate the programme from any additional interventions that may strengthen the school feeding programme overall, but dilute the impacts of the programme on its own.

While acknowledging the limitations of existing evaluations to fully capture the range of outcomes and impacts school feeding programmes can have across sectors, this chapter relies on existing sectoral evidence of school feeding programmes across the African Union due to the unavailability of cross-sectoral studies. Therefore, in the following, the evidence in this chapter is presented according to a sectoral division into education and learning, health and nutrition, and agricultural and local economic development, which is in line with the way school feeding programme outcomes and impacts have been assessed. And while there may be outcomes from school feeding across other sectors, this study focuses on the aforementioned ones due to their relevance to and reflection in the SDGs, Agenda 2063 and CESA 16-25, as well as the availability of international evidence. Likewise, as this study aims to explore how school feeding is contributing to African development, a sectoral presentation of evidence appropriately reflects its outcome- and impact-based focus. Nevertheless, in Chapters 2 and 3 it is exactly this element of cross-sectoral integration and generation of cross-sectoral evidence that the study picks up again.

2. Overview of Existing School Feeding Programmes in the African Union

Before exploring existing sectoral evidence on what works, when and how across the continent, this section presents a brief overview of school feeding programmes in each AU member state, inclusive of such information as general structure, implementation arrangements, budget and financing, policy and legal frameworks and future plans. The overview is based on information gathered through a survey sent out to each AU member state and is presented in Table 2 below.¹⁵ Most of the information in the table relates to the main school feeding programme or model in each country, which is generally implemented by the national school feeding ministry, department or agency and/or WFP. However, many AU countries feature additional school feeding models, often implemented by NGOs or other MDAs. These models also make important contributions to school feeding and as such, available information on additional school feeding models in each country is also reflected in the table. Table 2 presents information on selected topics, with Annex 1 providing expanded information from the survey.

School feeding programmes encompass a diverse array of designs, implementation arrangements, and management structures, being nationally owned, managed by international organisations, or at times run through a partnership between the national government and international organisations. Furthermore, school feeding programmes in Africa operate in a range of contexts and under various constraints, which further add to the diversity on the continent. Some of the main components in which there is considerable diversity across African school feeding programmes include how many years countries have had school feeding programmes in place; the reliance on HGSF to supply school meals, either in whole or in part; whether procurement is mainly centralised or decentralised and whether most commodities are procured from abroad or domestically; the annual school feeding cost per student, which ranges from USD 6.61 per year to USD 326 per year; and the presence of multiple school feeding models in a country. Such a range of responses is not surprising, as the governmental, geographic, economic and education structures are different in each AU member state. As such, it is necessary for each African country to find the most appropriate school feeding arrangements, given the structures in place.

However, in spite of the diversity, there are common trends and features that emerge across AU school feeding programmes. These commonalities reveal the current state of school feeding in Africa, as well as where school feeding is headed, and include some of the following observations:

- Almost all school feeding programmes target primary school students;
- The majority of school feeding programmes further target geographically, often based on vulnerability assessments;
- School feeding programmes primarily serve in-school meals;
- Complementary health and nutrition interventions are present in nearly all school feeding programmes, with deworming, micronutrient fortification and trainings being the most common;
- National school feeding policies exist or are in the process of being elaborated/adopted in the vast majority of AU countries;
- Ministries of education and/or WFP are generally the main implementers for school feeding;

¹⁵ Table 2 reflects all country surveys received by 09 June 2017.

- Communities are involved in the implementation for nearly all school feeding programmes, primarily in meal preparation and serving, giving in-kind or monetary contributions and procurement;
- Rate of enrolment, rate of attendance and other education and learning outcomes are the most common objectives/indicators for school feeding programmes, though a host of school feeding programmes also feature health and nutrition outcomes as objectives; and
- The expansion of HGSF elements, increased cross-sectoral cooperation and transitioning to national ownership are indicated to be the main focus areas for future policymaking on the continent.

Taken together, what do the survey results reveal about the state of school feeding in Africa? They reveal a great degree of coverage for school feeding programmes across the AU, with millions of children receiving hot, in-school meals, many of whom live in food insecure areas. They reveal that school feeding, at the moment, remains primarily an education intervention, with education actors leading implementation and evaluating programmes using education-focused indicators and objectives. However, they also reveal increasingly integrated and more comprehensive school feeding programmes that offer complementary health and nutrition interventions, and that are increasing their engagement with smallholder farmers and local markets. In addition, they reveal high levels of national, political commitment to school feeding in the form of national school feeding policies and more cross-sectoral coordination for school feeding. Constructing a general picture of the current state of school feeding in AU member states can help policymakers identify possible opportunities for cooperation with and learning from other policymakers, and for integrating school feeding into regional and pan-African development plans.

Table 2. Overview of school feeding programmes in the African Union

AU Member state	Algeria	Angola	Botswana	Burkina Faso
Name of primary SFP & Year started	School Feeding Program to Sahrawi Refugee Camps	School Meals Programme	Boiswana Supplementary Feeding Programme, April 1966	Support to Primary School Teaching
Actors involved in implementation	WFP, CISP (NGO), Sahrawi authorities	Ministry of Education, Ministry of Health, Ministry of Agriculture	Ministry of Local Government and Rural development, Department of Local Government Finance and Procurement Services, Food Relief Services Division	Directorate of Specific Means to Education Structures (DAMSSE) under Ministry of Education (MENA), WFP, CRS/Cathwell
Multiple SFP models?	No	No	No	1) WFP serves breakfast, lunch and take-home rations to girls; 2) Government serves lunch; 3) CRS/Cathwell serves lunch.
Targeting approach	Geographic and categorical – Five Sahrawi refugee camps, close to the Tindouf department.	Universal	Universal	Geographic – Schools with adequate and secure food storage facilities, space for cooking, kitchen equipment, PTA, etc.
Grades covered under SFP	Primary, intermediate, kindergartens and special need schools	Primary school	Primary school	Preschool and primary school
Beneficiaries	40,500	1,516,133	331,000	78,565
Meals	In-school meals: 80g glass of milk provided twice daily, with high energy biscuits HEB at 10.30AM and 1PM.	In-school meals served during lunch time	In-school meals: one school meal served at 11AM daily.	In-school meals and THR: Daily lunch provided at noon under all models. WFP serves breakfast at 10AM and provides THR for girls in last two primary school classes.
Complementary interventions	Deworming, rehabilitation of kitchen, store rooms, feeding areas and latrines and advocacy and sensitisation on WASH issues and preparation of milk	No	No	No
SFP part of national policies?	No	Yes	Yes	Yes
Primary funder of SFP	WFP ¹ , Switzerland (DSM) and Italy (HEB)	Government	Government	WFP; Government; DAMSSE; MENA
Annual cost per student	USD 206.35	USD 206.35	USD 53	USD 0.20 (per meal)
Procurement	In kind donations (Switzerland and Italy)	Partially decentralised and handled at municipal level that procure from farmers organisations through direct procurement.	Centralised - Food Relief Services Division in the Department of Local Government Finance and Procurement Services purchases commodities.	Centralised - WFP purchases commodities through country office, and delivers to schools via sub-offices. Cereals and beans are locally procured.
Food from abroad/ domestic	Abroad	Mostly domestic	Mostly domestic	Mostly from abroad

1. Please note that designating WFP as a primary funder denotes that a country office provides significant budgetary support to the school feeding programme; however, the financial resources for a WFP country office's budgetary support often comes from international donors, which are not reflected in the table

HGSP used to supply meals?	No	Yes	Yes, in part - agricultural produce such as green mealies, sweet water melons, yams, sweet reeds and fresh cowpeas grown purchased from individual local farmers by school feeding programme.	Yes - Cereals and beans are bought from farming cooperatives (through P4P) and yogurt is provided by groups of women milk transformation unions (UTL).
Actual and prescribed percentage of smallholder supplies	None	N/A	None	Actual supplies of 3.9%; smallholder inclusion outlined in DAMSSE document on 2017 commodity purchases for school canteens, contribution set at 30%.
Agricultural extension services	No	No	No	Yes - Trainings; installation of food stocks and conservation; technical assistance to UTL through trainings and equipment
Main M&E indicators	Enrolment rate; retention rate	N/A	Short-term hunger, nutrition, attendance and participation rates.	Gross rate of school enrolment; rate of primary school completion; ratio of girls/boys
Areas of community involvement	Meal preparation, M&E, transport and delivery of food stocks	Preparation of meals and provision of cooking	Food preparation and delivery.	Preparation of meals and provision of cooking wood; community contribution of commodities (collection of local foodstuffs); sensitization of girls' education
Upcoming plans for SFP	Ideas to offer more services to refugees and diversify food. Currently no plans to handover programme to the Sahrawi authorities as they don't have the means to fund the project however there are future plans to make the biscuits locally in Algeria	Strengthen the home-grown component; Promote nutrition education for educators	Strengthen implementation of Technical Development Plans elaborated by NEPAD/PCD in 2011 and 2013, particularly vis-à-vis recommendations on increased staffing levels.	Introduction of locally produced yogurt and progressive expansion to other schools; distribution of powdered micronutrients; distribution of local products. Progressive disengagement of WFP.
AU Member state	Burundi	Cameroon	Chad	Congo (Republic of)
Name of primary SFP & Year started	WFP School Feeding, 2003	Support to primary education	Support to Primary Education and Girls' Enrolment, 1973	School Feeding Programme, 2001/02
Actors involved in implementation	WFP, Ministry of Education of Superior Teaching and Scientist Research, Ministry of Health, iNGOs, nNGOs	Ministry of Basic Education, Ministry of Agriculture, WFP, FAO	WFP, National Directorate of Food, Nutrition, and School Health under Ministry of National Education and Civic Promotion	Ministry of Primary and Secondary Education and Alphabetization, WFP, IPHD (NGO), Ministry of Health, Ministry of Agriculture
Multiple SFP models?	1) WFP school feeding; 2) HGSF	No	No	No
Targeting approach	Geographic and categorical - Localities chosen based on food security and education indicators.	Geographic - Regions in the North and Extreme North with high levels of food insecurity, and large disparities in enrolment rate and for girls and boys.	Geographic - Regions with high levels of food insecurity and low levels of school enrolment.	Geographic - Districts identified as most vulnerable to food insecurity.
Grades covered under SFP	Early childhood development, primary school (grade 1-9)	Primary school, grades 1-6 (SIL to CM2)	Primary school	Primary school, grades 1-6
Beneficiaries	441,634	19,459	128,000	95,000

Meals	In-school meals served at mid-day.	In-school meals and THR: Daily meal served at noon.	In-school meals and THR: Daily meal served between 9 and 10AM.	In-school meals: Daily meal served at noon.
Complementary interventions	Deworming; fortification; school gardens; SAFE initiative	No	Deworming; micronutrient fortification	Deworming; introduction of fortified cassava and flour forthcoming
SFP part of national policies?	Yes	No	No	Yes
Primary funder of SFP	Government of Burundi, WFP	WFP	WFP	Ministry of Primary and Secondary Education and Alphabetization
Annual cost per student	21 USD	79.76 USD	79.76 USD	54 USD
Procurement	Centralised - WFP purchases commodities at the national or regional/international level and delivers these to sub-offices.	Centralised - WFP conducts purchasing through tenders	Centralised - WFP purchases commodities through tenders	Centralised
Food from abroad/ domestic	Mostly from abroad	Equal distribution of both	Equal distribution of both	Abroad
HGSP used to supply meals?	Yes - Mainly cereals, beans, rice and corn	No	No	No
Actual and prescribed percentage of smallholder supplies	Actual supplies of 30%; smallholder inclusion in policies, but no percentage specified.	Actual supplies of 10%; smallholder inclusion not in policies.	Actual supplies of 30% of cereal purchases; smallholder inclusion in policy, but no percentage specified.	No actual supplies; smallholder inclusion outlined in National Policy on School Feeding; contribution set at 100% by 2025.
Agricultural extension services	Yes - Trainings; support in post-harvest management, preparation of business plans; storage facilities; farming inputs	N/A	N/A	N/A
Main M&E indicators	Enrolment rate; retention rate	Enrolment rate; participation rate; learning outcomes	Enrolment rate; participation rate; learning	Enrolment rate; retention rate; completion rate; ratio of girls to boys; National Capacity Index; rate of household food insecurity
Areas of community involvement	Meal preparation; in-kind contributions; rehabilitation of necessary infrastructure (cafeterias, warehouses)	Procurement; transport, delivery and stocking of commodities; meal preparation; M&E; monetary and in-kind contributions	Meal preparation; transport, delivery and stocking of commodities; monetary and/or in-kind contributions	Construction/rehabilitation of infrastructure (warehouses, kitchens, toilets); meal preparation; stocking of commodities; provision of local produce (vegetables, fruits)
Upcoming plans for SFP	SABER recently undertaken and development of a comprehensive action plan for the transition to a nationally owned school feeding programme.	Within the WFP Strategic Plan, school feeding will be executed for the next 5 years with Home-Grown School Feeding and with the heightened participation of Government through different ministries. A policy on school feeding has been developed and is awaiting Government validation, foreseeing more responsibilities for the Government including financing, management, and coordination.	N/A	Provide all primary school students through HGSF by 2025; formation of a multi-sectoral council on school feeding, comprised of donors, partners, and Government; creation of an inter-ministerial technical committee. From 2025, the programme should be 100% financed by the Government, with the financial plan detailed in the National Policy on School Feeding.
AU Member state	Democratic Republic of Congo	Djibouti	Egypt	Ethiopia
Name of primary SFP & Year started	WFP School Feeding Program, 2003/04	Support to the National School Feeding Program in Djibouti, 2013 ²	National School Feeding Programme, 1941	School Feeding, 1994

2, School feeding has been present in Djibouti prior to 2013; 2013 is the starting year for the Support to the National School Feeding Program in Djibouti

Actors involved in implementation	WFP, World Vision, Lutheran World Federation, Caritas, Samaritan's Purse, COOPI, Ministry of Education involved in selection of schools	WFP, Office for School Catering under Ministry of Education	Ministries of Social Solidarity, Education, Health and Population, Industry and Trade, Supply & Internal Trade, Agriculture and Land Reclamation, International Cooperation Finance, WFP	Ministry of Education, Regional Education Offices, WFP, First Lady Initiative, private donors, FAO, NGOs
Multiple SFP models?	No	No	1) Different meals hot/dry meals and snacks under Government implementation; 2) WFP model with fortified date bars and conditional in-kind or cash transfers to families of children in community schools	1) WFP uses mixed model of HGSF and imported food; 2) Government emergency school feeding uses WFP HGSF model of procurement; 3) First Lady Initiative and private donors provide lunch through organised women groups.
Targeting approach	Geographic and categorical - Emergency zones in Eastern DRC in schools that receive IDPs, returnees, or refugees; with enrolment rates below national average; gender disparity below national average; elevated degree of micronutrient deficits.	Geographic - Schools in all rural areas and two schools situated at the periphery (semi-urban area).	Universal coverage for Kindergarten and primary schools; in higher grades, priority to vocational, sports, special needs and boarding schools.	Geographic - Targeting based on food insecurity, enrolment rates, gender parity levels, and dropout rates.
Grades covered under SFP	Primary school, grades 1-6; selected pre-primary schools	Pre-primary and primary school (grades 1-9)	Kindergarten, primary school, partially pre-primary and secondary schools	Pre-primary and primary school, grades 0-8
Beneficiaries	160,000	18,000	13,500,000	470,000; an additional 57,000 supported by First Lady Initiative and NGOs
Meals	In-school meals: Daily meal served at 1.30PM, subject to food availability.	In-school meals: Two daily meals served at 7AM and 11.30AM; THR	In-school meals: depending on the model, daily cooked meal; dry meal of bread, cheese/ eggs, tahini/jam; fortified biscuits; date pie; fortified date bar; THR under WFP model	In-school meals: Daily meal served mid-morning; THR once per month
Complementary interventions	Deworming, depending on the availability of tablets	No	Fortification of snack; deworming; school rehabilitation; nutrition awareness programmes; mothers' livelihood support; teachers training	Deworming; trainings on nutrition, health, sanitation, school gardens, energy saving stoves, and infrastructure building (WASH, store and kitchen and feeding shelters)
SFP part of national policies?	No	Yes	Yes	Yes
Primary funder of SFP	WFP	WFP, Ministry of Education	Ministry of Finance	WFP, Dubai cares, Brazilian Government, private donors, Government of Ethiopia and the Regional Education bureau
Annual cost per student	USD 55	USD 328	USD 0.09 child/day	USD 0.18 child/day (WFP); USD 0.15 child/day (HGSF); USD 0.10 child/day (emergency HGSF)
Procurement	Centralised - Centralised per regional WFP office, wherein each office receives its allocations as defined by the Country Office.	Centralised procurement within WFP; decentralised procurement of fresh produce from Ethiopia within the Ministry of Education, where regional level is in charge	Decentralised - Identification of needs and allocation of funding decentralised within Ministry of Education	Partially decentralised and handled at Regional Offices, that procure from farmers organisations through direct procurement (adopted from WFP P4P).

Food from abroad/ domestic HGSP used to supply meals?	Mostly from abroad	Mostly from abroad	Mostly from abroad	Domestic	Domestic
Actual and prescribed percentage of smallholder supplies	No	None	N/A	No	Yes
Agricultural extension services	P4P projects just started in 2 provinces.	N/A	N/A	N/A	Actual supplies of 100% under HGSP; smallholder inclusion in policy, but no percentage specified. Trainings; inputs such as seeds, fertiliser, farming equipment
Main M&E indicators	Enrolment rate; attendance rate; dropout rate; completion rate. Promotion of local production.	Operational indicators; school attendance rate; completion rate; dropout rate; gender parity levels	Operational indicators; school attendance rate; completion rate; dropout rate; gender parity levels	Output indicators; On the government level, number of meals distributed. For WFP indicators: school attendance rate; dropout rate; gender parity levels	Enrolment rates; attendance rates; nutrition outcomes; social cohesion and inclusion outcomes; local economic development
Areas of community involvement	Preparation and distribution of food; warehouse security; construction of kitchens and renting of depots; provision of cooking wood; set-up of school gardens.	Meal preparation and serving; further participation through meetings of PTAs.	Meal preparation and serving; further participation through meetings of PTAs.	No	Food production; meal preparation and serving; monetary or in-kind contributions
Upcoming plans for SFP	Implementation of the national policy on social protection. Ensuring the recognition of school feeding as a national programme under the national policy on social protection.	The government recently completed a SABER and has developed a comprehensive action plan towards development of nationally owned school feeding programme.	The government recently completed a SABER and has developed a comprehensive action plan towards development of nationally owned school feeding programme.	Development of national school feeding strategy; universal coverage of Kindergarten and primary schools with an enhanced dry meal, assessments on educational and health/nutrition impact of school feeding; supply chain assessment of processes, information flows, and staff; costing of existing feeding programme	Finalisation and approval of school feeding strategy; increase coverage to 3 million (pre-) primary school children and secure necessary funding; WFP plans to focus more on technical assistance and capacity development.
AU Member state	Gambia	Ghana	Ghana	Kenya	Lesotho
Name of primary SFP & Year started	Home Grown School Meals Programme (HG-SMP), 2012	Ghana School Feeding Programme, 2005	Ghana School Feeding Programme, 2005	National School Feeding Programme, 1980	Lesotho School Feeding Programme, 1961
Actors involved in implementation	Ministry of Basic and Secondary Education (MoBSE), WFP, Ministry of Agriculture, the Gambia Standards Bureau, FAO	Ministry of Gender, Children and Social Protection, WFP, UNICEF, PCID, World Bank, Ministries of Education, Health, Agriculture, Local Government and Rural Development	Ministry of Gender, Children and Social Protection, WFP, UNICEF, PCID, World Bank, Ministries of Education, Health, Agriculture, Local Government and Rural Development	Ministry of Education, WFP, FEED	Ministry of Education and Training, WFP, Food Management Unit of the Prime Ministers' Office, National Managing Agents, community-based caterers
Multiple SFP models?	No	No	No	1) Home Grown School Meals Programme by Government of Kenya and WFP; 2) WFP model providing food and transitional cash transfer	1) WFP model with international procurement in foothills and high-lands; 2) Catering Model wherein caterers procure, prepare and serve food in low-lands; 3) National Managing Agent Feeding where private businesses are contracted to procure, process food and deliver to schools.
Targeting approach	Geographic - Areas vulnerable to food insecurity and low education outcomes.	Geographic - Semi-arid and arid areas with low education achievements and high food insecurity, and unplanned settlements/slums of Nairobi.	Geographic - Semi-arid and arid areas with low education achievements and high food insecurity, and unplanned settlements/slums of Nairobi.	Geographic - Semi-arid and arid areas with low education achievements and high food insecurity, and unplanned settlements/slums of Nairobi.	Universal

Grades covered under SFP	Early Childhood Development Centers; Lower Basic Schools; Madrassas (Islamic schools)	Kindergarten and primary school, grades 1-6	Primary school, grades 1-8	Pre-primary and primary school, grades R-7
Beneficiaries	126,513	1,700,000	1,617,000	390,000
Meals	In-school meals: Daily meal served at 11AM.	In-school meals: Daily meal served in the late morning.	In-school meals: Daily meal served at 12.30PM.	In-school meals: One daily meal in low-lands served at 11.00AM; two meals served in foothills and high-lands served at 7.30AM and 11.00AM
Complementary interventions	Deworming; health education for children, school committees and teachers	Micronutrient supplementation; deworming; trainings on nutrition, health, sanitation	Deworming; micronutrient supplementation; trainings on nutrition, health, sanitation	WASH, nutrition, life skills education; school gardens
SFP part of national policies?	Yes	Yes	Yes	Yes
Primary funder of SFP	WFP, Government	Ministry of Finance	Ministry of Education, WFP	Ministry of Education and Training
Annual cost per student	USD 30	USD 39	USD 24	USD 46
Procurement	Centralised - Procurement mainly centralised, however, a decentralised approach through community procurement and caterer model, currently piloted in 24 schools.	Decentralised - Public tender issued by School Feeding Secretariat to select a vendor to procure goods in bulk and supply to the caterers. Additionally, the caterers purchase from smallholder farmers in their areas.	Decentralised - Cash transferred to schools which then procure food from local suppliers (HG-SMP); central procurement for food and cash provided to schools for decentralised procurement from local suppliers (WFP)	Centralised for WFP model and National Managing Agents; decentralised under catering model.
Food from abroad/ domestic	Abroad	Domestic	Domestic	Both – abroad (WFP model); domestic (NMA/Caterer model)
HGSP used to supply meals?	Yes	Yes	Yes	Yes, under catering model.
Actual and prescribed percentage of smallholder supplies	Actual supplies of 10-12%; smallholder inclusion in policy, but no percentage specified.	Actual supplies of 60%; smallholder inclusion in policy, contribution set at 70%.	Actual supplies of 70% under HG-SMP; smallholder inclusion not in policies.	Unknown; not included in policies.
Agricultural extension services	Trainings, farm visits, group meetings, field demonstrations; inputs such as seeds, fertiliser; farming equipment	Trainings; farming inputs (seeds, fertiliser, farming equipment); assistance in forming farming cooperatives	Trainings; assistance in formation of farming cooperatives	Trainings; subsidies
Main M&E indicators	Enrolment rates; attendance rates; gender parity; passing rates; awareness on importance of good nutrition; smallholder capacitation	Enrolment rates; attendance rates; learning outcomes; health and nutrition outcomes; local economic development outcomes	Enrolment rates; attendance rates; nutrition outcomes; local economic development outcomes	School enrolment rates; attendance rates; drop-out rates; retention rates; local economic development
Areas of community involvement	Procurement; food preparation; monitoring (only in cash-based transfer pilot)	Food production; procurement; food transportation and storage; meal preparation and serving; monitoring and evaluation	Food transportation and storage; procurement; meal preparation and serving; monitoring and evaluation; monetary or in-kind contributions	Food production and delivery; meal preparation and serving; monitoring and evaluation
Upcoming plans for SFP	WFP is expected to completely hand over the implementation of the HGSMIP to the Government by 2020. Plans to increase Government funding in line with handover.	Expansion of coverage; implementation of SABER recommendations; finalisation of programme legalisation through bill in 2017.	Establishment of HGSMIP national- and county level steering committees. Continued transition of HGSMIP from WFP to Government of Kenya.	Complete handover of implementation responsibility from WFP to Government by 2020.

AU Member state	Liberia	Madagascar	Malawi	Mali
Name of primary SFP & Year started	Liberia School Feeding Program, 1968	WFP School Feeding Programme, 2005	National School Meals Programme, 1999	Providing safety nets to students in conflict-affected zones, 2015
Actors involved in implementation	Ministry of Education, WFP, Mary's Meals (NGO), Ministry of Agriculture, Ministry of Health, Ministry of Finance	WFP, Ministry of National Education (MEN), GRET (NGO), ADRA (NGO)	Government, through the Ministry of Education, Science and Technology; WFP; Mary's Meals	WFP, Ministry of Education (MoE), National Center for Canteines Scolaires (CE)
Multiple SFP models?	1) Daily hot meals in public and community primary schools, monthly THRs to adolescent girls under WFP; 2) daily hot meals to public/government, community and private schools under Mary's Meals.	1) WFP provides a cooked hot meal; 2) ASBAL HGSP pilot by World Bank; 3) Projet Nourmad (Porridge for the Children) implemented by GRET; 4) Riz proteines (Protein rice) implemented by ADRA	1) WFP, or centralised model 2) Government, centralised model; 3) Mary's Meals	1) WFP directly transports commodities to schools or sends cash through financial institutions; 2) Government provides cash to the Committee on School Management (CGS) through mayons; 3) CRS gives food to schools.
Targeting approach	Categorical - Targeting based on Food Security and Vulnerability Assessment.	Geographic - Eleven districts in three southern regions, and two urban areas.	Categorical - targeting based on food insecurity and education indicators	Geographic - WFP targets Northern regions.
Grades covered under SFP	Kindergarten and primary school, grades 1-6 (WFP); Kindergarten and primary school, grades 1-12 (Mary's Meals)	Pre-primary and primary school	Primary school, grades 1-8; some early childhood development centres	Primary school, grades 1-6
Beneficiaries	438,444	240,000	2,559,073 (Government - 700,000, WFP - 954,669, Mary's Meals - 904,404)	109,342
Meals	In-school meals and THR: Daily meal served between 10 and 11AM. THR for girls in grades 4-6 provided by WFP.	In-school meals and THR: Daily meals served at 9,00AM for the morning session, noon for the afternoon session.	In-school meals and THR: Daily meal served at 7:30AM and THR (cash or food) distributed in majority of schools during lean season of January-March.	In-school meals: Daily meal served between noon and 1PM.
Complementary interventions	Deworming; school gardens; energy efficient stoves; trainings on nutrition, health, sanitation; capacity strengthening for government	Deworming, micronutrient fortification, other education assistance programmes	Deworming, vitamin A supplementation, teacher training, health assessments	Vitamin A enriched oil and iodised salt
SFP part of national policies?	Yes	No	Yes	Yes
Primary funder of SFP	WFP, private donations	WFP, World Bank	WFP, through McGovern-Dole funding; Government	Ministry of Education (Government model)

Annual cost per student	USD 30	USD 27 (Home Grown School Meals), USD 22.88 (centralised)	USD 56
Procurement	Centralised – Commodities are imported and brought to WFP warehouses from two ports in Madagascar.	Both – Decentralised procurement from Farmers Organisations at school level for Home Grown School Meals (HGSM); centralised procurement for WFP model.	Centralised - WFP contracts local transporters which deliver commodities to each school quarterly. These commodities are received by members of the CGS, who oversee storage, food rations and preparation.
Food from abroad/ domestic	Abroad	Abroad	Equal distribution of both
HGSP used to supply meals?	Yes - HGSP used for schools that procure locally under the government ASBAL model.	Yes, in part	Yes
Actual and prescribed percentage of smallholder supplies	Actual supplies of 100% under HGSP pilot; smallholder inclusion in policy, set at 100%.	Actual supplies of 15% for centralised model, 100% for Home Grown School Meals model	Actual supply varies, as local purchases depend on availability from local producers and availability of funding; smallholder inclusion in policy, but no percentage specified.
Agricultural extension services	Trainings		Trainings, support, advice; farming inputs
Main M&E indicators	Enrolment rates; attendance rates; retention rates; learning outcomes; local economic development outcomes; gender parity outcomes	Attendance rates; retention rates; feeding rates; completion rates	Enrolment rate; retention rate
Areas of community involvement	Food production; meal preparation and serving	Organising and assuring the cooking and delivery of meals, provision of firewood and ingredients	Construction/rehabilitation of buildings (kitchen, storage rooms); provision of water and wood; financial contributions for buying condiments; management of commodities; meal preparation; keeping of management documents
Upcoming plans for SFP	Expansion of HGSP.	National Policy on School Feeding 2017-21	In the process of introducing cash into schools to allow CGS to directly purchase local goods. All current efforts geared towards a progressive takeover by the Government of all school feeding programmes.

AU Member state	Namibia	Niger	Rwanda	São Tomé and Príncipe
Name of primary SFP & Year started	Namibia School Feeding Program, 1991	Government School Feeding Program with WFP's support, 1975	Home Grown School Feeding, 2002	
Actors involved in implementation	Ministry of Education, Arts and Culture, WFP	Ministry of Primary Education	WFP, Ministry of Education (MINEDUC), Ministry of Agriculture (MINAGRI), Ministry of Health, World Vision, FAO	
Multiple SFP models?	No	1) Canteens supported exclusively by the government; 2) Canteens supported by WFP	1) One cooked meal per day in primary schools under WFP model; 2) MINEDUC provides a fixed amount of funding to secondary schools, boarding and day schools to allow them to buy food for schools meals; 3) MINAGRI: One Cup of Milk Per Child provided twice weekly for early childhood development and primary 1-3 students.	
Targeting approach	Universal	Geographic and categorical - Rural areas with nomadic populations, food insecurity and low girls attendance rate.	Geographic - Most food insecure parts of the country (WFP). Universal for secondary, boarding and day schools (Government).	
Grades covered under SFP	Pre-primary and primary school, grades 0-7	Primary school	Primary and secondary school, boarding schools ⁶	
Beneficiaries	330,000	248,408	89,000 (WFP); 89,000 total projected for MINEDUC and MINAGRI models	
Meals	In-school meals: Daily meal served as mid-morning snack for schools with morning session and afternoon snack for schools with afternoon sessions.	In-school meals: 2-3 daily meals served before 8AM for breakfast, 12:30PM for lunch and at sundown for dinner in nomadic zones.	In-school meals: Daily meal served at noon; one cup of milk per child served twice weekly.	
Complementary interventions	Deworming; trainings on nutrition, health, sanitation	School gardens; livestock transfers to high-performing girl students	Deworming; trainings on nutrition, health, sanitation; early grade reading support; books and supplementary teaching materials; infrastructure support – kitchens, stores, energy saving stoves, and latrines.	
SFP part of national policies?	Yes	Yes	No	
Primary funder of SFP	Ministry of Finance	WFP	WFP (primary schools under WFP model), Ministry of Education (secondary, boarding and day schools)	
Annual cost per student	USD 29	USD 95	USD 17 (WFP rations with locally purchased food, excluding the cost of in-kind contributions)	

Procurement	Centralised - Procurement through tendering process with three tenders issued by the ministry's head office.	Centralised - Tenders with smallholder organisations, prices determined by the VAM (Vulnerability Assessment Mapping) on the basis of a market analysis.	Both - Centralised procurement (WFP); decentralised procurement, with each school purchasing its own food based on requirements (Government)
Food from abroad/ domestic	Domestic	Domestic	Domestic
HGSP used to supply meals?	No	Yes	Yes
Actual and prescribed percentage of smallholder supplies	None	Actual supplies of 50%; smallholder inclusion not in policies.	Actual supplies of 10%; smallholder inclusion not in policies.
Agricultural extension services	N/A	Trainings; farming inputs; assistance in forming smallholder organisations or cooperatives	Trainings; assistance in formation of farming cooperatives; provision of storage equipment and milling machines
Main M&E indicators	Enrolment rate; attendance rate; learning outcomes; health outcomes; nutrition outcomes	Enrolment rate; attendance rate	Deworming; trainings on nutrition, health, sanitation; early grade reading support; books and supplementary teaching materials; hand washing stations, latrines, kitchens, water tanks
Areas of community involvement	Meal preparation and serving; monetary or in-kind contributions	Transport, delivery and stocking of commodities; meal preparation and serving; monitoring and evaluation; monetary or in-kind contributions	Food production; meal preparation and serving; monetary or in-kind contributions
Upcoming plans for SFP	Implementation of Public Private Partnerships; finalisation of School Feeding Policy, which will address issues such as expansion of coverage, revised objectives, and increased programme decentralisation.	Vision to establish closer linkages to local economic development and health sector. No clear timeline set, awaiting SABER recommendations.	School feeding policy awaiting ratification, completion of deworming, setting up of school gardens and community based nutrition education.
AU Member state	Senegal	Sierra Leone	South Sudan
Name of primary SFP & Year started	Support to School Feeding, 1970	National School Feeding Programme, 2016	Food for Education, 2003
Actors involved in implementation	Division of School Feeding (DCaS) under Ministry of Education (MEN), WFP, Care Plan International	School Feeding Secretariat under Ministry of Education, Science and Technology, CRS	WFP Somalia School Meals Programme, 2003 WFP, Ministry of Education, various iNGOs and local NGOs
Multiple SFP models?	1) WFP model (covering 181 canteens); 2) Government model; 3) Care Plan International in Saint Louis region. All actors utilise same targeting system to identify schools. Progressive alignment of the Government and WFP models.	1) Government implements National School Feeding Programme and provides funds to school authorities to locally buy food; 2) CRS provides a morning snack to learners in one district.	No

Targeting approach	Geographic - Accessible, food insecure areas in North-West, North-East and South-Central Somalia.	Geographic - Targeting based on the IPC food security classification, with prioritisation of food insecure areas.
Grades covered under SFP	Primary school, grades 1-6	Primary school, grades 1-8
Beneficiaries	653,582	300,000
Meals	In-school meals: Meal served mid-day, twice per week under National School Feeding Programme; morning porridge served daily under CRS model.	In-school meals: Daily meal served at noon. THR distributed at the end of month to girls in grades 3-8, and conditional on attaining at least 80% of attendance.
Complementary interventions	Provision of storage facilities; teacher training (CRS model)	Deworming
SFP part of national policies?	No	Yes
Primary funder of SFP	Ministry of Finance and Economic Development	WFP
Annual cost per student	USD 6.61	USD 53
Procurement	Decentralised - School authorities work with community-based groups (5-man committees/SMCs) to buy food from the local market.	
Food from abroad/ domestic	Equal distribution of both	Abroad
HGSP used to supply meals?	No	No
Actual and prescribed percentage of smallholder supplies	None	N/A
Agricultural extension services	N/A	N/A
Main M&E indicators	Enrolment rates; attendance rates; learning outcomes	Enrolment rates; attendance rates; nutrition outcomes
Areas of community involvement	Procurement; meal preparation and serving; monitoring and evaluation; monetary or in-kind contributions	Food transportation and storage; meal preparation and serving; monetary or in-kind contributions

Upcoming plans for SFP	Revitalisation of the policy document with plans to expand the programme, change the principle objectives, and add other services.	No formal plans yet.	Strategic review of the school meals programme currently undertaken, to inform any future plans.	Various plans on expansion and capacity building for key stakeholders are developed, considering future sustainability.
AU Member state	Sudan	Tanzania	Tunisia	Uganda
Name of primary SFP & Year started	WFP PRRO School Meals, 1969	HGSF Pilot Programme, 2015	Sustainable National School Meals Programme (SNSMP), 1958	Home Grown School Feeding, 1983
Actors involved in implementation	WFP, Federal and State structures of Ministry of Education, INGOs/local NGOs	Government, District Council (Local Government Authority), WFP and cooperating partner Project Concern International (INGO)	Government, Office of Scholastic Affairs under Ministry of Education, WFP	WFP, Office of the Prime Minister (OPM), district local governments
Multiple SFP models?	No	1) Home Grown School Feeding involving cash transfer to district and/or schools to procure food locally; 2) traditional school feeding by the Government for boarding schools; 3) school meals programmes by NGOs; 4) community-led school meals programmes	No	1) WFP school feeding; 2) ad hoc support through NGOs and faith based organisations; 3) parent- and school-led feeding
Targeting approach	Geographic and categorical - Rural schools in high and moderate food insecure areas with lower education indicators, enrolment rates and gender parity index; and schools in IDP camps.	Geographic and categorical - Most food insecure districts, with universal targeting in assisted wards.		Geographic - Universal primary school coverage in the Karamoja sub-region.
Grades covered under SFP	Primary school	Primary school, grade 1-7	Primary school, grades 1-6	Primary school (grades 1-7), secondary and tertiary schools
Beneficiaries	909,141	28,000	250,000	116,400
Meals	Both - In-school meals provided in 11 States and THR in 2 States (Red Sea and Kassala States). THR pilot focused on improving gender parity in the areas with worst indexes reported by WFP M&E system: Daily meal served at 11AM.	In-school meals: Mid-morning porridge and cooked meal served at 10.00AM and 1.00PM, respectively (HGSF model).	In-school meals: Daily meal served at 11.00AM.	In-school meals: Mid-morning and midday meals provided.
Complementary interventions	Deworming; distribution of micronutrient powder (2015) with continuation subject to available resources	Deworming; trainings on nutrition, health, sanitation; school gardening, poultry		Trainings on nutrition, health, sanitation, post-harvest handling for cooks, OPM, district local governments, School management committees, teachers, store keepers, and non-food items provision
SFP part of national policies?	No	Yes	Yes	No
Primary funder of SFP	WFP	1) HGSF funded by WFP and community, 2) traditional school feeding funded by Government, 3) school meals programmes funded by charity organisations and NGOs, 4) programmes funded by community	Ministry of Education	WFP, Government, the Irish Government, Lift a Life Foundation, private donors
Annual cost per student	USD 37.77 (for 176 feeding days)	USD 30	USD 41	USD 11.26

Procurement	Centralised - Procurement is centralised in WFP Country Office.	Decentralised - Under HGSE, districts procure specified commodities from local markets.	Decentralised - Schools oversee procurement.	Centralised - WFP tenders are published in the local newspapers and following receipt of applications, a committee approves the vendors.
Food from abroad/ domestic	Mostly from abroad	Domestic	Domestic	Domestic
HGSP used to supply meals?	No	Yes	Yes	No
Actual and prescribed percentage of smallholder supplies	None, but plans foresee inclusion of purchase from smallholder farmers in future strategies/policies.	Actual supplies of 60%; smallholder inclusion not in policies.	Actual supplies of up to 30%; smallholder inclusion in policy set at 30%.	No indication of actual supplies; smallholder inclusion not in policies.
Agricultural extension services	N/A	No	Trainings; inputs such as seeds, fertiliser; farming equipment; assistance in formation of farming cooperatives	No
Main M&E indicators	Retention rates; gender parity. Address short-term hunger, while improving children's micronutrient status, learning ability and access to education; improve girls' attendance where gender disparities are high.	Enrolment rate; attendance rate; learning outcomes; health outcomes; nutrition outcomes; local economic development outcomes; capacity development for district and schools to procure locally	Enrolment rates; attendance rates; learning outcomes; health outcomes; nutrition outcomes; social cohesion or inclusion outcomes; local economic development outcomes	Enrolment rates; attendance rates
Areas of community involvement	Food and financial contributions; food delivery from secondary delivery points to schools; food preparation	Food production, meal preparation and serving, M&E, monetary or in-kind contributions, community mobilisation	No	Meal preparation and serving; M&E
Upcoming plans for SFP	As a key output of SABER, an action plan was developed, with national ownership of the programme constituting a key objective.		WFP has put together a Plan of Action to operationalise the SNSMP, and is working with MoE for operationalisation.	1) Support government to develop a national school meals policy including: a) through South-South cooperation and a robust learning agenda; b) investment case/cost benefit study on school feeding; c) knowledge and evidence-based/documentation of best practices; and d) mapping and review of the school meals. 2) Implementation of a home-grown school feeding model supplied by sustainable local agricultural production, including high level stakeholder workshop on HGSE.
AU Member state	Zambia	Zimbabwe		
Name of primary SFP & Year started	Home Grown School Meals, 2003	Home Grown School Feeding Programme, 2016		
Actors involved in implementation	Government through Ministry of General Education, WFP	Government through the Ministry of Primary and Secondary Education, UN agencies, NGOs and civil society		
Multiple SFP models?	1) Government/WFP model, 2) <i>ad hoc</i> support from churches and 3) CSB meals	1) Government model, 2) <i>ad hoc</i> school feeding through NGOs based on geographical targeting		
Targeting approach	Categorical – schools chosen based on poverty, food insecurity and low performance on education indicators	Categorical – phased approach based on grade level. Phase I (2016) is pre-primary, Phase II (2017) is junior learners, Phase III (2018) is secondary learners.		

Grades covered under SFP	Preschool and primary school	Pre-primary school and primary school (grades 1-2)		
Beneficiaries	1,052,000	1,510,618		
Meals	In-school meals: one hot meal per day served at 11AM	In-school meals: one hot meal per day served during mid-morning		
Complementary interventions	Micro-nutrient powders, nutrition education (only on a pilot basis)	Deworming; WASH		
SFP part of national policies?	Yes	Yes		
Primary funder of SFP	1) Home Grown School Meals funded by government through Ministry of General Education, WFP; 2) other models funded by churches and faith-based organisations, funding permitting.	Government		
Annual cost per student	USD 14.95	USD 47.50		
Procurement	Both – 1) centralised procurement system of maize through the Food Reserve Agency which is then delivered to collection points close to beneficiary schools; 2) decentralised for pulses and vegetable oil; 3) decentralised for fresh produce, as schools are given small budgets to directly procure from smallholder farmers.	Decentralised – School Development Committees procure commodities.		
Food from abroad/ domestic	Domestic	Domestic		
HGSP used to supply meals?	Yes, in whole	Yes, in part		
Actual and prescribed percentage of smallholder supplies	Approximate supplies of 96%; smallholder inclusion not in policies.	No indication of actual supplies; smallholder inclusion not in policies.		
Agricultural extension services	Trainings, post-harvest technology, field days for information sharing	No		
Main M&E indicators	Enrolment rate; retention rate; attendance rate; dropout rate; gender ratios; responsiveness of school feeding programme to social and economic needs of the schools and communities	Attendance rate; retention rate; completion rate; learning outcomes; nutrition indicators (stunting and wasting); social protection; curriculum enrichment; health; local economies		
Areas of community involvement	In-kind contributions, meal preparation and serving, construction of feeding shelters, M&E	WASH, resource mobilisation, M&E, food preparation		
Upcoming plans for SFP	Reach 100% coverage, or 2 million learners, by 2020, increase funding levels and co-financing source to support programme expansion, strengthen local procurement mechanisms, enhance capacity of stakeholders, identify a coordination mechanism within government for school feeding, embed school feeding into government's social protection framework.	SABER workshop, move to next phase of targeting approach, strengthen institutional linkages, expand school feeding policy, and conduct annual budget reviews.		

Box 3. Cross-cutting considerations in school feeding: gender

Within international development, enhancing gender equality and empowering women and girls feature as common goals; indeed, SDG 5 specifically speaks to these issues. Contributing to greater gender equity likewise figures as an objective of numerous school feeding programmes in Africa, primarily measured through increasing girls' attendance rates and/or improving gender parity at schools. Evaluations of school feeding programmes on the continent show positive and near-immediate impacts on increasing girls' attendance and enrolment rates, even in the absence of specific, gender-related programme objectives. And, there are examples of school feeding programmes going beyond simply serving in-school meals to accomplish progress vis-à-vis gender equity, such as distributing THR (Burkina Faso) and giving goats (Niger) to high-performing girl students as a way of encouraging girls to stay in school, hiring local women to work as remunerated school caterers (Nigeria), the participation of more women in smallholder cooperative societies that sell to HGSF programmes (various countries), amongst other initiatives. Moreover, school feeding's position as a value transfer, either through in-school meals or THR, can help households avoid negative coping strategies, like taking girls out of school, during times of drought or other shocks.

Finally, school feeding can build on other gender empowerment programmes and contribute to overall success in reducing the gender gap. As such, school feeding programmes should be considered as an important component of wider efforts to improve women's social and economic status, given school feeding's potential to keep girls in school and boost their educational achievement, both of which link to reduced rates of child marriage, higher educational performance amongst future generations and, overall, higher levels of empowerment and inclusion for women and girls.

3. Review of Sectoral Evidence and Outcomes

The above section gives an overview of the various design and implementation models of existing school feeding programmes across Africa, while the next sub-sections highlight programme outcomes across the selected sectors of education and learning, health and nutrition, and agricultural and local economic development. Furthermore, the following sections highlight not only sectoral outcomes, but also selected indicators associated with outcomes. Following the presentation of outcomes and indicators, the study considers programme design elements in school feeding programmes and how these elements can affect school feeding outcomes.

4. Education & Learning

A central motivation for the design and implementation of school feeding programmes is its sectoral outcomes on education and learning. Investing in a country's education sector is an important investment in future human capital, given the broad evidence-base linking higher levels of education to a range of socioeconomic returns, including an individual's higher earning potential. However, in spite of the proven benefits associated

with more education, there are a range of factors that can inhibit children from accessing education, both on the demand and supply-side, and in fact preventing a country from reaching universal primary education. The demand-side is concerned with factors influencing the behaviour of the unit, such as the household or the individual, to which a service is provided, and that might inhibit the uptake of a particular service, such as education or health care; while supply-side factors describe the provision of services and required infrastructure from the providing unit, particularly with regards to the supplied quality, accessibility and availability.

Examples of supply-side barriers can include poor transport or road systems that limit access to schools, or lack of available classroom facilities or materials; whereas demand-side barriers can be financial, in terms of a household's inability to pay for school fees, or cultural, in terms of the value placed on sending children to school. Moreover, the cost to overcome these barriers may require families to make trade-offs, as paying for school fees may reduce the amount of resources available to buy household needs or sending a child to school may forego household income earned by the child.¹⁶

Within the African context, many households still face the above barriers and others in sending children to school, and the need to enhance education outcomes on the continent is recognised by Agenda 2063 and CESA 16-25. Improving education outcomes has particular relevance in Africa, as the continent has globally some of the lowest scores on education indicators. According to April 2016 statistics¹⁷ from the United Nations Children's Fund (UNICEF), the net primary school attendance rate for sub-Saharan Africa was 74 per cent and the primary school completion rate was 58 per cent, with 24 per cent of children of primary school age out of school. These percentages show significant changes for children from the poorest quintile of households, with this group achieving only 55 per cent net primary school attendance rate and 28 per cent primary school completion rate, with 45 per cent of primary school age children in this group out of school. Considering the focus on enhancing access to quality education in Africa, especially for poor households, school feeding programmes have emerged, in part, as a way to ease some of the barriers to entry, with the added objectives of increasing school enrolment and improving learning outcomes.

While there are numerous studies on school feeding programmes' results across education-related indicators, it is difficult to generalise how significant these outcomes are, given the breadth and variation in the design of school feeding programmes and the rigour of each evaluation. In general, the strongest outcomes associated with school feeding programmes, are on the demand-side, such as increased enrolment and attendance rates. Strong demand-side outcomes may however require responses from the supply-side: for example, increased enrolment rates may increase pupil-to-teacher ratio (PTR), thus necessitating the provision of more teachers. There is some evidence that better supply-side conditions can affect learning outcomes, as research on a school feeding programme in Kenya revealed that schools with lower PTR and/or adequate teaching staff produced higher exam scores.¹⁸ However, more research on the interplay between demand-side outcomes from school feeding programmes and the supply-side is needed, and policymakers should consider how to address any effects to the supply-side when designing school feeding programmes in order to reduce potential stress to education infrastructure and optimise results.

Table 3, which is by no means exhaustive, highlights some of the education and learning outcomes on the demand-side and possible effects on the supply-side of school feeding programmes.

16, (Alderman, Gilligan, & Lehrer, 2010)

17, (United Nations Children's Fund, 2016)

18, (Finan & Muindi, 2010)

Table 3. Selected demand-side outcomes and potential supply-side effects

Demand-side outcomes	Supply-side effects
<ul style="list-style-type: none"> • Increased school enrolment • Increased school attendance • Lower dropout rate • Improved learning and concentration abilities • Higher test scores • Decreased gender-gap in education 	<ul style="list-style-type: none"> • Less available classroom seating space • Higher PTR • Decreased teaching time due to serving school meals • Increased education sector costs in absorbing higher enrolment numbers

4.1.1 Achieving Desired Outcomes through Design Elements

The achievement of the above demand-side outcomes, and others, is often influenced by the chosen design modalities for the school feeding programme. These modalities vary, and various design choices include, among others, the serving of meals in-school solely or the provision of complementary take-home rations; the embedding of incentives and/or conditions into the programme, meaning that students only receive school meals after meeting a certain set of conditions or requirements; and at what time of day school meals are served.

Whichever design modalities are chosen, policymakers should endeavour to think creatively and strategically about how to combine different design elements to achieve positive results across education and learning indicators. For example, school feeding programmes with conditional incentive structures, or Food for Education (FfE) programmes, are generally considered effective at increasing school attendance, and available evidence points to their positive effects on several education indicators. Estimates on the extent of these effects vary according to the chosen design modality, the selected co-responsibilities and the specific country context¹⁹. There is overall consensus that FfE programmes enhance attendance rates for primary schoolchildren, however, there is limited causal evidence to support it. A randomised controlled trial in northern Uganda tested the effects of FfE on education-related indicators across two modalities – in-school meals and THR – both with unique conditions. In addition to evaluating results on education indicators, the RCT also looked at more indirect contributors to results, such as how design features may influence participants’ behaviours. The results revealed that with in-school meals, the child may feel a greater incentive to attend, as he or she directly receives the benefit. On the contrary, with THR, caregivers or parents have more control over distributing the meal and thus may feel more incentive to send their children to school. Overall, both modalities had significant impacts on school attendance and grade repetition, while neither modality affected progression to secondary school.

The RCT in Uganda also controlled for school quality in testing the effects of in-school meals versus THR, and found that school quality factored more heavily into THR households’ decision to send children to school, perhaps because parents and caregivers are more aware of the future returns to a quality education than pupils themselves. Hence, different design modalities and incentive structures, be it in-school meals and/or THR, may not be the sole factor affecting attendance rates once children are in school though, but they can impact

¹⁹ (Alderman, Gilligan, & Lehrer, 2010)

community sensitisation and provide the necessary initial incentive to actually enrol children in school. Once children are in school, the prevailing supply-side structures, including availability

Box 4. Extending school feeding beyond primary school

Overall, Africa has made marked improvements in primary school attendance rates, following the release of the MDGs. Levels of pre-primary and secondary education enrolment, however, remain low, though both rates are rising. This is a promising trend and policymakers may want to consider programmes, such as school feeding, that further promote pre-primary and secondary school enrolment. By introducing school feeding into pre-primary education, nutritious school meals can contribute to enhanced educational and health outcomes, thereby contributing to future success in school. Additionally, school meals, as part of early childhood education programming, can constitute an essential component of a life cycle approach to nutrition and food security.

The potential for higher levels of pre-primary attendance and enrolment to exert longer-term effects on school achievement contains implications for progression from primary to secondary school, a particularly important consideration given that the returns from higher levels of post-primary education on human capital development and poverty reduction can be significant. Several African countries have ongoing, mostly small scale, secondary school feeding programmes with the selected objectives of retaining students, increasing girls' enrolment, and safeguarding students' nutritional and health status, among others. Although there is limited evidence on the outcomes from school feeding in secondary schools, especially considering relatively low implementation levels across Africa, extending school feeding beyond primary school presents some worthwhile considerations to policymakers.

First, the period of adolescence sees a 'second growth spurt' within children, as they undergo significant physical, social, emotional and behavioural changes. Scientific research has also uncovered that the brain's neuroplasticity – or the ability to modify its own structure – likewise undergoes a second growth spurt during the teenage years, meaning that secondary school children have a window of opportunity to improve cognition and learning abilities (Noble, et al., 2015). Given these various physiological and physical changes, the nutrient requirements for adolescents are considered higher than at any other stage in a child's development and adolescents' inability to access enough nutrients can have damaging health effects in the short- and long-term. Moreover, adolescence is a time when health-related behaviours vis-à-vis diet and nutrition are formed, so providing this age group with nutrient-rich diets can have lasting effects on their eating habits (Sawyer et al, 2012). As such, ensuring nutritious diets during the pre-pubertal growth spurt can exert physiological, developmental, health, and behavioural outcomes.

Second, increasing secondary school enrolment can have transformative effects particularly for girls, as enrolment has shown to improve their social and health status. For example, international evidence bears out that more years of schooling decreases the likelihood of child marriage for girls: research from the International Center on Research for Women found that marriage rates for girls under the age of 18 in Western and Middle Africa were over 70 per cent for girls with 0-3 years of schooling, but under 20 per cent for those with more than 8 years. This suggests that increasing girls' secondary school attendance rates has an impact on the child marriage incidence, wherein the avoidance of child marriage not only enables girls to pursue more schooling, but it also diminishes their exposure to heightened health risks associated with child marriage.

Considering the above, investments in the education and health of adolescents are important to fostering a country's future human capital. Investing in adolescents within the African context has special importance, given that Africa has the youngest population in the world, so any current actions that policymakers take towards ensuring the full development of adolescents can have long-lasting impacts.

of teachers and classrooms, among others, and the thereof resulting quality of education, might play a more vital role in ensuring that children stay in school.

Considerations on how to structure the incentives for sending children to school not only include the decision to use in-school meals alone or together with complementary THR, but also include additional incentives like provision of school materials, scholarships or other education assistance programmes. These programmes can target both the demand- and the supply-side barriers to education, and be either universal or targeted to those students for which the opportunity costs of going to school are not offset by the school feeding programme. Moreover, these programmes can take a variety of forms and shapes. A programme in Niger for instance, which according to qualitative interviews with school stakeholders is responsible for increased retention rates for participating students, provides goats to high-performing girl students in schools that have school feeding programmes. Independent evaluations, such as in Nigeria²⁰ and Zimbabwe²¹, have found that education assistance programmes are cost-effective, in terms of achieving positive results. As such, education assistance programmes have the possibility to serve as useful and cost-effective complements to school feeding programmes.

In addition to embedding conditions into or coupling other incentives with school feeding programmes, the timing of school meals is an important design consideration in reaping the full cognitive benefits²² from students. In Madagascar, for instance, the question of when to serve school meals was researched extensively during the design stage of the school feeding programme; following which it was decided to serve meals for the morning session of school at 9.30AM and at noon for the afternoon session. These times were determined as the most optimal hours for cognitive activity and learning retention; moreover, for students who attend morning classes, it is important that meals are not served too late in the day as some students may have arrived at school without having eaten anything. Simply serving school meals might not always be sufficient to improve schoolchildren's concentration and learning abilities though, as there are various other factors – household food security, peaks of brain activity – that affect learning outcomes as well.

4.1.2 Measuring Outcomes and Impacts

While there are other school feeding design elements that can influence education and learning outcomes, the above examples present some of the considerations that go into achieving outcomes in this sector. At the same time, it should be acknowledged that there is no one-size-fits all approach for the different design components and elements of school feeding programmes – by contrast, it should be stressed that a programme needs to be designed to suit the specific local context in which it operates. Nevertheless, the above examples also highlight common indicators associated with measuring education and learning outcomes, as supported by the survey results and objective evaluations, which include:

- Attendance and enrolment rates, as indicators of school feeding programmes' ability to attract new students to schools and existing students to keep attending classes;
- Retention and dropout rates, as indicators of school feeding programmes' ability to retain students and prevent students from leaving school;
- Repetition rates and test scores, as indicators of school feeding programmes' ability to improve school performance and cognition; and

²⁰ (Uneze & Tajudeen, 2011)

²¹ (Smith, Chiroro, & Musker, 2012)

²² (Molinas & Regnault de la Mothe, No date)

- Completion and promotion rates, as indicators of school feeding programmes' roles in helping students to move from one grade to the next, complete primary school and go on to secondary school.

Having standardised indicators is essential for evaluating school feeding programmes and tracking changes to educational performance; but, producing successful results against one indicator not necessarily mean holistically improved educational performance or educational systems, as these indicators build on each other. For example, while increased attendance or enrolment rates indicate that more children are going to school, if students perform poorly on tests and/or drop out, school promotion and completion rates will be adversely affected and the overall level of educational attainment will not improve. As such, conducting evaluations on school feeding programmes that simultaneously measure a range of indicators is vital to fully measuring and assessing the education and learning outcomes of school feeding programmes, as well as the influence of other factors, such as school infrastructure availability and quality, on the latter.

As a way of summarising the discussion on education and learning outcomes in school feeding programmes, Table 4 presents results from international evaluations on selected school feeding programmes in Africa across the abovementioned indicators. As some of the examples and results show, the nutritional design of a programme can also register impacts on education indicators, and the next section elaborates more on the close linkages between education and learning outcomes and schoolchildren's improved health and nutritional statuses. Meanwhile, below, Table 4 elucidates how education and learning outcomes and health and nutrition outcomes are intertwined and affect one another.

Table 4. School feeding programme outcomes across selected education and learning indicators

Country (region)	School feeding programme design (evidence strategy)	Changing education and learning indicators
<p>Uganda (northern)</p>	<p><u>In-school meal or THR:</u></p> <ul style="list-style-type: none"> -Daily in-school snack and lunch, conditional on household in-kind contribution of firewood for cooking and fee of approximately US\$0.10 per month toward pay of cooks. -Monthly distribution of dry THR, conditional on each primary-school age child (ages 6-17) enrolled in school maintaining an attendance level of 85% of school days in the previous month. (RCT) 	<p>Changes to attendance and/or enrolment rates: 8-12% increase in attendance amongst children aged 10-17 years during morning classes; significant positive impacts on attendance at morning and afternoon classes; a 9% increase in probability that children aged 6-13 years would enrol; but no significant impacts on school enrolment (in-school meal and THR).</p> <p>Changes to repetition rates and/or test scores: a significant decrease in grade repetition for boys (in-school meal).</p> <p>Changes to completion and/or promotion rates: possible increase in time it takes to complete primary school (in-school meal).</p> <p>Changes to attendance and/or enrolment rates: girls' enrolment rates increased by 5% and enrolment rates of boys living within the girls' households increased 3.3% as a spill over effect.</p> <p>Changes to repetition rates and/or test scores: girls' scores on simple arithmetic tests increased by 9.5%, while boys living within the girls' households increased their scores by 7% as spill over effect.¹</p>
<p>Burkina Faso (northern)</p>	<p><u>THR only:</u></p> <ul style="list-style-type: none"> -Monthly THR of 10 kilogrammes of flour, conditional on 90% attendance rate (girls only). (RCT) 	<p>Changes to attendance and/or enrolment rates: attendance rates increased by 90% and gender disparity decreased significantly (from 0.69 to 0.77 indexes of girls to boys)</p>
<p>Côte d'Ivoire</p>	<p><u>In-school meal only:</u></p> <ul style="list-style-type: none"> -Daily fresh cooked meal provided in school canteens. (Qualitative assessment) <u>In-school meal or beverage or energy supplements:</u> - Children in grade 1 were provided with 1) meat, 2) milk, or 3) an energy supplement as a mid-morning snack in schools for 23 months. (RCT) 	<p>Changes to repetition rates and/or test scores: meat and energy-supplemented children performed significantly better on arithmetic tests over time compared to milk and control groups; children who received meat improved arithmetic scores by 0.15 standard deviations and their performance on a test of nonverbal reasoning improved by 0.16 standard deviations; meat group had the greatest percentage increase in total test scores compared to other feeding groups and control group.²</p>

1. (World Bank, 2012)

2. (Neumann, Murphy, Gewa, Grillenberger, & Weibo, 2007)

<p>Kenya</p>	<p><u>In-school meal:</u> -one meal (lunch) of cereal, pulses, oil and salt per day served to all primary school students in arid districts; only schools in urban and semi-arid districts most vulnerable to food insecurity are targeted. (Quantitative and qualitative surveys)</p>	<p>Changes to attendance and/or enrolment rates: 5% increase in attendance rate for girls and boys benefiting from school meals; higher enrolment rates at schools serving meals.³ Changes to repetition rates and/or test scores: students who received school meals scored higher on the KCPE exam⁴ by about 7 percentage points than those without. Changes to completion and/or promotion rates: no significant effect of school meals on boys⁵; primary school completion rate, but girls who received school meals finished primary school at higher rates; boys who received school meals entered secondary school at a 10% higher rate than those without, while the advantage for girls who received school meals was 4%.</p>
<p>Republic of Congo (southern & central)</p>	<p><u>In-school meal:</u> -Rice and bean lunch. Complementary programmes, among other, targeted at reduction of malaria. -In Southern Congo school feeding started in 2002, in Central and Northern Congo in 2012. (Quantitative assessment & RCT)</p>	<p>Changes to attendance and/or enrolment rates: between 2002 and 2006, 23,8% increase in school enrolment, 12,9% increase in attendance rates, and increase in enrolment rate of minority groups (35 to 737 Babongo pupils) in southern Congo; in first year; 9,7% increase in enrolment rate, and 1,4% increase in attendance rates in central Congo.⁵ Changes to retention and/or dropout rates: between 2002 and 2006, 50% decrease in dropout rate in southern Congo.</p>
<p>Ghana (Garu-Tempane district)</p>	<p><u>In-school meal:</u> -one nutritious meal prepared from available local food crops for pupils in public primary schools from Mondays to Fridays in disadvantaged communities. (RCT)</p>	<p>Changes to attendance and/or enrolment rates: increase in gross enrolment rate in participating schools by 24%.⁶</p>
<p>Senegal</p>	<p><u>In-school meal:</u> Hot lunches were provided through school canteens set up in selected primary schools in four poor rural regions for one year. The food basket consisted of maize, legumes, vegetable oil and iodised salt. (randomised experiment)</p>	<p>Changes to repetition rates and/or test scores: the canteen had a positive and significant impact on the overall score of students in Grade 2 (10.56 points), in both mathematics and French. However, the impact is not significant for older children; girls disproportionately benefit from the meals, showing higher returns; competencies in memory and reasoning improved the most.⁷</p>
<p>Malawi</p>	<p><u>In-school meal:</u> -one daily fortified Corn Soya Blend meal. (quasi-experimental)</p>	<p>Changes to retention and/or dropout rates: the number of children dropping out of school, as reported by teachers, decreased by 51.3% for the treatment group while only with 11.2% in the control group.⁸</p>
<p>Egypt</p>	<p><u>In-school meal:</u> -pie fortified with minerals and vitamins given once a day to school children for 5 years. (quasi-experimental)</p>	<p>Changes to repetition rates and/or test scores: specific cognitive functions, including visual memory and auditory attention, were performed significantly better by the treatment than the control group; socioeconomic variables remained main predictor for high cognitive function.⁹</p>

3, (Finan & Muindi, 2010)

4, The KCPE exam is taken at the end of primary school to determine if a student can receive a certificate of completion for primary school.

5, (Niamayoua, No date)

6, (Bukari & Hajjara, 2015)

7, (Diagne, Lo, Sokhna, & Diallo, 2014)

8, (Mary's Meals, 2016)

9, (Salah, Khalifa, Metwally, & Monner, 2012)

5. Health & Nutrition

Given the international evidence that prolonged malnutrition, stunting and poor health contribute to increased school absenteeism and dropout rates²³, lower attendance rates, and overall decreases in cognition²⁴, the potential health and nutritional outcomes from school feeding programmes are complementary to education and learning outcomes. For example, school feeding can alleviate short-term hunger or reduce micronutrient deficiencies in (malnourished) children, both of which can improve student cognition, concentration, ability to perform complex tasks and test scores²⁵. Over the long run, research suggests that improving health and nutrition can lead to better academic performance, fewer grade retention and reduced dropout rates²⁶.

The development of programmes that benefit child health and nutrition levels is particularly important in Africa, which houses 28 per cent of the world's undernourished population²⁷. Furthermore, 30 per cent of African children under the age of 5 are stunted, as a result of poor nutrition²⁸ and/or chronic malnutrition. An increase in stunting rates represents a serious concern to a country's future development, given that it is irreversible and associated with impaired cognitive ability and reduced school performance²⁹. According to the *Cost of Hunger in Africa (COHA)* study, up to 18 per cent of grade repetitions are associated with stunting³⁰. There is some evidence that nutritious school meals have impacts on the growth of school age children, as found in evaluations in Kenya and Tanzania and outlined in Table 5, but often these impacts are small and do not fully make up the detrimental cognitive effects of early malnutrition and stunting³¹.

Hence, in addition to seeking to improve education and learning outcomes, school feeding programmes often feature the added objectives to improve the health and nutritional statuses of beneficiaries. Indeed, school feeding programmes across the globe increasingly include nutrition standards for the composition of the meals, as part of their design. Similarly, survey results of school feeding programmes in AU member states reveal that a variety of African school feeding programmes include health and nutrition outcomes in evaluating school feeding programmes, such as children's micronutrient status and short-term hunger. In the following subsections, the nutrition-sensitive and nutrition-specific components of school feeding programmes are further explored.

5.1.1. Nutrition-Sensitive Components of School Feeding

School feeding not only promotes the nutrition and health of direct beneficiaries, schoolchildren, through school meals, but can also influence households' level of food security, health and nutrition. Therewith, nutrition-sensitive components of school feeding can address the underlying determinants of foetal and child nutrition. Rwanda, for instance, introduced awareness campaigns on the importance of child nutrition for communities and parents along with its national school feeding programme. The campaigns make use of media, constituting a vital step towards creating a general, nutrition-sensitive conscience amongst the wider population³². Other examples of countries that are currently in the process of aligning nutrition policies and strategies with the existing national school feeding programme are Malawi, Kenya and Liberia.^{33,34}

23, (Olusanya, 2010)

24, (Tomlinson, 2007)

25, (Del Rossa, 1999)

26, (Fanjiang & Kleinman, 2007)

27, (African Union Commission; New Partnership for Africa's Development; UN Economic Commission for Africa; World Food Programme, 2013)

28, (United Nations Children's Fund, 2016)

29, (United Nations Children's Fund, 2016)

30, (African Union Commission; New Partnership for Africa's Development; UN Economic Commission for Africa; World Food Programme, 2013)

31, (Bundy, et al., 2009)

32 (WFP Centre of Excellence against Hunger, 2013)

33 (WFP Centre of Excellence against Hunger, 2013)

34 (WFP Centre of Excellence against Hunger, 2016)

Another usual evidence for this is closely linked to THR and their spill-over effects on households. Providing schoolchildren with THR works akin to an income transfer to households, in that it increases the food and financial resources in the home, mainly through the sharing of THR amongst family members. Sharing THR with children in their first 1,000 days of life can have particularly impactful results through improving their nutritional status during this most critical window of cognitive development. For example, an RCT in Burkina Faso in which THR of 10 kilograms of flour per month were given to girls for maintaining a certain level of school attendance showed a significant increase in the weight of children aged 12 to 60 months in the girls' households³⁵.

The effects of THR on household food security not only have nutritional implications, but can have educational ones, too, as the longer-term outcomes of improved food security are all linked to improvements in literacy, numeracy and other educational variables³⁶. Similarly, in-school feeding can be seen as a transfer to households, as schoolchildren are directly provided with meals, therewith enabling the household to save resources that would have gone to the feeding of schoolchildren, and spend those resources on other items.

Nutrition education constitutes another nutrition-sensitive component that is implemented in various countries as a complementary intervention, as revealed by the continental survey. Food and nutrition education consists of a variety of educational strategies aimed at achieving long-lasting improvements in people's diets³⁷. While there is lack of direct evidence on the effects of nutrition education on health and nutrition indicators, stakeholders in South Africa for instance reported that nutrition education, which forms an integral pillar of the National School Nutrition Programme (NSNP), fosters more responsibility among learners for their health and physical development, through improved hygiene practices, particularly hand washing prior to the in-school meals and vegetable production in school gardens.

Instilling healthy eating habits and preferences within schoolchildren through nutrition education can also address the rise of overweight and obese children in Africa. Globally, the prevalence of overweight and obese children is increasing, but the prevalence for overweight and obese children in Africa is growing particularly quick: in 2010, prevalence on the continent was 8.5 per cent and is expected to reach 12.7 per cent by 2020³⁸. Stemming the rise of obesity and overweight is important not only as a part of efforts to reduce malnutrition, but is important as a preventative measure against non-communicable diseases (NCDs). Overweight and obese children are at particular risk of developing NCDs later on in life, which include diabetes, heart disease and high blood pressure, all of which can shorten an individual's life expectancy. As such, effective nutrition education, especially education that encourages the consumption of nutrient-rich diets and regular exercise, can achieve both immediate and future effects on an individual's health and nutritional status.

5.1.2. Nutrition-Specific Components of School Feeding

Additionally, school feeding programmes can incorporate nutrition-specific components – addressing the immediate determinants of foetal and child nutrition and development – and as such, form components of comprehensive public health programming. One way to incorporate school feeding as a public health tool is through food complements and related complementary interventions, such as health and nutrition education, regular deworming, micronutrient supplementation or fortification, or the provision of biscuits fortified with zinc, iron, Vitamin A, and/or other micronutrients. While most of these interventions are nutrition-specific complements that aim to address the immediate determinants of child nutrition and development, they can also contribute to achieving education-related objectives through improvements in nutritional intake and health. Evidence from studies on the effectiveness of deworming is compelling in this regard,

35, (Bundy, et al., 2009)

36, (Tomlinson, 2007)

37, (Food and Agriculture Organization of the United Nations, n.d.)

38, (De Onis, Blössner, & Borghi, 2010)

especially considering that students with prolonged worm infections perform poorly in learning ability tests, cognitive function and educational achievement³⁹, given prolonged worm infections' depletion of energy and concentration levels. Some of this evidence points to increased attendance, improved learning and overall educational attainment⁴⁰. Complementary interventions can also function as preventive health measures, as receiving regular deworming tablets every six to 12 months reduces overall transmission rates in communities⁴¹. The presence of a range of complementary interventions within school feeding programmes is already widespread throughout Africa – as shown in the high-level programme landscape – so much so that complementary interventions currently form integral rather than supportive parts of school feeding programmes.

In terms of value for money, food complements and complementary interventions have proven to be particularly cost-effective. The two deworming drugs used in the Primary School Deworming Project (PSDP) in Kenya cost USD 0.04 and USD 0.18 per annual dosage, which equals USD 7.19 per student for an entire year of regular deworming tablets⁴². If improved health as a result of deworming treatments leads to better attendance, which in turn leads to more years of schooling, an investment of USD 50 can mean nearly seven additional years of schooling for one child. Nonetheless, deworming treatments or fortified biscuits are not a nutritional replacement for a school meal. Hence, while complementary interventions enhance and contribute to health, nutrition and education-related outcomes, the focus of a school feeding programme should remain on providing schoolchildren with full meals that meet high standards for nutritional content.

5.1.3. Measuring Outcomes & Impacts

Most countries recognise that there is a need for enhancing M&E systems of school feeding programme, to be able to assess the programme's efficiency and effectiveness and to refine nutrition-sensitive and -specific components⁴³. Meeting high standards for nutritional content within school meals is a crucial factor in performing well in favour of health and nutrition indicators. Unlike education and learning indicators, health and nutrition indicators can be physically measured within schoolchildren, such as changes to a child's height, weight, arm circumference and/or body mass index (BMI). Other changes may be more subjective, such as a child's reported incidence of feeling hungry. But taken together, these objective and subjective health and nutrition indicators are determinants of a child's ability to fully learn and participate in class. Table 5 summarises reported health and nutrition outcomes measured in African school feeding programmes across the selected indicators, which include:

- Anthropometric measurements, such as height, weight, BMI and other body measurements, as indicators of school feeding programmes' ability to impact a child's physical wellbeing;
- Micronutrient status and/or vitamin deficiencies, as indicators of school feeding programmes' ability to impact a child's nutritional status;
- Short-term hunger, as an indicator of school feeding programmes' ability to impact a child's perceived wellbeing and fitness to participate in class; and
- Incidence of illnesses, as an indicator of school feeding programmes' ability to improve a child's health and reduce inhibitors to school attendance.

The measurement of school feeding programmes' achievements of health and nutritional indicators often occurs alongside educational and learning indicators, considering the interrelated nature of malnutrition, poor health,

39, (World Health Organization, 2003)

40, (World Health Organization, 2003)

41, (J-PAL, 2012)

42, (J-PAL, 2012)

43, (WFP, 2013, 2014)

and decreased educational and learning performance. Prolonged malnutrition not only affects an individual child's chances at more advanced educational achievements, but prolonged and widespread malnutrition can affect a country's future development. For example, let us assume that a school feeding programme results in higher enrollment and completion rates, which, in turn, lead to higher levels of education amongst the current generation. This is significant because maternal and paternal education levels are determinants of child growth and development as measured by stunting; indeed, some studies show that the likelihood of having a stunted child decreases by about 4 to 5 per cent for every additional year of formal education achieved by mothers⁴⁴. Furthermore, evaluations of the Child Support Grant in South Africa⁴⁵ found that childhood stunting levels amongst beneficiary households were only noticeably reduced if the mother had at least eight years of schooling. As such, school feeding programmes can contribute to long-term effects on future generations' nutrition, by exerting more short- to medium-term effects on educational attainment levels for the current generation. Below, Box 5 further explores the relevance of educational achievements for the future growth and development of a country, in a context of abundant cheap labour.

To complete this section, Table 5 summarises the existing evidence on school feeding outcomes across selected health and nutrition indicators on the continent. The further-reaching effects of improved health and nutrition, and education and learning on human development is further covered in the next section, which discusses how school feeding programmes, through their promotion of more education and better overall health, can contribute to national economic development, as well as how HGSF programmes, as a structured demand intervention, can add opportunities for agricultural transformations and engagement with local markets and economies.

Box 5. The Fourth Industrial Revolution

Improving educational outcomes is of particular importance to the future workforce, given the global economy's direction towards knowledge and services. The so-called Fourth Industrial Revolution, whereby technology-led productivity is replacing jobs held by humans, is changing the labour force and labour needs across the world, and its impact on developing economies, including those in Africa, will be significant. For example, World Bank data estimates that 85 per cent of jobs in Ethiopia are at risk of replacement by automation.

Humans will not be completely replaceable in the future global economy, as those who can contribute knowledge and intellectual capital stand to benefit from the Fourth Industrial Revolution (Mulas, 2016). Developing a country's knowledge and intellectual capital will require investment in people and, more specifically, in people's education. As a related concern, safeguarding children's full cognitive development through proper nutrition will also factor in to cultivating a labour force able to participate in the future economy.

As most African countries still rely on the traditional growth path of utilizing low-cost labour that is available in the country, such a revolution will be relevant for these countries in the long run, as solely relying on the traditional growth model is rendered less feasible. Therefore, it is vital for policy makers to understand early on, that there is an increasing need to invest in the education of the country's population, to become/remain competitive in the long run. As such, programmes and policies that improve educational attainment and childhood cognitive development, such as school feeding programmes, can be adapted and integrated into larger national strategies on increasing educational levels and developing intellectual capital. However, responding to the evolving needs of the global economy will not only require more education but different types of education to develop the labour force's full technical and creative abilities.

44, (J-PAL, 2012)

45, The Child Support Grant provides a monthly stipend to vulnerable families to help cover childcare costs; it is provided by the South African government

Table 5. School feeding outcomes across selected health and nutrition indicators

Country (region)	School feeding programme design (evidence strategy)	Changing health and nutrition indicators
Burkina Faso (northern)	<p><u>THR only:</u></p> <p>-Monthly THR of 10 kilogrammes of flour, conditional on 90% attendance rate (girls only). (RCT)</p>	<p>Changes to anthropometric measurements: for younger siblings of beneficiaries, aged between 12 and 60 months, THR increased weight-for-age by 0.38 standard deviations and weight-for-height by 0.33 standard deviations; in contrast, school meals did not have any significant impact on nutrition of younger children.¹</p>
Kenya	<p><u>In-school meal or beverage or energy supplements:</u></p> <p>- Children in grade 1 were provided with 1) meat, 2) milk, or 3) an energy supplement as a mid-morning snack in schools for 23 months. (RCT)</p>	<p>Changes to anthropometric measurements: meat group showed the steepest rate of increase in mid-upper-arm muscle (lean mass) and greatest increase in percentage of time spent on high levels of physical activity (free play observed) compared to all other groups; children in the meat, milk, and energy supplement groups all gained weight at a greater rate than the control group; younger stunted children in the milk group showed a greater rate of gain in height compared to other groups; overall, children in supplementation groups gained approximately 0.4 kg (10%) more weight than children in control group.^{2,3}</p>
Kenya (Marafa)	<p><u>Food complement:</u></p> <p>-Fortified corn-soya porridge, to which iron in different doses were added, was given to (pre-) schoolchildren aged 3-8 years, on a daily basis for 5 months. (Placebo-controlled RCT)</p>	<p>Changes to micronutrient and/or vitamin status: Compared with the placebo, the prevalence of iron-deficiency anaemia in children receiving fortified porridge reduced by 89% to 48%, varying according to the dose of iron in the fortified porridge.⁴</p>

1. (Kazianga, de Waalque, & Alderman, 2009)

2. (Neumann, Bwibo, & Murphy, 2003)W

3. (Neumann, et al., 2007)

4. (Ardang'o, et al., 2007)

<p>South Africa (KwaZulu-Natal)</p>	<p><u>Food complement:</u></p> <ul style="list-style-type: none"> -Micronutrient-fortified shortbread-based biscuits and cold drinks. -The shortbread-based biscuits were designed to provide 50% of the recommended dietary allowances of iron, iodine and beta-carotene for children aged 7–10 years. -The sugar-based cold drink contains <90 mg vitamin C. -The estimated cost of fortifying the biscuits and cold drinks was Rand 4.40 (< \$0.7) per child, per school year; the cost of the cold drink included the additional cost of a special packaging material. <p>(RCT)</p>	<p>Changes to micronutrient and/or vitamin status: significant improvement in the micronutrient status of primary schoolchildren from poor rural communities; favourable effect on anthropometric status;⁵ no significant difference in weight or height recorded over 12 months.⁶</p> <p>Changes to incidence of illness: reduced incidence of illnesses in treatment versus control group⁷.</p>
<p>Tanzania (Mp-wa-pwa District)</p>	<p><u>Food complement:</u></p> <ul style="list-style-type: none"> - Fortified orange-flavoured beverage with 10 micronutrients was provided to primary schoolchildren for 6 months. <p>(Placebo-controlled RCT)</p>	<p>Changes to anthropometric measurements: mean incremental changes in weight, height, and BMI were significantly higher in the fortified group than in the non-fortified group⁸.</p> <p>Changes to micronutrient and/or vitamin status: the fortified beverage significantly improved hematologic measurements and significantly lowered the overall prevalence of anaemia and vitamin A deficiency.⁸</p>
<p>Republic of Congo (Southern & central)</p>	<p><u>In-school meal:</u></p> <ul style="list-style-type: none"> -Rice and bean lunch. Complementary programmes, among others, targeted at reduction of malaria. <p>(Quantitative assessment & RCT)</p>	<p>Changes to incidence of illness: RCT showed that using the school feeding programme as a platform for distribution of mosquito nets led to an over 60% reduction in school absenteeism due to Malaria measured in school year 2006/2007⁹ in southern Congo.</p>
<p>Malawi</p>	<p><u>In-school meal:</u></p> <ul style="list-style-type: none"> -One daily fortified Corn Soya Blend meal. <p>(quasi-experimental)</p>	<p>Changes to short-term hunger: percentage of children saying they feel hungry at school at least sometimes decreased from 86.8% to 12.6% in the treatment group compared with an increase in the control group from 81.4% to 87.7%.¹⁰</p>

5, (Van Stuijvenberg, et al., 1999)

6, (Van Stuijvenberg, et al., 1999)

7, (Van Stuijvenberg, Kvalsvig, Faber, Kruger, Kenoyer, & Benadé, 1999)

8, (Ash, Tatala, Frongillo, JR, Ndossi, & Latham, 2003)

9, (Ash, Tatala, Frongillo, JR, Ndossi, & Latham, 2003)

10, (Niamayoua, No date)

6. Agricultural & Local Economic Development

The preceding sections have looked at the relationship between school feeding and good health and nutrition outcomes, and solid education and learning outcomes. These outcomes can have high-level implications, as the indirect and direct costs of poor nutrition and health, and diminished years of schooling on an individual's and, subsequently, a country's economic development can be wide-ranging and substantial. These costs include reductions in the labour force, a lower skilled national workforce, increased spending on public health due to the long-term effects of chronic malnutrition and decreased levels of overall economic development. At a microeconomic level, it is estimated that a 1 per cent loss in adult height as a result of childhood stunting equals to a 1.4 per cent loss in productivity of the individual.⁴⁶ At a macroeconomic level, the cost of malnutrition can range from 2 to 3 per cent of Gross Domestic Product (GDP) to as much as 16 per cent in countries most affected by malnutrition⁴⁷. Table 6 displays the estimated reduction in GDP that undernutrition has had in selected African countries, according to the COHA study.^{48,49}

Table 6. Reduction in GDP in selected countries due to undernutrition

Country	Loss in USD	Equivalent % of GDP
Chad	USD 1.2 billion	9.5 per cent
Egypt	USD 3.7 billion	1.9 per cent
Ethiopia	USD 4.7 billion	16.5 per cent
Ghana	USD 2.6 billion	6.4 per cent
Lesotho	USD 200.3 million	7.13 per cent
Malawi	USD 597 million	10.3 per cent
Rwanda	USD 820 million	11.5 per cent
Swaziland	USD 92 million	3.1 per cent
Madagascar	USD 73 million	3.1 per cent
Uganda	USD 899 million	5.6 per cent

Therefore, given the detrimental consequences that malnutrition and the resultant lower educational attainment can have on individual productivity and national economies, investing in programmes that address education and nutrition is increasingly recognised as being critical to achieve sustainable economic growth outcomes. Moreover, as in the case of school feeding, when countries can simultaneously link these programmes to appropriate interventions that improve local markets, such as structured demand programmes, local economic development spill overs can further accelerate programme returns in both the short- and long-term.

⁴⁶ (World Bank, 2006)

⁴⁷ (European Union, 2014)

⁴⁸ (African Union Commission; New Partnership for Africa's Development; UN Economic Commission for Africa; World Food Programme, 2013)

⁴⁹ (African Union Commission; New Partnership for Africa's Development; UN Economic Commission for Africa; World Food Programme, 2013)

6.1.1. Creating Demand through School Feeding Programmes

Structured demand programmes connect large, predictable sources of demand for agricultural products (i.e. markets) to small farmers, which, in theory, reduces risk and encourages improved quality, leading to improved food systems, increased income, reduced poverty⁵⁰ and, in the long-term, increased food security. School feeding programmes can serve as an example of a structured demand programme, with school feeding constituting a market to which smallholder farmers can be linked. Structured demand programmes, particularly when implemented in rural areas, can stabilise commodity prices and markets through public procurement.

In many rural areas of developing economies, smallholder farmers face high levels of uncertainty and a narrow supply chain, oftentimes resulting in selling off products at unfairly low prices to private vendors⁵¹. Through the introduction of a structured demand programme, however, the state or other entity procuring food establishes predictable demands, thereby enabling smallholder farmers to set production and pricing benchmarks and have more assurance in selling their surplus goods.⁵² While there are few examples of large-scale, national structured demand programmes globally, independent evaluations from two national programmes in Brazil – the Food Acquisition Programme (PAA) and the National School Feeding Programme (PNAE) – reported that participating smallholder farmers diversified their production, improved their product’s quality, strengthened farming collectives and increased household income. These results also mirror findings from qualitative interviews with members of farming cooperatives and local producers that were conducted as part of this study in various countries, as subjects reported increased membership within cooperatives, increased yields, improved product quality and increased individual incomes⁵³.

In most cases, the subjects interviewed were participants in HGSF programmes, which can be defined as school feeding programmes that provide food produced and purchased from within a country. More specifically, this study defines HGSF as produced and purchased locally, that is, within the area of the schools served under the programme. As a structured demand programme, HGSF programmes seek to address scarce opportunities for market engagement by procuring directly from local farmers, with the added objective of contributing to school feeding programmes’ desired educational and nutritional outcomes. Home Grown School Feeding programmes combine local and regional food procurement with school feeding programmes under the premise that low farm productivity, poor agricultural market development, and poor educational and nutritional outcomes are mutually reinforcing, jointly determining key aspects of rural hunger and poverty⁵⁴. The theory for linking HGSF programmes to agricultural development begins with a demand shift within local economies, as local producers now must fill food orders previously supplied to school feeding programmes by donors⁵⁵; over time, these local producers supply schools with food produced and procured domestically to the greatest extent possible. Below, Box 7. Food sovereignty

Reaching food sovereignty represents perhaps the greatest indicator of the full maturation and realisation of a country’s agricultural development. Food sovereignty is defined as “...the right of peoples, communities, and countries to define their own agricultural, labour, fishing, food and land policies, which are ecologically, socially, economically and culturally appropriate to their unique circumstances. It includes the true right to food and to produce food, which means that all people have the right to safe, nutritious and culturally appropriate food and to food-producing resources and the ability to sustain themselves and their societies” (*Via Campesina* statement at 2002 FAO Summit).

50, (Coles, 2013)

51, (International Policy Centre for Inclusive Growth, 2013)

52, (International Policy Centre for Inclusive Growth, 2013)

53, (International Policy Centre for Inclusive Growth, 2013)

54, (Coles, 2013)

55, (Lawson, 2010)

Box 6. Brazil's National School Meals Programme and Food Acquisition Programme

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

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

Combined, the National School Meals Programme and the Food Acquisition Programme represent the largest structured demand initiatives for smallholder farmers in Brazil. The two programmes connect large and predictable demand for food to the farmers, which in turn holds the potential for farmers to increase their income, while increasing the supply of locally-grown foods within communities. (WFP Centre of Excellence against Hunger, n.d.) (WFP RBP, 2017).

Hence, food sovereignty goes beyond food security, as food security only guarantees access to sufficient and adequate food, whereas food sovereignty guarantees national control over food production and wider and more equitable access to the means and resources for producing food. HGSF programmes' contributing role in working towards food sovereignty can include providing local farmers with enough land and inputs to meet school feeding demands, drawing up contracts with farmers that set fair commodity prices, and using locally-produced food in school menus to the greatest extent possible (Tomlinson, 2007). Reaching greater local ownership over food production for AU member states also contributes to reaching sustainable, inclusive economic growth, which is part of the SDGs and factors into the goals and priority areas of Agenda 2063. explores how HGSF can go a step beyond increasing local production of food, impacting national food security and sovereignty.

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Given HGSF programmes' engagement with local producers and farmers, and potential to spur economic growth, they are growing in popularity throughout AU member states, as supported by the survey results. Incorporating local, agricultural production into school feeding programmes makes particular sense in the African context, as nearly two thirds of the population live and work in rural areas, and over 65 per cent of the population rely on agriculture for work⁵⁶. Furthermore, the Comprehensive Africa Agricultural Development Programme (CAADP) Framework for Africa's Food Security includes HGSF programmes under the objective of "increased economic opportunities for the vulnerable," while the New Partnership for Africa's Development (NEPAD) endorsed HGSF programmes' potential to contribute to long-term development goals.

Box 8. Procurement and structured demand

Governments at times look to global markets to procure food, in order to achieve cost-effectiveness, oftentimes not achieved by the domestic market. However, while looking outward to import cheaply in bulk, governments risk reinforcing existent dynamics of global food supply systems, creating a 'dumping' effect, rising the economic and social vulnerability of domestic small-scale producers. Instead, public procurement could be used to support small-scale food producers, who are among the most marginalised in many developing countries. Including these producers in the procurement process can enhance their access to markets and provide conditions for further improvements in their capacities, income and competitiveness, therewith bearing potential to significantly impact the reduction of rural poverty (Schutter, 2014).

This is the rationale behind policies such as HGSF and food assistance programmes that channel their demand towards small-scale producers' supply. Targeted institutional procurement promoting small-scale farming can produce a range of direct and indirect benefits by creating a sustainable market for small food producers, encouraging the development of both individual and collective capacities, creating additional job opportunities and spurring the development of local economies through spill-over effects. Governmental interventions, such as HGSF, are therewith capable of guaranteeing a steady income flow to farmers, producers and other supply chain actors. (Sumberg & Sabates-Wheeler, 2011).

56 (Houngbo, 2014)

6.1.2. Design & Implementation Modalities for HGSF Programmes

While HGSF programmes generally feature the common goals of increasing local production and strengthening local economies, there are various models of implementation available. For example, procurement in HGSF programmes can either be more centralised or more decentralised. The decentralised or bottom-up management approach, such as in Côte d'Ivoire, Nigeria and Tanzania, builds on the strengths of community-based institutions, including schools and village groups. Food is procured by local caterers, community organisations or school groups from local farmer-based organisations, with some support by district and state institutions. This approach ensures strong local programme supervision and monitoring and, in some cases, shorter procurement times. On the other hand, the centralised approach builds on contractors and traders for procurement of food. Ownership lies with the state or regional government, with some participation and contribution from the local schools and communities. While a decentralised approach may better suit the local context, and strengthen communities and local partnerships, it is essential that local actors are capacitated to manage HGSF programmes and that equality between localities is promoted by the state⁵⁷.

In addition to building local capacities, HGSF programmes can also promote inclusion of women into the supply chain, therein following the objective of SDG 5, to achieve gender equality and empower women and girls⁵⁸. There are examples of African HGSF programmes, such as in Kenya, Burkina Faso, Côte d'Ivoire and Nigeria, that specifically embed women into the supply chain, thus adding members of a community into local labour forces and markets who may not otherwise have been included. The direct economic benefits of providing income-generating activities to women are difficult to measure, but one can contemplate some of the benefits using examples from existing HGSF programmes. In Nigeria, the HGSF programme in Osun state has employed over 3,000 local women as community caterers⁵⁹ to prepare food and run kitchens since its launch in 2012. In addition to receiving an income for preparing school meals, the women can also use the kitchens during the weekends and school holidays to run catering business, thus enabling them to earn extra income. Having regular sources of income may allow these women to send their own children to school and improve household food and nutritional security, thereby enhancing their children's prospects at more years of schooling, their children's nutritional status and their children's potential to higher earnings in the future.

Box 9. African Union Declaration on School Feeding

During the African Union Summit in January 2016, the African Heads of State decided to adopt a continental strategy on home grown school feeding programmes, to enhance retention rates and performance of children in schools, whilst boosting income generating activities and economic development in local communities. This declaration encourages AU member states with operational school feeding programmes to continue their programmatic efforts, while inviting other member states to learn and adapt lessons from those running school feeding programmes. Furthermore, the decision calls for the establishment of a multi-disciplinary technical committee of African experts to undertake, with support from the WFP Centre of Excellence, a general study on the relevance and impact of school feeding in AU Member States, and the institutionalisation of the African Day of School Feeding on 1 March. (World Food Programme Centre of Excellence against Hunger, 2016).

There are various supply chain actors that stand to benefit from HGSF programmes and Table 7 highlights some of the possible socioeconomic development opportunities available to them. However, the multiplier effect of HGSF programmes on local economies can result in this extended inclusion; for example, the

57, (World Food Programme, No date)

58, (United Nations, 2015)

59, (State of Osun, No date)

president of a women’s association that runs a yogurt factory in northern Burkina Faso and sells yogurt to the HGSF programme reported that her factory buys from more local milk producers due to increased product demand. Although the products from the local milk producers are not directly served in schools, members of the women’s association reported that expanded demand from the HGSF programme in their area led to expanded economic opportunities for them.

Table 7. Socioeconomic development opportunities within HGSF programmes

Supply Chain Actor	Socioeconomic development opportunities within HGSF programmes
Farmers/producers	<ul style="list-style-type: none"> • Access to school feeding markets/additional buyers for leftover produce. • Increased production. • Increased diversity of production, promoted by increased diversity in demand from school feeding nutrition-sensitive design. • Ability to purchase improved agricultural and production inputs (e.g. seeds, equipment). • Access to loans and capital to increase outputs and improve/modernise inputs. • Formation of cooperatives pools resources, increases overall outputs, and strengthens negotiation position for school feeding tenders and contracts. • Acquisition of additional farming skills. • Potential to transition from supply of raw inputs to higher added value production. • As HGSF programmes expand, expansion of agricultural/local production sector.
Transporters	<ul style="list-style-type: none"> • Extra income through providing transport from purchase to storage sites. • Formation of transport unions pools resources and strengthens power to negotiate school feeding contracts. • As HGSF programmes expand, expansion of transport networks.
Traders/Market Vendors	<ul style="list-style-type: none"> • Access to school feeding markets/new buyers. • Increased stock/range of commodities available for purchase. • As HGSF programmes expand, expansion of local markets.
Caterers	<ul style="list-style-type: none"> • Employment opportunity. • Possibility to use school kitchens during the weekends to run catering businesses. • Development of financial literacy through managing budgets and negotiating commodity prices. • Acquisition of cooking and business skills.
Private financial institutions	<ul style="list-style-type: none"> • Access to new clients as local production capacities grow and require additional capital. • Local bank branches grow with opening of new accounts.

6.1.3. Measuring the Effects of HGSF Programmes

Due to the limited number of HGSF programmes implemented on a large-scale internationally or in Africa and their relative young age, there is little available evidence on the measured direct and indirect socioeconomic effects of HGSF to supply chain actors and local and national economies.⁶⁰ Moreover, very few school feeding programmes that feature HGSF include agricultural or local economic development outcomes into programme objectives or evaluations, as evidenced through the survey results. And, in the absence of wide-ranging evidence, it is difficult to estimate the full extent of future gains of HGSF to local and national economies as a whole. Additionally, there do not exist standardised indicators for evaluating HGSF programme outcomes, as seen in the other sectors discussed in this chapter. Some possible indicators could include the

60, (Coles, 2013)

programme’s direct and indirect contribution to the labour force, changes to household incomes, percentage of locally produced goods sold to school feeding programmes, changes to agricultural productivity, or feelings of empowerment/improved knowledge. Table 8 presents some examples of HGSF programmes in Africa and reported outcomes on a variety of indicators.

Although data on the longer-term and wider effects of HGSF programmes on agricultural and local economic development are not available, initial reports on HGSF programmes point to great potential. If HGSF programmes can manage to reach scale at national levels, this potential increases, both in terms of supplying school feeding programmes and in supplying domestic food systems. However, the agricultural sector in Africa, despite its potential, has yet to fully reach scale, due to fragmentation, underinvestment and lack of infrastructure.⁶¹ Bringing HGSF programmes and domestic production to scale requires significant investments of time, expertise and resources, and these costs can affect the implementation features of HGSF programmes. Section 6 of this chapter touches on some of the cost considerations in HGSF programmes and in school feeding programmes in general.

Table 8. Selected HGSF programme design features and outcomes

Country	HGSF programme design features (evidence strategy)	Reported outcomes
Côte d’Ivoire	<ul style="list-style-type: none"> Communities are at the centre of procurement. They are encouraged and supported through the production of agricultural commodities to progressively supply their own canteens. Farmers are grouped into agricultural production groups, supplying a share of the canteens’ commodity needs. (Comparative evidence) 	<ul style="list-style-type: none"> As of academic year 2009-10, 974 agricultural production groups with more than 30,000 members, of whom 87% were women, supplied 23% of the needs to canteens.¹ Use of modern inputs (fertiliser, urea, selected seeds, cuttings, and seedlings) has allowed agricultural production groups to produce food for canteens, whilst meeting the domestic needs of households to generate revenue from market sales. Comparison of productivity across years reveals increases in yields per hectare.² Increased knowledge and capacity of communities through trainings, monitoring activities, access to market, and credit and loan support.³
Kenya	<ul style="list-style-type: none"> Under the Njaa Marufuku Kenya (NMK) programme, farmers were linked to (non-) governmental organisations that provided agricultural inputs such as fertilisers, seeds, irrigation equipment and training. In addition to agricultural extension services to smallholder farmers, the programme gave complementary grants for setting up model gardens within the community for technology transfer. (Survey) 	<ul style="list-style-type: none"> Evidence suggests that capacity building and provision of start grants and dissemination of technological information through school gardens – which served as demonstration projects providing learning opportunities to both pupils and local farmers – fostered community empowerment.⁴

1, (Drake, Woolnough, Burbano, & Bundy, 2016)

2, (Direction Nationale des Cantines; Partnership for Child Development; Programme Alimentaire Mondial, 2011)

3, (Direction Nationale des Cantines; Partnership for Child Development; Programme Alimentaire Mondial, 2011)

4, (Kenya, 2012)

61, (McKinsey & Company, 2010) & (African Development Bank Group, n.d.)

Country	HGSF programme design features (evidence strategy)	Reported outcomes
South Africa	<ul style="list-style-type: none"> The National School Nutrition Programme (NSNP) relies on volunteer food handlers, usually parents of the schoolchildren, to prepare and serve meals for children. The handlers are paid a stipend for their work. Provinces and schools are encouraged to rely on local service providers, small and medium enterprises, and local-based co-operatives for food production and procurement. (Qualitative & quantitative evidence) 	<ul style="list-style-type: none"> NSNP was shown to benefit the community through the appointment of volunteer food handlers, and by using local suppliers or producers of food; therewith contributing to poverty alleviation and supporting local economic development.

7. Costs of School Feeding Programmes

Throughout the above presentation of various school feeding designs and sectoral outcomes, the question of programme costs has not been directly addressed. This is an important question, given that programme budgets do not have unlimited funding for school feeding programmes. However, the average costs of school feeding programmes, including HGSF programmes, are difficult to estimate given the wide range of school feeding designs, though a commonly cited range is USD 28 to USD 63 per child per year; in some countries, this range could double the cost of educating a child.⁶² Per the survey results, the annual cost per student for school feeding in AU member states likewise showed a wide range, from USD 6.61 (Sierra Leone) to USD 328 (Djibouti). In most school feeding programme budgets, the majority of funds are spent on food, though there are various other costs for policymakers to consider and which are a factor in variations in annual costs, such as the transportation and storage of commodities; food preparation, including outfitting school kitchens and purchasing cooking equipment and utensils; number of school feeding days; and compensation, either in-kind or monetarily, for cooks and other persons involved in delivering meals to students, considering that volunteer work is a donation of household labour and resources to the school feeding programme. These costs can all be affected by the level of centralisation or decentralisation within a school feeding programme, and can vary widely between school feeding and HGSF programmes, and within HGSF programmes.

This wide variation in costs depending on the level of centralisation is evidenced through comparing spending within HGSF programmes in Côte d’Ivoire and Botswana.⁶³ Although both programmes spent the largest share (80-90 per cent) of their budgets on food costs, Côte d’Ivoire spent 17 per cent of its budget on food transportation, while Botswana only spent around 1 per cent on food transportation. However, Côte d’Ivoire spent 3 per cent of the budget on support costs,⁶⁴ whereas Botswana spent 13 per cent on the same line item. The level of centralisation versus decentralisation of procurement practices influenced these cost shares, with Côte d’Ivoire’s more decentralised model producing higher food transportation but lower overall implementation costs, and the more centralised model in Botswana contributing to the reverse scenario. Additionally, HGSF programmes might require a range of additional investments, such as construction of better road infrastructure to transport food from production to preparation sites; construction of food storage facilities; training for farmers and provision of additional agricultural inputs to increase production; and/or compensating community members for their participation. These additional investments should be taken

62, (World Bank, 2012)

63, (Suwo, 2013)

64, Support costs include administrative cost and staff labour cost, among others, while they do not include trainings or provision of inputs to farmers.

into account when designing HGSF programmes and decentralised implementation arrangements that rely heavily on community involvement should try not to burden communities with too many costs.

The cost investments into HGSF and general school feeding programmes may appear high at the outset, though it may be more useful to evaluate these investments in terms of their returns over the long-term and their added value as social transfers to various sectors, such as education, nutrition, health, agricultural and local economic development, and related supply-side infrastructure. As a holistic social protection intervention, school feeding programmes can help children access nutritious foods, help income-constrained families feed their children and help promote agricultural and local economic development.⁶⁵ And even though education assistance programmes could cost less than school feeding programmes while achieving similar education outcomes, they generally do not have the nutritional and health components offered by well-designed school feeding menus, a significant distinction given the linkages between good nutrition and stronger learning outcomes, nor the same development outcomes that HGSF can spur.

As a long-term investment, school feeding outcomes in education, health, nutrition, agriculture and local economic development can potentially save on future costs spent on these sectors. An independent cost-benefit evaluation of a school feeding programme in the Federal Capital Territory of Nigeria projected that reduced school repetition rates over a 10-year period would save the Nigerian government over 758 million Nigerian Naira (USD 2.4 million) in additional expenditures to the education sector.⁶⁶ The COHA studies likewise estimated the additional costs to governments due to primary and secondary school grade repetition to be up to 0.42 percent of national GDP in Lesotho. While there is a lack of more evaluations on real cost-savings to other sectors as a result of improved education, learning, health and nutrition outcomes, in part because of the limited number of studies that comprehensively assessed the cross-sectoral outcomes of school feeding, the future sectoral returns on an investment in a school feeding programme represent an important consideration in programme investment, design and implementation.

There are many design considerations that go into a school feeding programme and the previous sections have highlighted some major ones in achieving outcomes across various sectors. In the subsequent section, Chapter 1 concludes with a summary of programme design considerations and modalities and how they interact with the sectors of education and learning, health and nutrition, and agricultural and local economic development; as well as with some general observations on gaps and shortcomings in African school feeding programmes.

8. Observations on the State of School Feeding in AU Member States

Reviewing existing school feeding programmes in AU member states and the available sectoral evidence is useful in establishing the range of design and implementation features available, and in exploring what works, when and how in reaching desired outcomes. However, there are no absolutes in guaranteeing outcomes, given the diversity of design features, school feeding programme objectives and contexts (political, geographical, economic, social, developmental) in which African school feeding programmes operate. Therefore, it is up to policymakers to first establish the objectives to which a school feeding programme is designed to respond, and then determine which combination of design features can maximise those objectives across sectors.

65, (World Bank, 2012)

66, (Uneze & Tajudeen, 2011)

8.1. Review of Programme Design Features & Evidence

School feeding policymakers may endeavour to strategically combine design elements in line with programme budgets, scope and objectives. For example, offering complementary interventions, such as regular deworming, to school meals has shown to be a cost-effective way of enhancing nutrition and educational outcomes through improving the overall health status of schoolchildren, which in turn improves school attendance levels and children's cognitive and concentration abilities. Policymakers should bear in mind, though, that if strict nutritional guidelines for school meals are not set and enforced, the health, nutrition and learning benefits of school feeding programmes may be compromised, regardless of the inclusion of complementary interventions. Additionally, in terms of achieving education and learning outcomes, serving in-school meals at the beginning of the day can help ensure that schoolchildren are well fed before learning commences, thus strengthening their concentration abilities. However, serving meals later in the school day encourages children to stay for lessons, instead of leaving after being fed. For creating nutritious and well-timed meals, research on child nutritional requirements and brain activity – as education stakeholders did in the earlier example of Madagascar – may be necessary, so that school meals can fully achieve impacts on education, learning, health and nutrition outcomes.

Another consideration in strategically designing school feeding programmes is through targeting. The chosen targeting approach can be universal, meaning all children in the targeted group receive meals; geographical, meaning distribution is restricted to targeted areas; or individual, meaning that recipients must meet established criteria to benefit from meals. In AU member states, in-school meals are generally targeted at all children in a classroom, many of whom already have high attendance rates, though schools are generally targeted geographically. Universally targeting all children, also those not attending, while more inclusive, can increase programme costs, particularly in terms of food quantities needed. However, individually targeting students for in-school meals, which may lower feeding costs, can lead to social exclusion and claims of unfairness,⁶⁷ thus making recipients feel marginalised, as well as higher administrative cost of maintaining updated databases of individual beneficiaries. On the other hand, with THR, which are implemented complementary to in-school meals in several countries on the continent as revealed by the survey, individual targeting becomes easier, given that THR are less public and have less visibility, therewith decreasing the prospects of social exclusion and marginalisation.⁶⁸

Employing different targeting categories can allow policymakers to focus efforts on particular groups and/or regions, and to specifically address interventions to vulnerable areas or individuals. For example, international evidence and interviews with stakeholders from several countries have shown that school attendance decreases during times of food insecurity or drought; wherefore as part of crisis and emergency responses, school feeding programmes have been specifically targeted to areas prone to food insecurity to help stabilise school attendance during food shortages. Moreover, policymakers may consider targeting school feeding programmes to areas with ongoing interventions in other sectors as a means of maximising impacts. For instance, in Niger, there are *zones de convergence in vulnerable areas* of the country in which various actors align their programmatic efforts and interventions. In these zones, school feeding is implemented as part of these interventions, aimed at achieving cross-sectoral improvements. Finally, targeting can be utilised as a means to implement a school feeding programme in stages and gradually scale it up through the expansion of programme eligibility to more geographical areas or grades, for instance.

67, (Alderman, Gilligan, & Lehrer, 2010)

68, (Alderman, Gilligan, & Lehrer, 2010)

The choice of targeting approach can involve trade-offs, however. Targeting certain areas or individuals may raise questions about equity, as there may be vulnerable regions and/or students not reached by school feeding. If groups that would benefit from school feeding are excluded, country-wide improvements to education, learning, health, nutrition and economic development outcomes may be affected. Conversely, though, universal targeting may raise questions of efficiency, as limited resources for school feeding may not cover provision of school meals for the entirety of the school year or may place high financial burdens on communities. The inability to serve nutritious meals on a daily basis could impact education and learning outcomes (e.g. attendance, enrolment, retention rates, test scores), and nutrition and health outcomes (e.g. anthropometric measurements, micronutrient status, incidence of illness, short-term hunger). These scenarios are presented to highlight the possible implications of targeting, though the choice of targeting can affect other indicators and sectors, as well.

In terms of designing HGSF programmes, there are likewise a range of considerations and questions that can affect how quickly HGSF programmes scale up and how much HGSF programmes can rely on domestic versus international procurement. Policymakers who pursue HGSF programmes should be careful not to scale-up too quickly or oversell local produce, as these can have damaging consequences for local markets. Moreover, poor market intelligence or incorrect production estimates can lead to food shortages and/or price fluctuations that directly and adversely affect the community and local economy.⁶⁹ From the outset, HGSF programmes should be adequately integrated with agricultural development policies, such as agricultural extension services, and therewith invest in producers' technical capacities until production is able to scale up. For example, a WFP-led project in northern Burkina Faso to increase local yogurt production to supply school breakfasts worked to build producers' technical capacities and improve quality standards for over one year before the first yogurts were served in schools. As this example demonstrates, investing in and increasing local producers' capacities requires both time and resources, and HGSF programme management should commit to developing these capacities before relying too heavily on local production.

Within HGSF programmes, management of the programme is often decentralised, given the reliance on local structures to supply the school feeding programme. In general, though, an overall trend for decentralising school feeding programme management to district, local or school levels is observed. Decentralisation can help lower levels build capacity to manage school feeding programmes and can decrease central administration costs, as local levels take charge of preparing meals, managing food stocks and deliveries, and other duties related to procurement (e.g. buying directly from producers, purchasing food condiments, contracting transportation services). However, decentralising too quickly can place heavy implementation or cost burdens on communities, and lower levels should be prepared for taking on additional costs and responsibilities. For example, decentralised school feeding programmes may require that schools or parents supply cooking equipment, utensils and dishes. If schools or parents cannot afford to supply these cooking items, sanitation and hygiene standards in food preparation and eating may be compromised, and health and nutrition outcomes could be affected.

One way to ensure that school feeding needs are met in decentralised management structures is to set up community management committees and school development funds. For example, school development funds in Namibia purchase spoons and bowls for serving school meals.⁷⁰ Community management committees can be comprised of school officials, members of local government, community leaders or school parents, and are dedicated to addressing issues relating to the functioning of school feeding programmes. Community management committees can also manage the disbursement of school development funds, which are oftentimes

69, (Coles, 2013)

70, (Ellis, 2012)

composed of community contributions. In addition to buying equipment for school feeding programmes, these funds can be used to compensate volunteer cooks or volunteers who manage food stocks, as evidenced during interviews with stakeholders in Burkina Faso and Madagascar. Overall, a primary consideration for designing decentralised school feeding programmes is to set up mechanisms that share responsibilities or costs, so that local government, school management and school parents do not feel overburdened by running of the school feeding programme.

There is much to consider in the design phase of a school feeding programme, and this chapter has discussed both how different school feeding designs can produce different outcomes per sector and how different programme design elements can influence outcomes per sector. These various programme design elements per sector are summarised in Table 9.

Table 9. School feeding programme design elements per sector

Sector	Programme design elements
Education & learning	<ul style="list-style-type: none"> • School meal delivery modality and timing: in-school meals, THR, food complements (e.g. micronutrient supplementation, fortification), meal time and number of school meals • Menu design of school meals: THR, food complements (e.g. micronutrient supplementation, fortification) • Conditions/co-responsibilities: FfE programmes • Education supply-side: provision of more teachers, classrooms and education assistance programmes (e.g. scholarships, teacher assistance, education materials) in complement to school feeding
Health & nutrition	<ul style="list-style-type: none"> • School meal delivery modality and timing: in-school meals, THR, food complements (e.g. micronutrient supplementation, fortification), meal time and number of school meals • Menu design of school meals: nutritional content, promotion of diversity of ingredients that are meaningful for the local cultures and traditions and adapted to the local environment, THR, food complements (e.g. micronutrient supplementation, fortification) • Health and nutrition education integrated with curriculum • Complementary interventions: e.g. deworming, micronutrient fortification, trainings on nutrition and hygiene
Agricultural & local economic development	<ul style="list-style-type: none"> • Procurement: level of centralisation local versus international procurement, procurement sources, HGSE • Level of community participation- • Inclusion of women in supply chain • Agricultural extension strategies: e.g. support for local production capacities/home-grown school feeding, including improvement of agricultural inputs, training and access to capital, improvement of road networks, construction of storage facilities

8.2. School Feeding Gaps & Areas of Improvement in AU Member States

Despite the strong outcomes across various sectors that school feeding programmes in AU member states have already realised, the desk review of existing international evidence and in-country missions revealed some general shortcomings, gaps and areas of improvement in African school feeding programmes. While

there are also positive generalisations to be made about school feeding in AU member states, such as the near-universal uptake of complementary interventions, the below lists summarises some matters that merit future consideration if policymakers truly wish to amplify the positive outcomes and effects from school feeding programmes:

- Education-based objectives and indicators remain the most common means for measuring outcomes from school feeding programmes in AU member states, with little integration of cross-sectoral indicators and/or objectives.
- A single line ministry, primarily the Ministry of Education, and/or WFP are the sole financing and implementation agencies for school feeding programmes.
- Low application of M&E for school feeding programmes on a national scale, with limited usage of automated feedback systems to contribute to policymaking.
- Lack of large-scale structured demand programmes and supply-side responses to support the expansion of HGFSF and local production capacities.
- Cross-sectoral coordination and integration of school feeding into national development plans and agendas are still at nascent levels of uptake.
- Achievement of complete national ownership of school feeding programmes is a persistent challenge and rarely seen.

Many African policymakers already are striving to improve performance on some of the above points, such as expanding HGFSF programmes, increasing cross-sectoral cooperation and planning for a transition to national ownership, and it appears that these areas will remain focus areas for policymaking, based on results from the continental survey.

Going forward and acknowledging the multi-sectoral returns to school feeding outlined in the various sections of this chapter, policymakers should position school feeding programmes to produce returns across sectors, both in the short- and long-term, as a means of solidifying school feeding's position as a key player within development agendas. Policymakers can also endeavour to make school feeding programme designs complementary to and consistent with national education, social protection, health, nutrition, agriculture and economic policies. In order for these returns to be graspable to all policymakers, it is vital to commence evaluating school feeding programmes from a cross-sectoral perspective, therewith assessing its impacts and returns across multiple sectors. Some evaluations presented in this chapter have been able to show connections between school feeding's returns to different sectors, but there is a need for more evaluations that look comprehensively at school feeding's outcomes across sectors and beyond direct beneficiaries to assess the exact extent of the undoubtedly overall positive impact. More comprehensive evaluations can help policymakers to fully understand how to strategically design integrated, sustainable and wide-reaching programmes that are able to address a variety of objectives and that rely on a systems approach to implementation.

The need to take a systems approach in designing sustainable school feeding programmes is built upon in Chapter 2, which presents a conceptual framework for school feeding programmes in AU member states. This study's conceptual framework looks at the different institutional levels – school, national, international – involved in designing school feeding programmes, as well as which programme design components can influence sector-specific outcomes and contribute to longer-term development impacts. Although there are pre-existing conceptual frameworks that speak to school feeding and school health, this study seeks to innovate its proposed conceptual framework by positioning school feeding as an enabler of cross-sectoral returns within harmonised, integrated development agendas.

Box 10. School feeding as part of emergency and humanitarian response systems

The African continent is widely affected by high levels of migration and displacement due to man-made and natural calamities, such as internal conflict, climatic and environmental shocks and political instability. To quantify the impacts of these calamities, Africa hosts nearly 30 percent of the world's population of refugees and asylum-seekers (approximately 5.6 million people), and an additional 13.2 million internally displaced persons (IDPs) and returnees (UNHCR, 2016). These numbers do not account for the large number of persons each year who are displaced, either internally or across an international border, due to environmental disasters. Furthermore, these figures are projected to continue rising in light of continued conflicts, serious food shortages and drought, the threat of famine, among other issues. Given that migration and displacement constitute a major cross-cutting issue for AU member states, policymakers must consider how to best respond to those affected by emergencies.

Emergency and humanitarian response systems are increasingly incorporating social safety nets (SSN), such as cash transfers (CTs), into responses to both acute and protracted emergencies as a means of helping affected populations smooth consumption, meet their basic needs and invest in livelihoods. Moreover, ensuring that displaced populations continue to access services like education and healthcare is essential to ensuring that developmental outcomes, especially for children, are not adversely affected. While there is debate on the appropriateness of education interventions as part of emergency responses, school feeding, in the form of emergency canteens, can perform various functions in emergency and humanitarian response systems. Emergency canteens, whether set up to serve IDPs or refugees and asylum-seekers, can fulfil two main aims: 1) to provide immediate assistance to affected populations and/or 2) to help the transition from meeting short-term, humanitarian needs to long-term, developmental goals. Regarding the first goal, *cantines d'urgence* (emergency canteens) in Niger have been set up to minimise the impact of the Boko Haram insurgency on Nigerian and Nigerien children through continuing to provide meals in schools hosting displaced children; and Egypt has also set up school feeding for Syrian refugees. For the second aim – transitioning to long-term goals – both Zimbabwe and the Central African Republic (CAR) are re-designing their emergency school feeding programmes, originally established to address food insecure households and children affected by conflict, respectively, to conform to national development agendas; both governments are also assuming more national ownership over their school feeding programmes.

Across various scenarios, the introduction of emergency canteens can serve multiple purposes within larger humanitarian response systems, such as providing a nutritious meal to students in stressful situations, reinforcing food security levels amongst potentially distressed children and assisting children to continue education in the presence of adverse conditions. Although each emergency situation requires unique responses to best meet affected populations' needs, school feeding contains relevance in both acute emergencies, as a means of filling nutrition and education gaps while displaced populations wait to return home; and in protracted emergencies, as a means of protecting the human capital development, thereby safeguarding that beneficiaries reach their full human capital potential. And once an emergency has subsided, structures and institutional capacities that were built as part of the emergency canteens can assist in transitioning a school feeding programme into a more sustainable, developmental model that fits into national goals on recovery, rehabilitation and growth.





Chapter



2



A Conceptual Framework for
Sustainable School Feeding

Chapter

2

A Conceptual Framework for Sustainable School Feeding

In Chapter 1, evidence from international evaluations and research, in-country missions to selected AU member states and country surveys completed by school feeding stakeholders were presented in order to both demonstrate the diversity of school feeding programme designs and school feeding's range of sectoral returns. The high-level landscaping of the current state of school feeding in Africa contributes to the construction of a broad evidence base and more profound grasp of major school feeding concepts, as well as facilitates links to be made between specific programme design features and sectoral outcomes. For instance, linking complementary interventions within school feeding programmes, such as deworming or micronutrient supplementation, to improve outcomes on the health and nutrition statuses of beneficiary schoolchildren; or finding linkages between the expansion of HGSF programmes and better opportunities for smallholder farmer engagement. Going beyond these linkages, though, the construction of a broad evidence base can also assist policymakers in choosing the optimal combination of design features to reach a school feeding programme's sectoral objectives, taking into account a country's specific contextual needs and budgetary boundaries.

However, the evidence base elaborated on in Chapter 1 relies primarily on evaluations that have analysed school feeding from a perspective wherein sectoral developments were the result of a single intervention, i.e. a programme with a unique set of objectives, timeframe, target group, budget and operational structure. In these evaluations, the school feeding programme itself is treated as the single intervention, with research and tests intended to measure and isolate outcomes stemming from it. For example, if an evaluation on a school feeding programme measures increased school enrolment or attendance figures, in the absence of any other interventions targeted to the benefiting students, these increases are attributed to the school feeding programme.

As a matter of fact, there is reason to believe that school feeding programmes can reach beyond sectoral objectives and already observed outcomes and further stimulate positive returns across sectors to comprehensively advance a country's sustainable development. While the highlighted sectoral outcomes in Chapter 1 demonstrate that school feeding programmes are already effective on their own in *driving* sectoral outcomes, and policymakers may design programmes to specifically achieve these aims, it is necessary to acknowledge a school feeding programme's ability to *enable* returns across interventions and sectors, which maximises its significance to a country's development agenda. Interviews with school feeding stakeholders during in-country missions confirmed this realisation, as well as the need to link school feeding to other avenues of development in order to complement wider strategies on social protection, education, nutrition, food security and, ultimately, a country's sustainable development. However, as results from the abovementioned survey indicate, the multi-sectoral integration of school feeding programmes remains a work in progress, with the majority of the school feeding programmes in Africa formulated around education and/or nutrition-related objectives, and with a

single line ministry or technical partner providing most of the financing. Considering the gap between the reality and the desired direction of school feeding programmes in AU member states, there arises the need for a framework for the design of school feeding programmes that are multi-sectoral, that work with and within other interventions, and that contribute to, and can be integrated into, national development plans.

As a result, this chapter elaborates a conceptual framework for school feeding in AU member states to guide policymakers in this pursuit. As policymakers are the target audience, this study's conceptual framework is organised around policy themes and builds innovatively on the renewed school feeding strategy from the World Food Programme (2013) and the World Bank's Systems Approach for Better Education Results (SABER) research framework on school feeding and health. Additionally, although this study's focus is on school feeding in AU member states, the conceptual framework is designed to be accessible enough to possess relevance to policymakers in other parts of the globe who wish to integrate school feeding programmes into multi-sectoral development plans.

1. A Conceptual Framework for School Feeding

The idea of a conceptual framework for school feeding is not new in and of itself, and existing conceptual frameworks have treated various aspects of school feeding. All conceptual frameworks, regardless of their theme, operate on a series of research assumptions, and provide an understanding of relationships rather than a theoretical explanation⁷¹ to a series of questions. For instance, a conceptual framework on school feeding's effect on child health and nutrition may start with the question of, "What is the relationship between school meals and child nutrition and health?" and then look at interactions between concepts like healthy diets, nutritional content, education on health and nutrition, improved hygiene and sanitation standards for meal preparation, to establish pathways to the ultimate outcome of improved child health and nutrition levels. As a conceptual framework is built to provide an overall understanding, identifying the key concepts and presumed relationships for inclusion in the framework helps to set parameters and focus the scope of the conceptual framework on addressing the topic at hand.

With that definition in mind, the conceptual framework constructed in this study seeks to answer the question of how to design, implement and institutionalise multi-sectoral school feeding programmes that are embedded within larger national, African and international development agenda, and has the following objectives:

- To demonstrate that school feeding can serve as an enabler for sustainable development given its potential for cross-sectoral outcomes on the education and learning, nutrition and health, agriculture and local economic development sectors, as well as on national capacity development; and
- To provide tools with which to assess and enhance the sustainability of current school feeding programmes.

The approach to responding to these objectives is not based on building a completely new framework, but on using existing tools offered by other frameworks to inform, refine and innovate the approach. As a way of structuring how to achieve cross-sectoral integration of school feeding, the conceptual framework applies a systems approach to school feeding. A systems approach to school feeding underscores the interrelatedness of school feeding programmes and diverse development goals, as well as the need to integrate

⁷¹, (Jabareen, 2009)

Box 11. What is a systems approach?

The term ‘systems approach’ is used in a variety of fields, to include, inter alia, psychology, business management, science and international development, and broadly recognises the interdependence and interplay between various sectors and contexts in realising outcomes. In a systems approach, different sectors and levels constantly influence each other and evolve together; there is no constant state of being, and change in one sector will affect other sectors, albeit directly or indirectly. Given the mutability of what a ‘system’ can represent – for example, an economist may define a ‘system’ as the free enterprise system (Chen, 1975), whereas a business manager may define a system as his or her corporation – there is no concrete definition for a systems approach. In this way, ‘systems approach’ is a more descriptive term and denotes an overall perspective, rather than a set methodology on how to address a problem.

In terms of what a systems approach means for international/national development programmes, a systems approach brings together a range of factors (economic, political, social, environmental, cultural) and actors (international, national, regional, grassroots) into comprehensive development efforts (Gallopín G. , 2003). A systems approach acknowledges that all development targets are interrelated, in that movement against one target affects the achievement of others. This acknowledgement is of particular importance and highlights the high levels of cooperation and mutual support needed for a successful systems approach to development.

school feeding programmes into larger development agendas and cross-sectoral, national development plans. As such, the systems approach to school feeding that guides the study’s conceptual framework goes beyond shorter-term effects and outcomes and reflects on how returns and impacts from school feeding programmes over the long-term can serve as a platform for the pursuit of multiple development goals. Emphasising school feeding programmes’ place as part of wider development plans can provide insights into how to design school feeding programmes that align with other programmes at local, national and international levels to maximise cross-sectoral returns over time and across generations. It is this emphasis on the wider-reaching effects of school feeding programmes and school feeding’s relevance to achieving cross-sectoral returns that distinguishes the systems approach utilised in this study’s proposed conceptual framework from existing conceptual frameworks: for instance, the SABER framework promotes a systems approach focused on strengthening the education sector at national and global levels, whereas this study promotes a systems approach to sustainable, cross-sectoral development at national and international levels. This distinction is not intended as an evaluative statement, but rather to underscore the importance of careful deliberation by policymakers on where to concentrate efforts, i.e. at the sectoral versus multi-sectoral level.

In more concrete terms, a systems approach helps to find the pathways from short-term, individual level outcomes to national impacts that occur over the long run. This idea can be summarised with an example from the European Commission’s Europe 2020 document: better educational levels help an individual’s employability, while increasing national employment rates helps to reduce poverty⁷² over the long run. This example underscores the multiple levels – individual, sectoral, national, regional – of outcomes and intersections thereof to consider when designing and scaling multi-sectoral development programmes. Additionally, value-for-money, cost-effectiveness and financing streams of multi-sectoral development programmes constitute worthwhile considerations during design and scaling phases and as such, this chapter delves into a more in-depth discussion below on co-financing.

⁷² (European Commission, 2010). Accessed at https://ec.europa.eu/info/strategy/european-semester_en.

Co-financing school feeding programmes

In order to advocate for school feeding's inclusion in multi-sectoral development plans, demonstrating cross-sectoral returns from school feeding programmes is crucial. This entails not only comprehensive and regular M&E, in terms of measuring and presenting outcomes against indicators, as but also showing strong returns on investment, in terms of value-for-money and cost-efficiency. Moreover, critically assessing the value-for-money of a multi-sectoral intervention has implications for how policymakers choose to allocate resources, which are not unlimited and are, on the contrary, often scarce. This study argues that the potential for school feeding to contribute to cross-sectoral development goals comes through its ability to be an enabler of impacts rather than a driver, meaning that school feeding programmes' productive relationships with other interventions are what promotes, or *enables*, the achievement of cross-sectoral goals. This idea situates school feeding as a structural intervention with potential multi-sectoral returns, and as such, the value-for-money of a school feeding programme should be assessed in light of this argument, adopting a broad, cross-sectoral perspective. A standard, sectoral cost-effectiveness analysis, which is most often conducted in isolation, is unlikely to capture the value-for-money that school feeding holds for diverse sectors, thereby reducing the likelihood of the programme to be prioritised and jointly financed by policymakers. However, strong value-for-money evaluations for cross-sectorally integrated school feeding programmes can help make the case for increased co-financing of complex, multi-faceted interventions that address a range of development goals and priorities.

As a financial tool, co-financing generally refers to cooperation between various actors in pooling resources to fund projects, programmes or other interventions. For the purposes of this study, co-financing more directly refers to different MDAs and other technical partners' identification of which share of development programmes they are willing to finance, based on identified returns from such programmes, thus supplying decision-makers with a more comprehensive overview of financial coverage and/or gaps. Furthermore, a systems approach provides an opportunity to realise developmental synergies, thus enabling the optimisation of returns on investments in school feeding programmes through the identification of overlapping areas of interest between sectoral actors. There are a multitude of co-financing strategies available, but for a co-financing approach to function, adequate frameworks and mechanisms for cooperation and negotiation between multiple actors and policy sectors are necessary. Furthermore, more harmonised development programmes involving a range of committed actors can allow for programmes that better minimise shocks to beneficiary populations over time through offering more comprehensive and sustainable interventions and services.

Integrating sustainability and a systems approach into the conceptual framework

The idea of structuring interventions over time, i.e. interventions that are both present- and future-minded, touches upon the concept of sustainability and sustainable development, which *Our Common Future*⁷³ originally defined as "...development that meets the needs of the present without compromising the ability of future generations to meet their own needs."⁷⁴ While this definition was written more with sustainable environmental development in mind, the emphasis on considering an intervention's effects over time has relevance to a systems approach to national development goals in that a systems approach to human capital development should likewise structure interventions that help present and future generations. In this sense, the

73, *Our Common Future* (1987), also known as the Brundtland Report, was written by the World Commission on Environment and Development, a body formed in 1983 following a United Nations General Assembly decision to bring countries together in dialogue about sustainable environmental development. The Commission was dissolved in 1987 after the release of *Our Common Future*

74, (World Commission on Environment and Development, 1987)

sustainability of multi-sectoral interventions that include school feeding are characterised by their ability to continuously produce returns in line with changing contexts and times.

Against this background and with the understanding of a conceptual framework, systems approach and sustainability in mind, the parameters of the study’s proposed conceptual framework can be set. As mentioned above and in line with the highlighted objectives for the conceptual framework, the proposed conceptual framework endeavours to present how policymakers can construct sustainable school feeding programmes integrated into a systems approach to national development; it is intended to serve as a guidance tool in the practical elaboration of multi-sectoral school feeding programmes. One of the main distinctions between this study’s conceptual framework and existing frameworks, such as SABER, is reflected through its policy inputs, outputs and their related outcomes: whereas the SABER framework primarily focuses on how school feeding and nutrition-sensitive interventions affect schoolchildren’s health, thus enabling better education results, this conceptual framework both recognises these outcomes while also recognising that sustainable design and implementation, and institutional arrangements for school feeding are essential to the realisation of sustainable development, in line with the SDGs, Agenda 2063 and CESA 16-25. The proposed conceptual framework has been adapted in line with the results of the desk and field research conducted for this study and to address the study’s objectives, and is presented below in *Figure 3*.

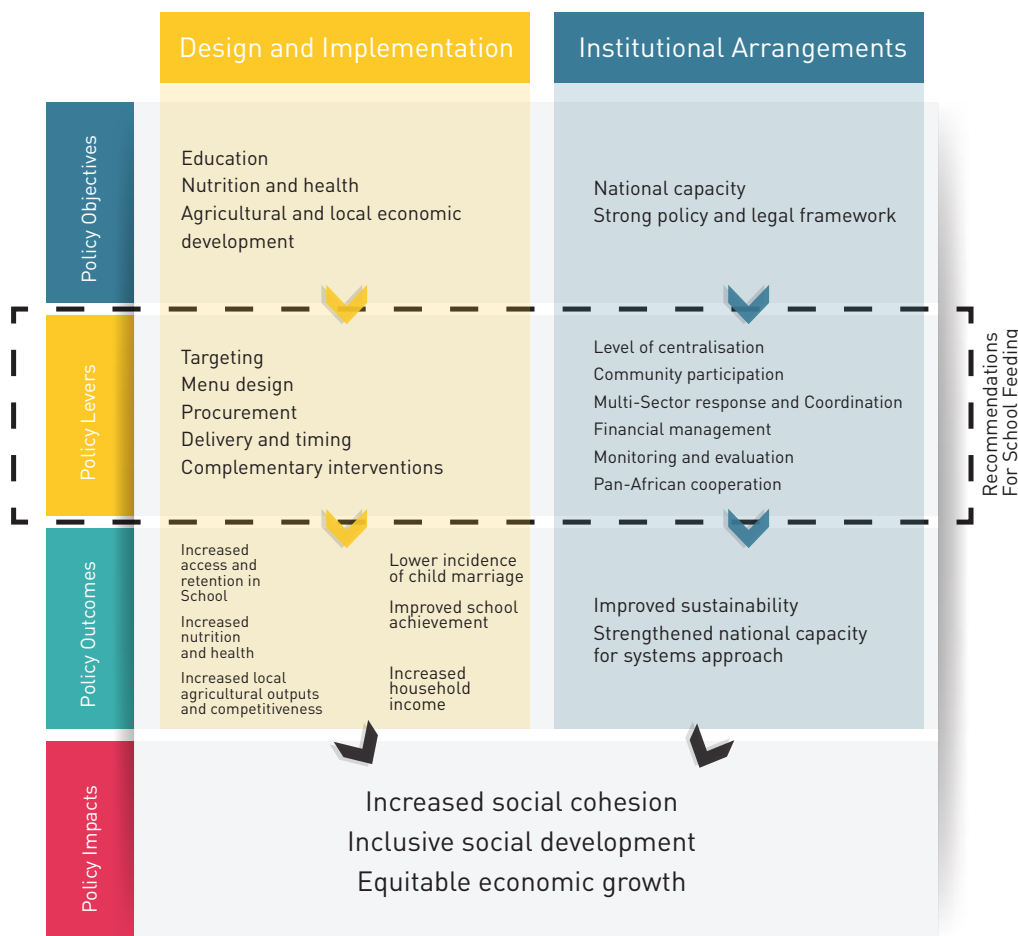


Figure 3. Conceptual framework for sustainable school feeding

The figure itself is divided into four rows, defined as follows:

- Policy objectives, which stand for thematic areas which school feeding programmes are designed to address. The policy objectives listed in the conceptual framework are education and learning, nutrition and health and agricultural and local economic development, which correspond to the sectors discussed in Chapter 1; and national capacity and strong policy and legal frameworks, which refer to how well-designed, multi-sectoral interventions can build national and institutional capacity levels to design, implement and manage such interventions.
- Policy levers, which refer to the mechanisms and/or strategies through which policy objectives can be achieved. The levers in the left-hand column match school feeding programme design features presented in Chapter 1, while the levers in the right-hand column signify strategies that policymakers can use to ensure optimal implementation of integrated school feeding programmes.
- Policy outcomes, which refer to more short-term effects from school feeding programmes and cross-sectoral development programmes. In the right-hand column, the highlighted policy outcomes reflect reported outcomes and linkages between those outcomes from school feeding programmes, as discussed in Chapter 1. In the left-hand column, the policy outcomes suggest the results of well-executed development programmes and the connection between high-performing programmes and improved sustainability and national capacity.
- Policy impacts, which characterise the longer-term impacts of school feeding programmes embedded into cross-sectoral development programmes that continuously produce positive outcomes, both in terms of human capital development and national capacity levels.

The four above rows are divided into two columns, design and implementation and institutional arrangements, to make a distinction between the design and implementation elements of the school feeding programme itself, presented in the left-hand column; and the higher level considerations for running sustainable school feeding programmes that work within and across local, national and international levels, presented in the right-hand column.

While reading the conceptual framework, it is important to make a few observations. First, there is no explicit mention of HGSF in the framework figure. This omission is not intended to devalue the importance of HGSF programmes in contributing to national development goals, but is rather intended to make the conceptual framework more wide-ranging, as not all school feeding programmes necessarily have an HGSF component, nor is having an HGSF programme necessary to realising sustainable, cross-sectoral programmes that operate from a systems approach. Second, the conceptual framework differentiates between outcomes and impacts in the following way: impacts, as a research term, are more subjective and are widely conceptualised as the longer-term effects, either primary or secondary, of measurable, short-term outcomes. This differentiation can be illustrated by a school feeding example: the *outcome* of increased levels of girls' enrolment and gender parity can influence future *impacts* of higher levels of gender equality and empowerment. Moreover, the inclusion of both outcomes and impacts ties back to the aforementioned discussion on returns from school feeding programmes, in which these returns have relevance for current and future generations. Finally, the left-hand column of policy objectives, policy levers and policy outcomes correspond to topics discussed in Chapter 1 vis-à-vis the predominant sectors, design and implementation features, and sectoral outcomes associated with school feeding programmes; whereas the policy objectives, policy levers and policy outcomes in the right-hand column will be more directly addressed in Chapter 3 (recommendations chapter).

The below sections define in more detail the policy objectives, policy levers, policy outcomes and policy impacts. Throughout these sections, real-life examples collected from in-country missions show how AU member states across the continent are innovatively combining selected components from the conceptual framework in their school feeding programmes, as a means of underscoring the various possibilities available to policymakers in designing sustainable school feeding programmes from a systems approach.

1.1. Policy objectives

As mentioned above, the study's conceptual framework identifies a set of policy objectives to which school feeding programmes can respond and around which school feeding programmes can be designed. The three policy objectives – education and learning, health and nutrition, agricultural and local economic development – in the design and implementation column are identified as the sectors on which school feeding programmes have been shown to produce effects and have been identified given each sector's importance in contributing to national development objectives. The policy objectives in the institutional arrangements column, national capacity and strong policy and legal frameworks, represent more overarching objectives in the institutionalisation of school feeding programmes within African countries. That is to say, the goal of transitioning to sustainable, nationally owned and sustainable school feeding programmes is linked to the national capacity to create and lead school feeding programmes, and to establish robust frameworks to protect and guide school feeding programmes. There is also a relationship between the policy objectives of education and learning, health and nutrition and agricultural and local economic development and national capacity, as achievements within these three objectives help to develop overall national capacities through the development of human capital, while also developing political support for policy and legal frameworks. In this sense, the highlighted objectives should be seen as a portfolio of interlinking concepts, in line with a systems approach of thinking, with returns on one contributing to returns on another.

1.2. Policy levers

The second row from the top, policy levers, identifies measures and mechanisms, herein called levers, for designing and implementing school feeding programmes, and in setting up institutional arrangements for embedding school feeding programmes within a systems approach to development. Accordingly, derived from the international evidence on school feeding programmes presented in Chapter 1, these innovative policy levers form a base for the further advancement of good practices and standards for school feeding programmes. Hereupon, Chapter 3 will use the policy levers to structure and categorise recommendations, thereby positioning the policy levers as tools for policymakers for furthering their sustainable development efforts. The aim is that policymakers are able to use context-specific combinations of the identified policy levers in responding to desired policy objectives and optimising policy outcomes. What is more, the policy levers in the study's proposed conceptual framework reach beyond comparable components of pre-existing conceptual frameworks, such as SABER⁷⁵, thus underscoring the study's innovative positioning of school feeding within a systems approach to cross-sectoral development.

⁷⁵ The SABER framework does not contain policy levers that refer to targeting, menu design, procurement, delivery and timing, community participation and pan-African cooperation, in comparison to the conceptual framework proposed by this study.

The policy levers in the design and implementation column refer to the variety of design and implementation options – targeting, menu design, procurement, delivery modality and timing, and complementary interventions – available to policymakers in crafting school feeding programmes. These options are not exhaustive and were chosen as a portrayal of some of the major design and implementation considerations for school feeding programmes identified in Chapter 1. Additionally, the policy levers in the design and implementation column can encompass a range of possibilities: for example, the policy lever of procurement includes various options for how and from where school feeding programmes procure commodities, such as to what extent commodities are procured from abroad vs. domestically and to what extent local production capacities are developed, i.e. HGSE, to supply school feeding commodities.

In the institutional arrangements column, the policy levers presented therein are examples of the institutional arrangements that policymakers have in how to shape approaches to multi-sectoral development interventions that include school feeding. The usage of the term ‘institutional arrangements’ refers to the policies, systems and processes used to plan, manage and coordinate⁷⁶ a programme, and include the existence of legal and/or policy frameworks that govern programme processes. Again, as with the policy levers in the design and implementation column, the policy levers in the institutional arrangements column are not meant as a finite list of approaches for how to institutionalise cross-sectoral interventions, but were selected to reflect some major themes around which programme structures are organised.

To better explain what the policy levers comprise, some brief parameters are offered below:

- Level of centralisation: whether programmes structures are more centralised, meaning that decision-making and operations primarily lie at central levels; or more decentralised, meaning that day-to-day decision-making and operations are effectuated primarily at regional or local levels.
- Community participation: the extent to which communities are formally involved in the implementation, monitoring and other support activities.
- Multi-sector response and coordination: the involvement of MDAs, technical partners and other stakeholders in the coordination, design, implementation, monitoring and/or other support activities, both on the demand- and supply-sides.
- Financial management: the process by which programmes are financed, funds are allocated and budgets are managed.
- Monitoring and evaluation: how programme outcomes and developments are tracked, measured and reported on against established programme objectives or other areas of interest, and how they feedback to programme design and implementation.
- Pan-African cooperation: outreach to regional and/or other African partners to support programmes.

⁷⁶ (United Nations Economic and Social Council, 2014)

Box 12. School feeding innovations: Niger

In Niger, a coalition of international and national actors called the 3N Initiative coordinates development efforts in strategically identified convergence areas in order to maximise results and outcomes in targeted regions. Within these areas, school feeding is implemented as part of a package of interventions, that include a **procurement** strategy, wherein school feeding is supplied in part by local producers, with agricultural extension services for these producers; **complementary interventions**, which include an education assistance programme that targets high-performing students from income-constrained families; and the installation of a communal grain mill, among other interventions. Through combining projects aimed at improving education, agricultural, gender and local development outcomes, international and national partners are able to make the most of limited financial resources through **multi-sectoral response and coordination** of their efforts. This innovative and comprehensive approach to partner coordination has been augmented by additional consultations at the national level, led by the WFP Centre of Excellence and including stakeholders from the Nigerien government and NGOs.

Just as policymakers can combine different policy levers identified in the conceptual framework in the design and implementation of school feeding programmes, it is up to policymakers to find optimal combinations and arrangements of the policy levers in the institutional arrangements column. For example, the adjustment of programme budgets or funds allocation (financial management) can be informed through M&E, such as through undertaking cost-effectiveness evaluations or gauging different programme components' progress against indicators. Furthermore, policy levers in the institutional arrangements column influence how policy levers in the design and implementation column are structured. For example, the procedure of commodities for school meals depends on policy levers such as the level of centralisation, if purchasing is effectuated more at the national level or devolved to district or school levels; multi-sector response and coordination and community involvement, in terms of if other ministries, agencies and/or communities are involved in supporting the supply of commodities; and pan-African cooperation, if procurement capitalises on trade and technical cooperation within Regional Economic Communities (RECs)⁷⁷ in the AU in order to take advantage of comparative production advantages and areas of technical expertise. Although there are two levels of consideration that go into constructing school feeding programmes – one at the level of the school feeding programme itself and one at the national level of cross-sectoral programmes – there are still interactions between both levels that have repercussions for the school feeding programme and beyond.

The policy levers in the institutional arrangements column also refer to how to increase the sustainability of school feeding programmes, vis-a-vis aligning school feeding programmes with priorities across sectors (e.g. multi-sector response and coordination), recording school feeding's outcomes across sectors and any gaps in implementation (e.g. M&E), ensuring stable funding levels for school feeding programmes (e.g. financial management) and contributing to community ownership and local capacity development (e.g. community participation). This means that policymakers revisit policy levers and adjust associated actions in response to changing needs, contexts and opportunities. The policy lever of M&E, for instance, illustrates how this is relevant to school feeding. Many school feeding programmes already carry out regular M&E in line with established indicators and objectives, but a systems approach to M&E also involves refashioning indicators, objectives and programme guidelines in response to changing contexts, integrating reporting across

⁷⁷ The AU officially recognises six RECs: the Arab Maghreb Union (UMA), Common Market for Eastern and Southern Africa (COMESA), Community of Sahel-Saharan States (CEN-SAD), East African Community (EAC), Economic Community of Central African States (ECCAS), Economic Community of West African States (ECOWAS), Intergovernmental Authority on Development (IGAD) and the Southern African Development Community (SADC)

sectors to fully reflect school feeding outcomes and analysing M&E reports over time to identify changes to beneficiary populations. Likewise, the policy lever of multi-sectoral response and coordination goes beyond the participation of various MDAs and partners in expanding coverage for the demand-side of development programmes to involving them in supply-side responses: for example, ensuring appropriate education supply-side responses from the education sector to mitigate any stress to infrastructural resources due to increases in school enrolment resultant from expanded school feeding coverage.

Box 13. School feeding innovations: Rwanda

In 2013, high-level consultations on the transition to a nationally owned school feeding programme in Rwanda, comprised of representatives from the WFP Centre of Excellence, the Rwandan and Brazilian governments, and other stakeholders, took place. As part of these consultations, the importance of HGSF to the future of school feeding in Rwanda, as well as how school feeding can contribute to national development, was highlighted. Subsequently, and as part of the efforts to find sustainable models for school feeding in Rwanda, a new, five-year HGSF programme in Rwanda approaches school feeding using an evidence-based approach by comparing **education and learning** and **health and nutrition** outcomes from two school meal models. Comprehensive **M&E**, composed of baseline, midline and endline surveys and regular reports, collect data across a range of indicators, data that will then be used to inform policymakers' future decisions on school feeding menu design and **delivery modality and timing**. Moreover, strengthening local capacities to supply school meals is part of the strong **community participation** involved in the HGSF programme, particularly in terms of empowering communities to gradually takeover supplying meals in full. This approach demonstrates the important role of M&E in both collecting data on outcomes and informing national strategies and school feeding design.

In addition, just as national policymakers need to find their own unique combinations of policy levers for school feeding programmes, the policy lever of pan-African cooperation is included to underline the opportunity for AU member states to support each other, either through trade or technical support, in the expansion of school feeding across the continent. Closer pan-African cooperation can also mean that African countries define how specific policy levers relate to the African context. For example, the policy lever of community participation is already widely featured throughout African school feeding programmes, and research and field visits reveal some shared features between what forms community participation takes in AU member states. In many cases, community participation relies on voluntary contributions from community members, either through monetary contributions, the donation of fresh food or cooking fuel, the preparation of school meals, participation on school management committees and/or the management of food stocks; community participation is often seen as a key to school feeding programme sustainability. The high levels of community participation already present on the African continent not only show that it is an important policy lever – hence its inclusion in the conceptual framework – but suggest that there are opportunities available for different AU member states to share their experiences and learn from other countries' experiences in optimising community participation.

There are a multitude of ways in which policymakers can combine the policy levers under both design and implementation and institutional arrangements columns, and policymakers should endeavour to use different combinations thereof to best address national and local contexts, achieve policy objectives and contribute to positive policy outcomes.

1.3. Policy outcomes

The policy outcomes row highlights some of the results that effectively executed school feeding programmes can produce, at the individual, school and national levels. Policy outcomes in the design and implementation column represent different sectoral returns associated with school feeding programmes, as presented in Chapter 1, and occur more at the individual, household or school levels. The selection of and associations between policy outcomes are by no means exhaustive or hierarchical, and are rather intended to represent some of the most common outcomes associated with school feeding programmes. As also presented in Chapter 1, the achievement of these and other policy outcomes depends on the combination of policy levers chosen. The arrows and lines between the design and implementation policy outcomes denote the interconnectedness of the outcomes, and how there are multiple pathways to the same outcome: for example, how increased school attendance, enrolment and completion rates and improved cognition and learning results are both connected to improved school achievement; and how improved school achievement rates have been proven to affect earnings potential. Moreover, as explained in the earlier discussion on what a systems approach to school feeding means, the interconnectedness of school feeding outcomes, or returns, further expands the selection of pathways to achieving certain desired impacts.

The two policy outcomes under the institutional arrangements column, improved sustainability of school feeding and strengthened national capacity for systems approach, reference outcomes that occur more at the national level. While not as easily measurable as the policy outcomes in the design and implementation column, especially given the paucity of international evaluations or established metrics for these outcomes, some indicators per outcome could include:

- Improved sustainability of school feeding: Positive sectoral outcomes observed over time vis-a-vis school feeding beneficiary populations, an enabling environment at national level for continued multi-sectoral engagement in development programmes.
- Strengthened national capacity for systems approach: cross-sectoral commitment to supporting development programmes, which include school feeding; willingness to continuously evaluate and adapt development programmes to changing needs and contexts and in line with the needs of beneficiary populations; eventual national ownership of school feeding programme.

Moreover, attaining strong outcomes at the individual, household or school levels make essential contributions to the progressive realisation of improved sustainability of school feeding and strengthened national capacity for a systems approach and national ownership. Or, returning to this chapter's prior discussion on the importance of demonstrating cross-sectoral returns from interventions, if school feeding programmes are consistently producing positive outcomes across education and learning, nutrition and health and agricultural and local development sectors, these can all increase cross-sectoral support for financing, expanding and supporting school feeding as part of multi-sectoral interventions, thus demonstrating the overall sustainability for such interventions.

The two policy outcomes under institutional arrangements require strong national capacity and a strategic combination of policy levers in order to be reached, though these policy outcomes also reinforce their corresponding policy objective and policy levers. For example, better national capacity for a systems approach (policy outcome) contributes to multi-sector response and coordination (policy lever) – as capacity for a systems approach implies the participation of a range of cross-sectoral actors – which ultimately contributes to overall national capacity (policy objective) to create and oversee cross-sectoral development programmes. This line of

thinking can also work in the reverse, as the policy objective of improving national capacity can be addressed through the policy lever of multi-sector response and coordination, thus leading to the policy outcome of better national capacity for a systems approach. Underscoring the mutually reinforcing aspects of policy objectives, policy levers and policy outcomes is not meant to show set pathways *per se* for moving between policy objectives, policy levers and policy outcomes, and *vice versa*; but rather to underscore the interconnectedness between the components of the conceptual framework. The achievement of policy outcomes under both rows requires policymakers to consider their policy objectives and available policy levers, as well as longer-term policy impacts that they wish to achieve through policy outcomes.

1.4. Policy impacts

The bottom row, policy impacts, contains three concepts that represent some of the ultimate effects of when high-performing school feeding programmes are integrated into multi-sectoral development plans that operate from a systems approach: increased social cohesion, inclusive social development and equitable economic growth. These three concepts are quite substantial and can entail varying meanings, but are broadly defined below for the purposes of the conceptual framework:

- Increased social cohesion, or the increased willingness of members of society to cooperate in the pursuit of development goals.
- Inclusive social development, or the recognition that development processes need to include, empower and benefit all members of society, particularly those within marginalised social and/or economic groups.
- Equitable economic growth, or sustained increases in a nation's economic outputs that are shared fairly and impartially amongst all members of society as part of national development and individual empowerment efforts.

While there are certainly other impacts that can arise over time from comprehensive and integrated development programmes, the above three policy impacts are highlighted in particular as they capture long-term impacts of the progressive advancement of and investment in human capital development. Each policy impact also encompasses other outcomes in education, learning health, nutrition, agricultural and economic development, food security and other areas, with advances in those areas culminating in these more vast policy impacts. For example, initiatives that address food security for vulnerable households have been observed to contribute to overall social development⁷⁸. Moreover, there is an aspect of complementarity between the three policy impacts: better social cohesion can contribute to more economic prosperity⁷⁹, which can spur more economic growth, an equitable distribution of which helps to support social development initiatives. The three policy impacts are neither connected to the design and implementation nor to the institutional arrangements column in the conceptual framework, as they are meant to represent the convergence of the policy objectives, policy levers and policy outcomes across both. Or, to put this idea in more practical terms: the embedding of national school feeding programmes into a systems approach to development that consistently achieves positive returns related to human capital (i.e. better education, learning, health, nutrition and local economic development) influences the realisation of larger impacts on overall economic development, social equity and resilience.

78, (United Nations, 1995)

79, (Stanley, 2003)

Furthermore, the policy impacts exemplify development goals around which multi-sectoral, integrated development plans can be crafted, as well as exemplify impacts that positively contribute to sustainable transitions to national ownership of school feeding programmes. The achievement of more social cohesion, inclusive social development and equitable economic growth, both at national and pan-African levels, are important steps towards sustainable development and correspond to international targets set out in documents like CESA 16-25, the SDGs and Agenda 2063. There are various possibilities for school feeding, as part of a systems approach to development, to contribute to such targets and others that align with CESA 16-25, the SDGs and Agenda 2063, and Table 10⁸⁰, contained at this chapter's close, further elaborates on how the goals, aspirations and strategic objectives found in these documents align with each other, and how school feeding outcomes and impacts align with these documents; Table 11 only lists goals, aspirations and strategic objectives for which linkages, either direct or indirect, with school feeding outcomes and impacts are discernible.

Through displaying how school feeding fits into international development goals and objectives, this can help policymakers reflect on how to strategically position school feeding programmes into their own development priorities and on how to ensure the sustainability of school feeding programmes. The conceptual framework's policy objectives, policy levers, policy outcomes and policy impacts represent some of the considerations in doing so, though policymakers should be open to using different combinations of such considerations as needs and contexts evolve. The ability to adapt programmes is an essential component of a systems approach to school feeding, as discussed earlier in this chapter, and while studying other school feeding programmes has merit, each country must find its unique path to nationally owned and sustainable programmes.

2. Concluding thoughts

Currently, African countries are recognising more and more that a key to the sustainability of school feeding programmes is their integration into an array of multi-sectoral interventions. This recognition is evidenced through in-country interviews with African policymakers as well as the survey results, a number of which highlighted future plans to include school feeding into multi-sectoral, national development plans and/or social protection policies. Moreover, the proliferation of complementary interventions and emergence of HGSF programmes across Africa in recent years speak to this recognition, and as such, this study's conceptual framework speaks to how to formulate multi-faceted, flexible school feeding programmes, both from the design and implementation and the institutional arrangements sides, rooted in a systems approach to development. As a way of summarising the main points and concepts addressed in the conceptual framework, Table 10 is offered below:

80, Table 11 is partially based on the documents "Agenda 2063 linkages with the Sustainable Development Goals," accessed at <http://agenda2063.au.int/en/documents/agenda-2063-linkages-sustainable-development-goals-sdgs>, and *How School Meals Contribute to the Sustainable Development Goals: A Collection of Evidence* (World Food Programme, 2017).

Table 10. Summary of main concepts presented in the conceptual framework

Concept	Main points
Systems approach	<ul style="list-style-type: none"> • A range of actors from a variety of sectors coordinate technical and financial resources in the pursuit of development goals. • There is no constant state of development, as development is viewed as a process that is adjusted in line with evolving contexts, needs and opportunities. • Cross-sectoral returns from interventions, and finding means of measuring these, are crucial to establishing co-financing commitments from various actors and technical partners.
Sustainability	<ul style="list-style-type: none"> • The ability of an intervention to produce returns for both current and future generations.
Policy objectives	<ul style="list-style-type: none"> • The thematic areas that development interventions can be designed to address, and around which desired outcomes are based. • For school feeding programmes, policy objectives can be sectorally focused; while, in addition, at a national level, the policy objective may be on the building of national capacity to design, implement and manage multi-sectoral development interventions, amongst which school feeding. • Returns on sectoral policy objectives are important to attaining returns to national capacity objectives.
Policy levers	<ul style="list-style-type: none"> • The mechanisms or tools through which policymakers can achieve policy objectives; depending on the objectives, various combinations of policy levers can be employed. • The policy levers used for the institutional arrangements of multi-sectoral programmes affect how policy levers function within the design and implementation of school feeding programmes • The mechanisms or tools through which this study will develop a set of recommendations to enable policymakers to better achieve policy objectives; depending on the objectives, various combinations of policy levers can be employed and taken into consideration.
Policy outcomes	<ul style="list-style-type: none"> • The short-term, more measurable outcomes from well-executed, effective school programmes and multi-sectoral development interventions. • The realisation of strong policy outcomes strengthens policy objectives, both at sectoral and national levels, and strengthens the future achievement of desired policy impacts.
Policy impacts	<ul style="list-style-type: none"> • The longer-term, broader effects of policy outcomes; policy impacts are not easily measured and are the convergence between school feeding- and national capacity-specific outcomes. • Speak more to impacts from progressive human capital development, and comprise sectoral impacts. • Aligned with more high-level goals and targets set out in international documents, like CESA 16-25, the SDGs and Agenda 2063.

Having a clear understanding of the concepts presented in the conceptual framework is essential to their practical application and execution, and this chapter offers some real-life examples from Niger and Rwanda as a demonstration of how school feeding programmes in Africa are putting into action parts of the conceptual framework. Going forward, Chapter 3 offers recommendations and more examples, drawn from AU member states, on how to connect the theory of the conceptual framework to grounded actions and strategies for African school feeding programmes. These recommendations are presented through seven core recommendations, which capture the policy levers, both under the design and implementation and institutional arrangements columns, to more directly link theory presented in Chapter 2 to concrete actions proposed in Chapter 3. However, this study recognises that not all school feeding programmes are the same, in terms of their scope, scale and degree of national ownership, and as such has set up the core seven recommendations to be accessible and applicable to all AU member states. However, to make the recommendations more concrete and actionable, indicators and outputs are tied to each one, thereby offering further guidance to AU member on how to optimise and strengthen outcomes and impacts from school feeding programmes.

Table 11. Linkages between CESA 16-25, Sustainable Development Goals, Agenda 2063 and school feeding programmes

CESA 16-25 Strategic Objectives	Sustainable Development Goals and Targets	Agenda 2063 Aspirations and Goals	Associated School Feeding Outcomes and Impacts
<p>4. Ensure acquisition of requisite knowledge and skills, as well as improved completion rates at all levels and groups through harmonization processes across all levels for national and regional integration</p>	<p>Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</p> <p>Target 4.1. Ensure that all girls and boys complete free, equitable and quality primary and secondary education</p> <p>Target 4.2. Ensure that all girls and boys have access to quality early childhood development care and pre-primary education</p> <p>Target 4.5 Eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations</p>	<p>Aspiration 1. A prosperous Africa, based on inclusive growth and sustainable development</p> <p>Goal 2. Well educated citizens and skills revolution underpinned by science, technology and innovation</p> <p>Aspiration 6. An Africa whose development is people driven, relying on the potential offered by African people, especially its women and youth, and caring for children</p>	<p>-Outcomes: Increased enrolment, attendance and completion rates; improved overall school achievement; decreased absenteeism and repetition rates</p> <p>-Impacts: More educated societies with higher levels of skill and human capital, greater feelings of social equity and inclusion through higher levels of education and increased access to education</p>
<p>5. Accelerate processes leading to gender parity and equity</p>	<p>5. Achieve gender equality and empower all women and girls</p> <p>5.1. End all forms of discrimination against all women and girls everywhere</p> <p>5.5. Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life</p>	<p>Aspiration 6. An Africa whose development is people driven, relying on the potential offered by African people, especially its women and youth, and caring for children</p> <p>Goal 17. Full gender equality in all spheres of life</p> <p>Goal 18. Engaged and empowered youth and children</p>	<p>-Outcomes: Increased enrolment of girls, improved gender parity, lower incidence of child marriage, reduction in number of school age children who are not in school, greater inclusion of women, higher participation of women in local economies through school feeding programmes</p> <p>-Impacts: Greater feelings of empowerment and social equality for women and girls, more educated and skilled youth, women are more economically empowered and are engaged in decision-making</p>

	<p>1. End poverty in all its forms everywhere in the world</p> <p>1.2. Reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions</p> <p>1.3. Implement nationally appropriate social protection systems and measures for all, including floors, and ... achieve substantial coverage of the poor and the vulnerable</p> <p>1.4. Ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance</p> <p>1.7. Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions</p>	<p>Aspiration 1. A prosperous Africa, based on inclusive growth and sustainable development</p> <p>Goal 1. A high standard of living, quality of life and well-being for all citizens</p>	<p>-Outcomes: Increased participation in local economies and more economic opportunities available (HGSF), increased household income levels as a result of more economic opportunities, passage of policies and/or legal frameworks that protect social protection programming</p> <p>-Impacts: Higher levels of equality and social mobility due to more equitable economic empowerment and distribution of resources, lower national and international poverty levels,</p>
<p>3. Ensure healthy lives and promote well-being for all at all ages</p>		<p>Aspiration 1. A prosperous Africa, based on inclusive growth and sustainable development</p> <p>Goal 3. Healthy and well-nourished citizens</p>	<p>-Outcomes: Improved anthropometric measurements in students, lower incidence of illnesses, access to health and education training</p> <p>-Impacts: Healthier future generations, improved health and nutrition behaviours</p>

<p>2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture</p> <p>2.1. End hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round</p> <p>2.2. End all forms of malnutrition</p> <p>2.3. Double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment</p> <p>2.4. Ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality</p> <p>2.6. Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries</p> <p>8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p> <p>8.3. Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services</p> <p>8.5. Achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value</p> <p>8.6. Substantially reduce the proportion of youth not in employment, education or training</p> <p>9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</p> <p>9.3. Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets</p> <p>12. Ensure sustainable consumption and production patterns</p>	<p>Aspiration 1. A prosperous Africa, based on inclusive growth and sustainable development</p> <p>-Outcomes: Improved micronutrient and health status, improved access to nutritious foods, development of agriculture sector and increase in agricultural outputs, involvement of more actors in local supply chains, increased individual incomes, closer linkages between local producers and schools (i.e. institutional markets), increase in agricultural extension services (e.g. trainings, formation of cooperatives, distribution of improved inputs and seeds), increased access to financial support/credit/capital for domestic enterprises</p> <p>-Impacts: Improved food security and access, more self-reliant and self-sustaining economies, expanded domestic markets, higher levels of national economic development and employment, higher levels of industrialisation to meet school feeding needs, adoption of modernised agricultural techniques, lower national incidence of malnutrition</p>	<p>Goal 4. Transformed economies</p> <p>Goal 5. Modern agriculture for increased productivity and production</p>
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<p>2. Build, rehabilitate, preserve education infrastructure and develop policies that ensure a permanent, healthy and conducive learning environment in all sub-sectors and for all, so as to expand access to quality education</p>	<p>16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</p>	<p>Aspiration 3. An Africa of good governance, democracy, respect for human rights, justice and the rule of law</p>	<p>-Outcomes: Adoption of policies/laws that protect school feeding and other social protection programmes, elaboration of strategic plans, establishment of inter-sectoral committees on school feeding, increased trade within RECs for procurement for school meals, inclusion of school feeding into national strategic plans, adoption of sustainable financing strategies (e.g. co-financing strategies)</p>
<p>12. Set up a coalition of stakeholders to facilitate and support activities resulting from the implementation of CESA 16-25</p>	<p>17. Strengthen the means of implementation and revitalise the global partnership for sustainable development 17.14. Enhance policy coherence for sustainable development 17.16. Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilise and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries</p>	<p>Aspiration 7. An Africa as a strong, united and influential global player and partner</p>	<p>-Impacts: Progressive transition to nationally-owned school feeding programmes, greater integration of school feeding programmes across sectors based on systems approach for implementation, development of national/regional/local capacities and institutions, heightened regional and inter-African cooperation and development</p>
		<p>Goal 20. Africa takes full responsibility for financing her development goals</p>	



Chapter

3

Recommendations for School
Feeding in the African Union

Chapter

3

Recommendations for School Feeding in the African Union

Throughout the first two chapters of the study, school feeding's actual and potential contributions to cross-sectoral outcomes and national development goals have been discussed, through a combination of evidence gathered from existing school feeding programmes in AU member states and theory on a systems approach to development. In Chapter 1, an overview of the state of school feeding in Africa was presented, both in terms of prevailing national programme designs, implementation and institutional characteristics, and measured outcomes and impacts across the education and learning, nutrition and health, and agricultural and local development sectors. This high-level landscaping of the state of school feeding in AU member states formed the basis for concluding observations on predominant trends and themes, and general gaps and shortcomings in school feeding programmes. In Chapter 2, the focus lay on constructing a conceptual framework for sustainable, nationally owned school feeding programmes in AU member states, designed not only to positively impact sectoral outcomes, but also to achieve overarching, sustainable development through a set of guiding policy objectives, levers, outcomes and impacts.

As the final part of this study, Chapter 3 envisions to address the findings of Chapter 1 through the components of the conceptual framework presented in Chapter 2 by developing a clear set of recommendations on how countries can build national, sustainable school feeding programmes, operating within a systems approach to development. As such, the foundation for the recommendations has two dimensions. First are the concluding observations from Chapter 1, which speak to outstanding gaps or shortcomings in school feeding programmes in AU member states that policymakers need to confront should they wish to position school feeding as an enabler of returns. To recapitulate, these observations are:

- Education-based objectives and indicators remain the most common means for measuring outcomes from school feeding programmes in AU member states, with little integration of cross-sectoral indicators.
- A single line ministry, primarily the Ministry of Education, and/or WFP are the sole financing and implementation agencies for school feeding programmes.
- Low application of M&E for school feeding programmes on a national scale, with limited usage of automated feedback systems to contribute to policymaking.
- Lack of large-scale structured demand programmes and supply-side responses to support the expansion of HGSF and local production capacities.
- Cross-sectoral coordination and integration of school feeding into national development plans and agendas are still at nascent levels of uptake.

Achievement of complete national ownership of school feeding programmes is a persistent challenge.

Second, the conceptual framework in Chapter 2 aims to address these aforementioned observations and gaps while simultaneously providing policymakers with an outline for realising school feeding’s full utility as an enabler for sustainable development given its promise for cross-sectoral outcomes on the education and learning, nutrition and health, agriculture and local economic development sectors, as well as on national capacity development. To this end, the conceptual framework elaborates a set of tools, or policy levers, with which to assess and enhance the sustainability of current school feeding programmes through a systems approach to development.

These two sides present an issue faced by school feeding policymakers, i.e. how can school feeding contribute to national and African development?; and then set up the means through which policymakers can deal with the issue, i.e. the policy levers in the conceptual framework. With these two sides in mind, Chapter 3 responds to the issue at hand by operationalising the conceptual framework into a series of entry point recommendations for AU guidance for member states. However, in order for the recommendations to remain pertinent to and practical for all AU member states, the study establishes a core set of recommendations that serve as overarching principles for bolstering school feeding’s role as an enabler of returns and as a viable partner in a systems approach to development. The recommendations put forth by this study are formulated to direct how to strengthen school feeding programmes, from the perspective of enhancing school feeding programmes’ sustainability through improving their performance and impacts and through enhancing their contributions to an integrated, systems approach to development.

The core set of recommendations (hereafter referred to as the “core 7”) follows as such:

The core 7 are further grounded and concretised by corresponding indicators and outputs tied to each one, which set benchmarks through which policymakers can gauge progress against a recommendation. The decision to set indicators and outputs for each recommendation is to support the future creation of an **AU School Feeding Cluster**, envisioned as a major output from this study, that will be tasked with evaluating national school feeding programmes’ performance against the core 7 and their indicators and outputs. This



Figure 4. “Core 7” recommendations

study does not establish quantifiable targets for the indicators in recognition of the diversity of design and implementation features, institutional arrangements, financing levels and programme objectives found in African school feeding programmes. With this diversity as a backdrop, establishing uniform targets is deemed neither appropriate nor feasible for school feeding programmes in AU member states. For example, some AU member states maintain policies or laws that stipulate that a certain percentage of school feeding commodities must be procured domestically. While the general idea of specifying a certain level of domestic procurement may be useful in strengthening HGSF programmes, defining a blanket percentage to be adopted across all AU member states does not necessarily help in this regard. Moreover, the stage of development for local production systems varies widely across the continent, so an AU member state-wide percentage for domestic procurement may prove too low for countries with more advanced HGSF programmes or too high for countries whose HGSF programmes are just coming to fruition.

Additionally, the focus of the core 7 is not on how countries can improve specific, individual components of their school feeding programmes in isolation from other components, but on how countries can increase sustainability of and cross-sectoral returns from school feeding programmes. And correspondent to the tone of Chapter 2 and the concluding thoughts it presents, Chapter 3 continues to assess school feeding programmes from a systems perspective, asserting that a country's policy landscape and development programmes function most successfully if policies and programmes are constantly influencing each other and evolving together; wherein change in one sector will affect other sectors, albeit directly or indirectly. This implies that all development targets are interrelated, in that movement against one target affects the achievement of others, and as such the core 7 must be considered holistically and relationally.

Hence, the core 7, indicators and outputs assert that increasing integration of school feeding programmes with other sectoral policies and programmes enhances programmes' sustainability in the long-term. Taken together, the core 7 are designed to guide AU member states in the building and strengthening of national capacity to adopt a systems approach to school feeding, resulting in heightened sustainability of school feeding programmes, as well as longer-term policy impacts of increased social cohesion, inclusive social development and equitable economic growth, as outlined in Chapter 2. Structured in a context-specific manner, the forthcoming recommendations are not an attempt to impose a solution-driven resource framework on national school feeding programmes, but rather to foment a problem-driven discussion on the current state of school feeding in AU member states and provide potential ways forward in light of concrete agendas across the continent. It is thus the prerogative of member states to define targets for the core 7 and related indicators and outputs in line with national policies, priorities and capacities.

Prior to delving into the core 7, this study sets some parameters. First, this chapter assumes that each country's ability to achieve a sustainable, systems-led national school feeding programme, suiting the national context, is influenced by a multitude of forces, including political willingness to reform, financial capabilities, and geographic and social contexts, among others. This assumption is consonant with the AU's and the WFP Centre of Excellence's belief that African countries can learn from each other's experiences, whilst inspiring and pushing countries to lead and improve programmes at their own pace and according to their own necessities.⁸¹ Second, the process of building sustainable school feeding programmes is not explicitly time-bound nor does it pursue a universally defined end goal, but is more based on a programme progressively taking on certain characteristics supporting a systems approach to school feeding to the extent feasible and possible. As such, this study does not put forth a so-called 'ideal' model for school feeding in AU member states, consistent with the study's assertion that there is no one-size-fits-all design for school feeding. Furthermore, the recommendations

81, (ASUL, 2017)

do not construct a hierarchical ranking of school feeding programme, based on the attainment of certain features. Categorising school feeding programmes may create a normative framework, in which one model is promoted as a standard for national school feeding programmes, thereby pushing countries to adopt features that may not be appropriate for their own contexts or needs.

That being said, though, the study's and Chapter 3's recommendations do promote the realisation of nationally owned school feeding programmes that operate within a systems approach and that work together with other programmes to support national and African development. Consequently, and following sections for each of the core 7, Chapter 3 offers some closing deliberations on how to support the building of national school feeding programmes as part of a systems approach to development.

1. A Core Set of Recommendations for School Feeding Programmes

1.1. Link school feeding programmes to international, continental and national development agendas

As Chapter 2 demonstrated, many sectoral and policy outcomes associated with school feeding programmes align with a variety of objectives and goals enshrined in international development documents, such as CESA 16-25, the SDGs and Agenda 2063. And as observed through in-country missions, results from the continental survey and interviews with AU member states, a number of countries have already taken note of school feeding's relevance to national development; some of these countries, such as Egypt, Ghana and Nigeria, have already incorporated school feeding into national policies on development and/or social protection. However, when advocating for school feeding's inclusion into national, continental and/or international development agendas, the emphasis should fall not on school feeding's theoretical alignments with development objectives, but on demonstrating school feeding's real contributions to established objectives, indicators and targets. In Senegal, for instance, school feeding policymakers, through outreach efforts to the Office of the President, succeeded in advocating to include school feeding in national social protection strategic plans, based on school feeding's proven connection to improved food security. Measuring and defining school feeding's contributions require significant communication and cooperation between stakeholders from involved MDAs, donor agencies and technical partners, and constitute a continuous process as development goals evolve. Additionally, the path to achieving strong linkages between school feeding programmes and international, continental and national development programmes is likewise a process, whereby stakeholders must identify ways in which school feeding is organically and progressively incorporated into larger plans and strategies.

The words 'organically' and 'progressively' are chosen to underscore that each country's route to linking school feeding to cross-sectoral development agendas is unique and is not necessarily straightforward. But, a point of departure for reaching the above objective may be for school feeding stakeholders to actively engage with other sectoral and development actors in presenting concrete outcomes from school feeding programmes, and identifying any intersections between school feeding's outcomes and other development objectives. The idea of cross-sectoral coordination will be further elaborated upon in section 1.3, but maintaining productive linkages requires strong relationships, and strong relationships are founded upon proactive outreach and communication. As such, school feeding stakeholders should take initiative in this regard by showing interest in what other sectors are working towards and in proving themselves to be a cooperative, viable and effective

partner. These outreach efforts should be formalised, either through national policies and/or legal frameworks, and can be bolstered through the formation of technical committees composed of multi-sectoral actors. Such technical committees may be dedicated to school feeding, but school feeding policymakers should also work to participate on committees tasked with setting national development objectives. Through meeting in regular forums, school feeding and other policymakers can link together to identify the most efficient and cost-effective ways to harmonise interventions and development efforts as part of the pursuit to desired development outcomes. *Table 12* outlines progressive indicators and associated outputs to assess progress against recommendation 1.

Table 12. Indicators for recommendation 1: Link school feeding to development agendas

Recommendation 1: Link school feeding programmes to international, continental and national development agendas	
Indicator(s)	Output(s)
1. The extent to which school feeding stakeholders engage other stakeholders on school feeding’s relevance to development goals.	1.1. Linkages between school feeding outcomes and other development goals identified. 1.2. School feeding presented as a platform for achieving cross-sectoral development goals.
2. The extent to which school feeding is included in national and continental development strategies and/or policies.	2.1. National development and/or social protection policies ensure school feeding’s place amongst primary development initiatives. 2.2. National and continental targets for school feeding programmes set. 2.3. Legal frameworks protect and define national and continental development agendas.
3. The extent to which national and continental committees for school feeding, composed of multi-sectoral actors, are present.	3.1. National school feeding committees established and regularly meet. 3.2. Formation of a school feeding taskforce within the AU, responsible for collecting reports on national school feeding programmes’ progress against international and continental development objectives.

1.2. Design and implement school feeding programmes to achieve cross-sectoral policy objectives

The necessity for school feeding programmes to introduce cross-sectoral objectives has been extensively treated throughout this study, given that school feeding programmes, particularly those with strong HGSF and nutrition components, can and are producing returns across the education and learning, nutrition and health, and agricultural and local economic development sectors. However, as previously underscored, the current state of school feeding indicates shortcomings in establishing programme objectives that effectively capture the cross-sectoral returns and outcomes from school feeding, hence the inclusion of the above recommendation.

The design and implementation of school feeding programmes that achieve cross-sectoral policy objectives feature two levels: one is at the institutional arrangements level, whereby policymakers define and formalise cross-sectoral policy objectives and how such objectives will be strategically addressed; and the other is at the programme design level, where policymakers select which design features, or policy levers, will be employed to achieve the stated policy objectives. At the institutional level, the school feeding MDA should include cross-sectoral objectives into the M&E plan for school feeding programmes, and may consult actors from other sectors (e.g. health, nutrition, agriculture) for advice in how cross-sectoral objectives will be measured. Consulting with other actors is also important for identifying intersecting areas of interest, therewith laying the groundwork for potential collaborations and cooperation and bolstering school feeding’s sustainability over the long run. However, simply pledging at the institutional level to incorporate cross-sectoral objectives

into a school feeding programme will not assure that a school feeding programme will achieve such objectives. Therefore, school feeding policymakers at the institutional level must embed explicit features into school feeding programmes's design that effectuate positive outcomes across cross-sectoral objectives at all levels (school, local, national, international).

Box 14. School gardens in Benin

In 2014, Benin's National School Feeding Policy was adopted, which is based on a multi-sectoral school feeding model that integrates education, health, nutrition, agriculture, hygiene and sanitation. WFP Centre of Excellence support to WFP Country Office activities to support the first phase of implementation of Benin's National School Feeding Policy pilot project lasted four months and consisted on mobilising parents and communities for the school feeding activities, including the construction of kitchens and canteens and school gardens in some schools. Benin considers school gardens as a practical learning opportunity for students, and the school garden initiative further serves to diversify school meals and complement the meals with fresh produce from the garden, while providing the community with practical experience in food production and natural resource management. The WFP Centre of Excellence and WFP Country Office, in partnership with the Government of Benin and involved officials of local governments and health centres, assisted in the implementation of fifty pilot school gardens and provided trainings on basic school garden development and management for community members. (WFP Centre of Excellence against Hunger, 2015) (WFP Centre of Excellence against Hunger, 2016)

For instance, this study has already presented school feeding programme design features that affect outcomes across the education and learning, health and nutrition, and agriculture and local development sectors. These features include school meal menus, complementary interventions, the delivery and timing of school meals, HGSF, structured demand programmes and overall increased procurement of locally produced goods for by feeding programmes⁸². School feeding policymakers should carefully research which design features or combinations thereof to incorporate into school feeding design and implementation structures, either through studying international evidence or liaising with actors from other sectors. Liaisons with other sectoral actors can also add creative elements to school feeding design, elements that are able to reach a variety of objectives through one design feature. For example, school gardens can simultaneously enhance the nutritional content of school meals through the provision of daily, fresh produce while providing an opportunity for students to learn about agriculture; and THR can have spillover effects on the nutritional status of other children in the recipient student's household and to improve overall household food security to targeted students. The below sub-sections provide further insights into how school feeding policymakers can successfully utilise design features in the attainment of cross-sectoral outcomes.

1.2.1. Complementary interventions

The results of the continental survey on school feeding displayed the near-universal uptake of complementary interventions in African school feeding. Usually these come under the form of deworming treatments, fortification of foods and micronutrient supplementation, and are implemented at different levels of coverage and duration. Nonetheless, moving beyond health- and nutrition-focused interventions, a multitude of complementary interventions, in form of cash or in-kind transfers and education assistance, can serve as instruments to support targeted students and households. The scope and scale of complementary interventions

⁸², Recommendations vis-à-vis procurement will be elaborated upon in section 1.4. of Chapter 3

certainly depends on a school feeding programme's coverage and financing levels, as well as its institutional arrangements; however, the ultimate objective of complementary interventions is to evolve from *ad hoc*, one-off activities to integrated, systematised and permanent interventions that thrive on cross-sectoral response and coordination, therewith exploiting synergies and interactions, which can foster sustainable outcomes and impacts in the longer-term that single interventions would not be able to achieve.

As school feeding programmes increase in complexity and their ability to effectuate cross-sectoral change, it is recommended to conceive of complementary interventions in their totality, across sectors. Or, to move beyond defining complementary interventions in their relation to the school feeding programme and position the school feeding programme itself as a complementary intervention to other development projects. This requires that the school feeding MDA includes design elements that ensure the complementarity of school feeding programmes, as such efforts can advance the achievement of cross-sectoral objectives. For example, in the *zones de convergence* in Niger, in which an array of actors implement programmes aimed at improving education, health, livelihoods, agriculture and the overall sustainable of the targeted areas, school feeding counts as one of a package of complementary interventions that are working to holistically tackle cross-sectoral objectives and build the resilience of beneficiary communities across their life cycle.

Box 15. Adopting a life-cycle approach to nutrition security

Sudan is on its way to align school feeding with other nutrition-related interventions and programmes into a life-cycle approach. Adopting a life-cycle approach to nutrition security is meant to support further integration of different programmes, interventions and activities in the country, aiming at safeguarding access to adequate food by all people, at all times and stages across their lives, in order to be able to live a healthy and active life style. Next to the Sudanese School Meals programme such interventions include support to pregnant women and lactating mothers and new-borns, particularly during the first 1,000 days of life, micronutrient supplementation, deworming treatments, and social and behavioural change communication (SBCC) on nutrition-related topics, among others. Moreover, income-generating activities targeted at the working age population are included in the portfolio. An example is the Safe Access to Fuel and Energy (SAFE) initiative, which is currently implemented in IDP camps and provides income-generating activities to its beneficiaries. The SAFE initiative is targeted at women in camps, who are then trained to produce fuel-efficient stoves and alternative sources of cooking fuel, which can be sold to households and schools in the area, therewith providing sustainable supply-side solutions to the implementation of school feeding in the area. Integrating these interventions therewith allows to design an as adequate as possible response to nutrition insecurity in a particular context, at any point in a life-cycle. Additionally, the complementarity of interventions allows for a range of interventions for a household, wherein the children in a household could receive school feeding and deworming treatments, while the mother is part of the SAFE initiative, producing and selling bio-briquettes to schools for the preparation of meals.

Consequently, adopting a life-cycle approach by harmonising and integrating programmes, interventions and activities, to exploit and maximise interactions and synergies across these, can foster sustainable outcomes and impacts in the longer-term that the single interventions would not be able to achieve. An integrated approach to nutrition security, wherein school feeding acts as an enabler of impacts and a platform for other interventions, also offers a chance for a comprehensive evaluation of school feeding from system's perspective; hence, capturing potential, multi-sectoral outcomes and impacts that school feeding can have, if implemented together with complementary interventions.

1.2.2. Menu design

The literature review and continental survey on existing school feeding programmes revealed that the menu design of the programmes is highly diverse, with wide variations in terms of nutritional content, meal diversity and student satisfaction. Whereas some programmes primarily rely on non-perishable foods, such as maize meal and Corn-Soya Blend (CSB) as main components of in-school meals, a significant and growing share of programmes also include perishable, locally produced foods in the menu plans. This study asserts that, generally, higher levels of locally produced goods, including fresh produce such as vegetables, fish, and/or meat, should be provided to help ensure diverse menus, promote good dietary habits to schoolchildren, increase student satisfaction and improve educational performance and health status, among other outcomes. As such, this study recommends that school feeding programmes plan school menus to feature a variety of fresh, perishable goods that are consistent with indigenous diets and local availability, and that safeguard the nutrient intakes of schoolchildren; school menus should be formulated in collaboration with qualified nutrition and health experts.

In order to achieve such a diversified, nutritious and locally adaptable menu, the utilisation of a menu development and planning tool is recommended. Such a, potentially, digital design and planning tool enables a country to design a healthy menu with varied meals per day of the week, adjustable to different regional contexts, for its school feeding programme. In addition, it is recommended to provide trainings on the composition of nutritionally balanced meals to cooks/caterers involved in the procurement of commodities and meal preparation. Through educating them on the nutritional value of different foods and adequate meal design complying with schoolchildren's dietary needs, the cooks/caterers are capacitated to buy foods according to local and seasonal availability, as well as empowered to substitute equally nutritious foods should menu items be unavailable. Finally, it is recommended to periodically review the menu composition and conduct evaluation exercises to gather insights on student satisfaction, cook/caterer feedback and teacher's impressions, among others.

Box 16. Designing and planning meals

Under the Ghana School Feeding Programme (GSFP), learners are provided with one hot cooked meal per school day, served around midday. The meals are prepared and served by caterers, who are also tasked with the procurement of commodities from the local market. The meal plan is designed by the GSFP Nutrition Department, with the aim to reflect the local seasonal production across Ghana's diverse agro-ecological zones, as well as the nutritional needs of school children. To safeguard that the macro- and micronutrient content of the locally procured food commodities is in line with school children's requirements based on the Food and Agriculture Organisation (FAO)/World Health Organization (WHO) recommended nutrient intakes, an electronic menu planner is used to design the meals. This planner was developed by Partnership for Child Development (PCD), with the aim of supporting countries in the operationalisation of HGSF by supporting the design of nutritionally-balanced menus, to reduce micronutrient deficiencies and malnutrition.

In the operationalisation of menu development with the help of the planning tool, WFP provided initial trainings to the GSFP Regional Coordinators and Monitors, and District Implementation Committees. The latter are in charge of stepping down the received trainings to the caterers. Through these trainings and the provision of guidelines on meal planning, the caterers are capacitated to adjust the commodity procurement and meal composition according to seasonally and locally available foods, whilst at the same time ensuring that the meals contain the adequate nutritional value for kindergarten and primary school children.

Hence, in practice, the meals for the GSFP differ according to agro-ecological zone and season, accounting for what is available locally. Across the regions, a meal is typically composed of a selection of maize, yam or rice; pulses; fish, fish powder or eggs; and leafy vegetables or fruits. Thus, while the menu guidelines spell out the required nutritional value of meals, with the help of the training on foods and their nutritional value, the caterers can vary ingredients based on what is available on the market at that point in time. The same food basket is used for kindergarten and primary school children, however, the ration for kindergarten children is set at 70 per cent of the nutritional value of that used for primary school children.

1.2.3. Delivery modality and timing

The delivery modality and timing of school meals are both important design considerations in reaping the full cognitive benefits from students. Simply serving school meals might not always be sufficient to improve schoolchildren's concentration and learning abilities though, as there are various other factors – household food security, peaks of brain activity, incidence of illness – that affect learning outcomes as well. Hence, school timings, length of classes, brain activity and travel times to school, among others, all influence the optimal times for serving in-school meals. Therefore, this study does not assert one optimal time for meal delivery, but rather promotes an evidence-based approach to determining meal times on a national and potentially even regional level. In Madagascar, for instance, during the design stage of the school feeding programme, all involved stakeholders were consulted on the best timing for school meals. They came to the decision to serve meals for the morning session of school at 9.30AM and at noon for the afternoon session. These times were determined as the most ideal hours for cognitive activity and learning retention. Moreover, for students who attend morning classes, it is important that meals are not served too late in the day as some students may have arrived at school without having eaten anything.

To optimise the developmental outcomes of the school feeding programme – that is, to maximise outcomes across health, nutrition education and learning indicators – it is recommended to provide meals every school

day throughout the scholastic year. Providing school meals only for a few months per school year might lead to an increase in school attendance during these months only, with a reduction once the feeding ends. School administrators in drought-prone areas of Niger and Senegal noted this phenomenon during in-country field visits. But, a paucity of funding for school feeding programmes might imply a trade-off between the frequency of meal delivery and the inclusiveness of the targeting approach, wherein a more frequent meal delivery might entail a narrower targeting approach, in turn reducing the number of school feeding beneficiaries. Nevertheless, this study asserts that the objective of any programme should be a high standard service delivery to its beneficiaries to achieve the best possible outcomes, which, in the case of school meals, is considered to be the delivery of at least one in-school meal per day.

In the future, though, school feeding programmes might think about the eventual introduction of a second meal per school day. Across the continent, a few programmes provide two in-school meals, typically at breakfast and lunch. Whereas the main reasons behind these are often educational and nutritional, returns go far beyond these sectors as farmers benefit from higher demand (in the presence of HGSP programmes), and communities from additional paid services required. Additionally, the rationale behind providing a first meal at the beginning of the school day is that children are assumed to come to school without having eaten at home; thus, a breakfast is provided in school to ensure that schoolchildren are better able to concentrate and learn, as short-term hunger impedes cognitive performance. As this might not be the case in all regions of a country, but particularly applicable to regions with high food insecurity levels or remote areas with long travel times to school, the provision of an in-school breakfast can be targeted to particular areas. Schoolchildren traveling from remote areas or long distances to attend school may also benefit from an in-school lunch before their journey back home. In Lesotho, for instance, the National School Feeding Programme provides two in-school meals to children in the foothills and highlands. As pupils in these areas must often walk long distances to schools, they are provided with a morning snack and a lunch.

Finally, with rising levels of secondary school enrolment due to higher levels of primary school completion in Africa⁸³, policymakers should consider expanding coverage of school meals to secondary school. A few countries in Africa provide meals in secondary school, though funding and coverage levels remain low. As explored in Chapter 1 of the study, the period of adolescence sees a ‘second growth spurt’, as children undergo significant physical, social, emotional and behavioural changes, which coincides with secondary school, creating another window of opportunity to improve cognition and learning abilities. Additionally, completion of secondary school can yield higher returns on long-term earnings, health, fertility, gender equality, and civic and political participation than primary school education⁸⁴. Considering these potentially significant returns, the school feeding MDA can make a case for investing in secondary school meals, given that higher secondary school completion rates impact a country’s human capital development.

83, (The Africa-America Institute, 2015)

84, (Duflo, Dupas, & Kremer, 2015)

Box 17. Strategically defining meal frequency and timings

School feeding can be integrated into poverty reduction and resilience programmes through various ways, with the number of school meals served per day posing strategic considerations in this regard. As this study has asserted, serving at least one full, nutritious meal per day is recommended for achieving cross-sectoral outcomes, but serving more than one in-school meal per day can maximise outcomes in responses aimed at empowering and serving vulnerable populations. For example, the school feeding programme in Niger provides multiple school meals per day to students living in nomadic and drought-prone areas, as these students often leave school when their families temporarily migrate out of the area. Therefore, providing two to three in-school school meals per day throughout the school year helps cover the needs of students whose food security may be affected by drought or other natural occurrences. Furthermore, using school meals to enable schoolchildren in drought-prone and nomadic areas to continue their schooling can have positive outcomes on their overall educational attainment levels, in terms of higher completion rates due to uninterrupted attendance at school. Given the strong links between higher educational achievement and higher individual earnings potential, adjusting the number of school meals delivered per day represents a possibility for school feeding programmes to empower vulnerable populations through supporting schoolchildren to achieve higher educational and learning outcomes.

1.2.4. Targeting

As discussed in Chapter 1, various targeting approaches can be employed in the process of selecting the intended beneficiaries of a school feeding programme. This study does not assert that universal, geographical or categorical targeting is indicative of the worth or effectiveness of a programme; rather, if closely linked to and developed in light of the programme's objectives, the targeting approach helps to safeguard that the programme reaches its envisioned beneficiaries and stated objectives. Moreover, the targeting approach should be clearly aligned with the programme objectives, as targeting can further efforts to achieve cross-sectoral policy objectives. For instance, many African school feeding programmes undertake both categorical and geographic targeting, taking into account annual food insecurity surveys, annual statistics on school attendance and scholarship levels, gender parity, among other data. Other potential data types for targeting include poverty levels, school enrolment and attendance rates, food insecurity levels, as well as gender parity indexes; stemming from national household surveys, regional poverty and food insecurity mappings, and administrative education, health and nutrition data, among others. At all stages of school feeding programme implementation, communication with various MDAs can support the attainment of appropriate data for targeting in line with cross-sectoral objectives.

It is recommended for school feeding programmes conduct periodic re-targeting of the programme, based on the availability of more recent data, suspected changes to situations in targeted areas and evolving programme objectives. This entails that with significant changes in regional poverty- or food insecurity levels, schools might be added and/or removed from the programme. In South Africa for instance, where primary and secondary schools are targeted for the National School Nutrition Programme, the schools are selected based on a ranking. All public schools are ranked according to quintiles and based on the ranking the NSNP serves primary and secondary schools in quintiles one to three, therewith targeting schools in areas more prone to poverty and deprivation. Furthermore, school feeding policymakers can begin to utilise school feeding programmes as a platform to target complementary interventions based on a population's profile, ranging from more basic interventions including deworming, micronutrient supplementation and food fortification, to more complex interventions such as cash and asset transfers to households and education assistance programmes.

While this targeting option does not influence the way the school feeding programme in itself is targeted, it nevertheless stresses the opportunities that lie in approaching school feeding design components from a cross-sectoral, systems perspective.

Box 18. Evidence-based targeting in Ghana

Ghana serves as an example of a country that managed to successfully re-target its Ghana School Feeding Programme (GSFP) in 2012. The Ghanaian government, with support from the World Bank, WFP and PCD re-targeted the urban beneficiary schools, as a study revealed that a significant share of resources went to schools in more affluent areas. Re-targeting was conducted on the basis of national poverty statistics, a food security and vulnerability analysis and spatial data variables. The re-targeting meant that some schools in better-off areas no longer received school feeding, whilst additional schools in poorer areas were covered. A nationwide sensitisation campaign to explain the reasons and the benefits of this initiative complemented the re-targeting. The Ghanaian government's initiative to re-evaluate targeted school feeding beneficiaries enabled the GSFP to target schools more in line with programme objectives, and to include beneficiary schools that met vulnerability criteria..

1.2.5. Maintaining flexibility in school feeding programme objectives

This study has asserted the importance of a school feeding programmes' establishment of clear objectives designed to reflect and respond to development needs and goals. However, over time, a country's development goals may change in line with changing social, economic, political and environmental contexts, and school feeding policymakers should likewise adjust objectives to be more consistent with current contexts. Maintaining close communication with cross-sectoral actors can help school feeding policymakers to remain abreast of any evolving development priorities and initiatives, and policymakers should accordingly adjust school feeding programme objectives and design features to ensure that programmes preserve their relevance to achieving cross-sectoral development goals.

For example, in Tunisia, the government has formally adjusted school feeding objectives to focus more on social cohesion as a reflection of popular attitudes that emphasise more social equity and equal access to economic opportunities. The changing objectives also come with new school feeding programme components, currently in pilot mode, such as school gardens, in which community members pass on their farming knowledge to schoolchildren as a way of increasing interest in agriculture; the incorporation of HGSEF, as a way of expanding economic opportunities in communities; and leasing vans to youth groupings to transport school meals, as a way of increasing economic opportunities for the youth. And by offering more economic prospects for the youth in rural areas, the school feeding programme aspires to stem the flow of urban migration. This redesign puts communities, schools and the school meal at the centre of expanding economic opportunities, especially in rural, agrarian areas, and enhancing social cohesion.

The purposeful design and implementation of school feeding programmes that achieve cross-sectoral policy objectives in education and learning, health and nutrition, and agriculture and local economic development are essential for a country's eventual achievement of positive impacts on social equity, social cohesion, human capital and sustainable development. Incorporating such cross-sectoral considerations into a school feeding programme from inception onwards demonstrates a programme's commitment to cross-sectoral change, acknowledging that a school feeding programme does not exist in a vacuum. To truly effect cross-sectoral change, school feeding policymakers must foster and maintain strong multi-sectoral response and coordination mechanisms.

Table 13. Indicators for recommendation 2: Achieve cross-sectoral policy objectives

Recommendation 2: Design and implement school feeding programmes to achieve cross-sectoral policy objectives	
Indicator(s)	Output(s)
1. The extent to which school feeding programme objectives reflect multi-sectoral development priorities.	<p>1.1. School feeding objectives tied to nutrition, health, agriculture, local economic development and other sectors included in M&E plans.</p> <p>1.2. Clear indicators, targets and measurements for evaluating cross-sectoral objectives are set by school feeding stakeholders, collaboration with cross-sectoral actors.</p>
2. The extent to which complementary interventions are included in school feeding programme designs.	<p>2.1. Outreach to health, agriculture, development and other stakeholders on best designs for complementary interventions initiated.</p> <p>2.2. Complementary education, learning, health, nutrition, agriculture and/or local economic development interventions reach scale.</p> <p>2.3. In-kind or cash transfers given to particularly vulnerable students.</p> <p>2.4. Complementary interventions are permanently made part of school feeding programme designs.</p>
3. The extent to which school feeding menus meet nutrition and health standards.	<p>3.1. Nutrition and health experts are consulted by school feeding stakeholders on content for school meals.</p> <p>3.2. School meals are comprised primarily of fresh, perishable produce that reflects local diets, food availability and preferences.</p> <p>3.3. School menus are varied and menu planning tools are utilised.</p> <p>3.5. School caterers and cooks are sufficiently trained on meal preparation, health, hygiene and nutrition.</p> <p>3.6. Evidence-based approach to menu design, with periodic evaluation and revision of the menu based on pupils', cooks'/caterers', and teachers' feedback, achieved.</p> <p>3.7. Menu planning tools are introduced and digitised.</p>
4. The extent to which school meals' delivery modality and timing are informed by research and evidence.	<p>4.1. Evidence-based approach to determining optimal feeding times adopted by school feeding stakeholders.</p> <p>4.2. School meals are served every school day, throughout the scholastic year.</p> <p>4.3. Multiple school meals per day served.</p> <p>4.4. School feeding extended into secondary schools.</p>
5. The extent to which targeting of school feeding programme promotes cross-sectoral objectives.	<p>5.1. Targeting approach informed and supported by data from a range of sectoral actors.</p> <p>5.2. Re-targeting exercises, based on the most up-to-date information, conducted on a periodic basis.</p>
6. The extent to which school feeding stakeholders adjust programme objectives in line with evolving policies and priorities.	<p>6.1. School feeding stakeholders consult other sectoral actors to identify evolving priorities.</p> <p>6.2. Periodic re-targeting of school feeding programme in line with adjusted objectives and updated data performed.</p> <p>6.3. School feeding programme objectives reflect the most current cross-sectoral objectives.</p>
7. The extent to which school feeding programmes effectuate positive results across pupils, households and communities.	<p>7.1. Life-cycle approach to school feeding interventions and objectives adopted.</p>

1.3. Invest in and empower multi-sectoral response and coordination mechanisms

Many African policymakers already realise the importance of cross-sectoral response and coordination, but there are various options for how to develop this support and what forms it can take. This support can be strategic, technical, financial or project-based and can entail other sectors supporting school feeding programmes and *vice versa*. Much of the facilitation for initial multi-sectoral response and coordination happens at the central level, as national policymakers work together to find ways for translating cross-sectoral support into tangible projects, documents and strategic plans that have effects at regional, district or local levels. Moreover, the degree of cross-sectoral support and coordination affects how school feeding programme design and implementation features, objectives and financial arrangements are approached and developed. As such, this section primarily focuses on cooperation at the central level, outlining how national school feeding policymakers can form cross-sectoral linkages, while also introducing some cross-cutting considerations in cross-sectoral coordination mechanisms.

The previous section on designing and implementing school feeding programmes that achieve cross-sectoral objectives introduced how to approach more cross-sectoral engagement in school feeding programmes by highlighting the importance of engaging with actors across education, health, agriculture, social protection and other sectors. This engagement may begin as relatively informal in nature, such as reaching out to national health actors for advice on nutritional guidelines, but it is imperative that the school feeding MDAs proactively identify linkages between school feeding and other programmes. In outreach and advocacy efforts, school feeding policymakers should present as much evidence as possible on school feeding's ability to achieve cross-sectoral outcomes and impacts – hence the value of including cross-sectoral objectives into school feeding designs – and should position school feeding as a long-term intervention with a variety of developmental returns. The exploration of synergies and linkages between school feeding programmes and other sectoral interventions is also an important component of reinforcing cross-sectoral engagement. For example, if national health actors want to introduce national deworming or anaemia campaigns, in-school meal times can serve as an excellent forum for doing so.

The official establishment of cross-sectoral relationships enhances the sustainability of school feeding by placing school feeding as part of collective efforts towards reducing poverty, enhancing human capital and expanding access to sustainable and viable livelihoods. A progressive formalisation of cross-sectoral coordination mechanisms not only safeguards the protection of such arrangements, but enhances school feeding's strategic position for eventual inclusion in national policies and plans. Embedding school feeding into national level policies gives the opportunity for legal frameworks to define cross-sectoral roles and responsibilities, and formalises these relationships. Moreover, concerns about continued political will to support school feeding and cross-sectoral engagement in development are alleviated through national policies and legal frameworks that protect these arrangements. There are various ways in which policymakers can approach multi-sectoral response and coordination, but the goal should be towards positioning school feeding *within* national, multi-sectoral policies, frameworks and strategic plans.

Box 19. When should national school feeding policies be adopted?

A great majority of African countries either have a national policy on school feeding or are in the process of elaborating and/or adopting one. As such, the more germane question that African countries face regarding school feeding policies is not whether to have one but when to adopt one. Is it better to adopt a policy at the onset of the school feeding programme, or is it better to wait and see what the needs of the school feeding programme are? There is no simple answer to this question, but policymakers should consider several issues. First, a national policy can help define the objectives, institutional arrangements and broad strategies for school feeding; thus, introducing such a policy at the outset can help define actors' roles and targets. Furthermore, formulating cross-sectoral objectives at programme launch can facilitate cross-sectoral engagement. On the other hand, policymakers may want to try different models, cultivate cross-sectoral relationships and build actors' implementation capacity before specifying arrangements in a policy. Therefore, policies should strike a balance between increasing sustainability of a programme, while maintaining sufficient flexibility for multi-sectoral responses and coordination. Concluding, policymakers should craft policies that position school feeding to work with other sectors in order to accomplish a range of development objectives.

Finally, school feeding programmes should deliberate on institutionalising a cross-sectoral platform tasked with the strategy, implementation, management and oversight of the programme. A dedicated – and possibly independent – institutional platform for school feeding allows for more dedicated advocacy and work with other sectors on formalising cooperation, integrating school feeding into cross-sectoral strategic plans and M&E, and establishing defined roles and responsibilities for actors involved in school feeding. However, when defining roles and responsibilities within a school feeding programme, policymakers must consider two important cross-cutting issues: level of centralisation and community participation.

1.3.1. Cross-cutting issues: level of centralisation and community participation

The inclusion of school feeding into high-level institutional arrangements is critical for ensuring cross-sectoral support and coordination, but school feeding policymakers also need to reflect on the best institutional arrangements for the programme itself. The chosen level of centralisation and level of community involvement are key determinants of the institutional arrangements, and the next paragraphs discuss related considerations. However, given that many African school feeding programmes already feature decentralised management structures or are in the process of decentralising, and that community participation is already a prominent feature in many African school feeding programmes, the below discussion centres on pertinent points in the progressive decentralisation of and increasing community participation within school feeding structures.

School feeding programmes are complex interventions, and become more complex as they increase in scale and include more HGSE-related activities and other complementary interventions. At lower levels of implementation, an array of dedicated, multi-sectoral actors is thus needed to ensure that school feeding programmes meet their objectives and that there are no ruptures in service delivery. Whilst multi-sectoral response and coordination strongly determine institutional arrangements at the central and strategic levels, the level of centralisation mainly influences the school feeding programmes' institutional arrangements at the regional, district, local and school levels. Level of centralisation is an inherently political decision, based on a country's own governmental structures, and as such this study does not promote full decentralisation of school feeding as the end-goal for programmes. It is crucial, however, that all actors from MDAs, technical partners

and communities, are capacitated to fulfil their tasks and that central level actors invest in capacitating them, regardless of chosen level of centralisation; furthermore, central levels must clearly define the roles and responsibilities for all actors within a school feeding programme. If capacities are not developed or there is confusion over roles and responsibilities at the various levels, these can threaten both the effectiveness and overall sustainability of a school feeding programme.

Box 20. Ensuring smooth transitions during decentralisation

When decentralising, central level policymakers must ensure that lower levels are capacitated to take on more responsibilities and that transparency and oversight are not threatened. A case study on decentralised structures in South Africa's school feeding programme offers some good insights into how to strike a balance between more local ownership and continued transparency. As part of decentralisation in South Africa, the provincial levels are given additional human resource allocations to help them take on more programme responsibilities; and at the school level, school governing boards make decisions on various matters. As schools are tasked with procurement, funds are directly transferred into schools' bank accounts and schools undergo financial management trainings. For procurement sources, the provincial level gives guidelines on preferred service providers (e.g. markets, smallholder farmers), and then schools must get price quotations from service providers. The decentralised school feeding model in South Africa sets up support chains for each level, wherein the central level supports the provincial level, and the provincial level supports the school level, thus easing the transition to decentralisation and safeguarding transparency and compliance with school feeding standards and guidelines.

Strengthening community participation in response to more decentralised school feeding models is also crucial, both in terms of ensuring that day-to-day school feeding operations at school level are completed in a timely fashion, and in contributing to the overall sustainability of and feelings of local ownership over a school feeding programme. The importance of community participation is widely comprehended throughout AU member states and international evidence has cited that the strongest and most sustainable school feeding programmes are those that respond to community needs, are locally owned and incorporate some form of community contribution, whether in-kind, in cash or through labour⁸⁵. Moreover, strong community participation in meal preparation, serving, stock management, M&E and other areas alleviates school feeding actors at central, regional and district levels, as well as teachers and other school administration staff from taking on extra tasks. Volunteer cooks, stock managers and food monitors from the community can also help lower school feeding programme costs; though, school feeding programmes should be careful not to overburden communities or local authorities, or to take community volunteerism for granted. While interviews with community members and school volunteers during in-country missions revealed a wealth of support for the school feeding programme, the school feeding MDA should be cognisant that community contributions, particularly if coming from vulnerable or poverty prone areas, are only sustainable if the communities themselves continue to feel that school feeding is beneficial to them.

The most noticeable benefits that school feeding programmes offer to communities are through providing compensation and employment opportunities to school chefs and caterers, though many school feeding programmes in AU member states are unable to offer salaries to support staff; and through additional economic opportunities offered by HGFSF programmes. As HGFSF scales up, communities and local actors participate more in supplying commodities, either as local smallholders and/or local traders/vendors. An intangible benefit, arguably, of higher levels of community involvement is the opportunity for communities to distinguish local development priorities, across various sectors, and strategise ways to in which to accomplish these objectives

85, (Drake, Woolnough, Burbano, & Bundy, 2016)

via school feeding and other development programmes. This may be better conceptualised as community empowerment, rather than community participation, whereby communities exercise more ownership over and accountability for their future. The Namibia School Feeding Programme (NSFP) is an example of community empowerment, as the NSFP formalises community involvement in the NSFP Manual and school feeding is integrated into general community development activities. In particular, communities raise funds for activities and organise three meetings per annum in which they discuss school feeding plans. The NSFP's engagement with communities extends beyond tasking communities with school feeding responsibilities to encompass community empowerment, in which school feeding is positioned to help communities identify and pursue their own multi-sectoral, developmental priorities. Ideally, at this point, a school feeding programme benefits not only its direct beneficiaries, the pupils, but supports household and community members through THR, cash and asset transfers, trainings and capacity building, and employment-creating activities, thus reaching a range of policy objectives through strong multi-sectoral response and coordination mechanisms.

Box 21. Community participation in urban settings

Expanding HGSEF programmes and community participation in school feeding are promoted by international evidence, however, policymakers should evaluate different community participation models for rural vs. urban contexts. For example, working with smallholder farmers and scaling up HGSEF may have more relevance in rural settings, with many urban dwellers not able to access arable land and/or being more reliant on petty trading or commerce as their main source of income. Moreover, parents of students in urban schools may not have as much time to participate in school feeding activities as their rural counterparts, as many may own shops or have day jobs. Therefore, it is important that policymakers think about how to best tailor school feeding programmes to benefit urban communities' needs. For example, although urban dwellers may not be able to grow fresh produce, school feeding programmes can include purchasing from local, urban vendors into procurement processes. Or, school feeding programmes can liaise with other institutions to facilitate community members' access to capital to expand their shops, set up new ones or invest in machinery that can improve their shop stock, such as milling machines for maize. And if school cooks are hired from urban communities, school feeding programmes should offer competitive wages, in line with wages offered for similar work by local establishments.

The World Bank estimates that 50 per cent of Africans will be living in urban areas by 2050 – in comparison to 36 per cent in 2010 – so implementing programmes that increase the economic, educational, health and nutritional statuses of urban communities will continue to be a priority for policymakers. School feeding programmes, given their placement at the intersection of various sectors, can serve as one such programme.

Concluding, high levels of community participation present advantages to both the school feeding programme and to communities themselves: the school feeding programme benefits from having more community actors to assist with implementation and possibly reduce administration costs, while the local community benefits from local economic developmental efforts, through more local procurement and HGSEF, and the building of management capacities. Furthermore, increased community involvement can also induce higher levels of social cohesion, as school feeding programmes create better access to education. For instance, higher levels of education across communities can help optimise income-earning prospects, which in turn can foster more social cohesion. Or, the improved economic status for community members can influence more willingness to 'give back' to communities, thereby creating more intra-community support systems and furthering unity. For example, an interview with a local vendor in Senegal, who sells commodities to the school feeding programme, revealed that the vendor feels obligated to help other community members in need, either through loans or giving them food on credit, since he and his children benefit from the school feeding programme. The additional income that this vendor earns as a result of the school feeding programme has enabled him to 'give

back' to his community, and one can imagine similar effects as school feeding programmes economically engage more and more community members.

School feeding programmes, if properly embedded within local development plans, can facilitate progress in the education, health, nutrition, agriculture and local economic development sectors. However, cross-sectoral coordination mechanisms should also be mindful of creating enabling environments for more local ownership over development efforts through assuring that supply-side conditions are conducive and sufficient.

1.3.2. Multi-sectoral cooperation in strengthening supply-side conditions

As school feeding and other policymakers work together to identify the most efficient ways to harmonise interventions and development efforts, they should endeavour to likewise identify the promising areas for investment of resources. Investing resources should not only focus on demand-side issues, such as access to services, but on supporting the supply-side conditions within school feeding and complementary development initiatives. Supply-side considerations vis-à-vis school feeding include how to increase local production capacities to begin supplying school feeding commodities, the hiring of more teachers to deal with any upticks in student enrolment and working with national food stocks to assess more local procurement possibilities, though these considerations overlap with other sectors. For example, a school feeding programmes' work on the supply-side with local producers can serve as a platform for the agricultural sector to develop its own efforts in this regard, by presenting school feeding as a potential institutional market for local production. Throughout the AU, there are numerous cases of linkages between HGSF programmes and agricultural MDAs, given the existence of shared interests; and the school feeding MDA should utilise multi-sectoral coordination mechanisms to discover how shared interests can enhance needed supply-side improvements.

Going further, feeding programmes should focus on further exploiting opportunities to build cross-sectoral linkages with public works programmes and other social protection programmes. For example, the forthcoming National Social Protection Policy (NSPP) in Nigeria calls for the hiring of 500,000 additional, qualified teachers, as well as the expansion of HGSF nationwide. If well aligned, the placement of newly hired teachers in schools that introduce an HGSF programme – assuming that these schools incur rises in enrolment and attendance rates – constitutes a cohesive supply-side response to a change in demand-side conditions. Properly aligning the demand and supply-sides in the expansion of school feeding programmes, and particularly HGSF, not only requires strong multi-sectoral coordination mechanisms in order to identify resources to fill gaps; but requires a comprehensive developmental procurement strategy, to order to fill higher commodity demands.

Table 14. Indicators for recommendation 3: Invest in multi-sectoral response and coordination

Recommendation 3: Invest in and empower multi-sectoral response and coordination mechanisms	
Indicator(s)	Output(s)
1. The extent to which multi-sectoral actors are included in school feeding design and implementation structures, and institutional arrangements.	<p>1.1. Roles for multi-sectoral actors in school feeding policies and strategic plans defined.</p> <p>1.2. Multi-sectoral committees and/or technical committees for school feeding established.</p>
2. The extent to which multi-sectoral response and coordination mechanisms are formalised.	<p>2.1. Memoranda of Understanding (MoUs) and/or contracts between responsible school feeding institution and other MDAs signed.</p> <p>2.2. National policies and legal frameworks defining roles and responsibilities of multi-sectoral actors in school feeding programmes elaborated.</p>
3. The extent to which school feeding is institutionalised in a multi-sectoral platform.	3.1. Dedicated cross-sectoral platform to manage, monitor and implement school feeding programme set up.
4. The extent to which school feeding institutional arrangements are decentralised.	<p>4.1. Document defining roles and responsibilities for all actors involved in school feeding programme finalised.</p> <p>4.2. Actors at regional, local and school levels sufficiently and continuously trained and capacitated.</p> <p>4.3. Regional and/or local management committees, comprised of multi-sectoral actors, formed.</p> <p>4.4. Strategies for the sustainable decentralisation (if applicable) of school feeding structures developed.</p>
5. The extent to which communities have ownership over school feeding programmes and local development objectives.	<p>5.1. Sensitisation by school feeding stakeholders of communities on school feeding programme conducted.</p> <p>5.2. Document defining roles for community participation and in school feeding programme finalised.</p> <p>5.3. Communities take ownership of day-to-day activities (i.e. meal preparation, procurement, serving of meals, school level reporting) for school feeding programme.</p> <p>5.3. Local committees to define development priorities and school feeding's role therein formed.</p>
6. The extent to which supply-side responses are integrated into multi-sectoral response and coordination mechanism.	<p>6.1. Relationships with public works programmes, social protection programmes and other development programmes built.</p> <p>6.2. Strategies for supplying more teachers, building more classrooms and/or schools, and addressing other education supply-side needs formulated.</p>

1.4. Commit to developmental procurement strategies that exert a strong focus on increasing local production capacities

Across the continent, different procurement strategies are employed to purchase, transport and store the commodities required for school feeding programmes. The strategies range from highly centralised procurement, with one MDA or donor agency in charge for all procurement processes, frequently purchasing goods off the international market; to decentralised strategies, wherein responsibilities are transferred to regions and districts, oftentimes resulting in increased purchasing of local goods. This study assumes that as scale of a school feeding programme increase, and decentralisation of tasks progresses and community participation grows, that the reliance on locally produced and grown goods to supply school meals intensifies. This study has discussed the potential economic benefits that HGSF offers, and as such, this study promotes that AU member states should commit to developmental procurement strategies that concurrently expand local production capacities to meet school feeding programme needs and promote national agricultural and economic expansion. The study uses the term ‘developmental procurement strategy’ to emphasise the need for a school feeding programme’s procurement strategy to be designed to contribute to a country’s overall growth.

However, in spite of the positive gains to be reaped through more local production and procurement, school feeding policymakers must ensure that dependence on locally produced goods is not scaled up too quickly. Placing too much pressure on local producers can result in commodity shortages, which can then result in higher food prices and negative consequences for the school feeding programme and local consumers. As such, it is recommended to first incept the assessment of possibilities for HGSF within the programme’s operational contexts. Such an assessment examines the capacities of regional and district levels to partially or fully handle procurement aspects such as tendering, transportation, storage and financial management, in the future. Following the assessment, necessary activities to build capacity of lower levels could commence, in order to prepare the latter for future responsibilities throughout the procurement process and to lay the groundwork for the elaboration of a developmental procurement strategy for the school feeding programme.

A developmental procurement strategy should allow for progressive expansion of local procurement and locally produced commodities by designing and implementing a set of activities that gradually build capacity over time. Within this, efforts should go towards linking the developmental procurement strategy to a country’s wider industrial strategy, as done in Ethiopia, for instance, where, to expand local capacity to supply to the school feeding programme, warehouses are constructed strategically with support from the Agricultural Transformation Agency. The strategic positioning of a multitude of activities over time and of involved stakeholders, all aimed at optimising procurement arrangements, can facilitate the ease of transition to more decentralised processes. Gradually, district and regional levels can increasingly take on responsibilities vis-à-vis purchasing, transport, delivery and storage of commodities. Herein, decentralising procurement can also help reduce programme costs, as transport distances and the need for large, central warehouses are reduced. In Cabo Verde, like many other African countries, the school feeding programme must overcome long distances, complex logistical challenges and high costs in delivering commodities from central locations across the archipelago. In recognition of these challenges, the national school feeding institution is decentralising procurement gradually, following a series of capacity building activities, to the other islands within the archipelago. However, procurement should only undergo decentralisation if policymakers determine that finance, supply, transport and storage facilities at lower levels are sufficient to accommodate the school feeding programme’s needs.

Box 22. Community participation in urban settings

The Programme Intégré de Pérennisation des Cantines Scolaires (PIP/CS) in Côte d'Ivoire presents an example of a developmental procurement strategy that simultaneously works to increase local production capacities, enhance community ownership over school feeding and expand local markets. Through the PIP/CS, launched in 1989, communities are encouraged to voluntarily mobilise local groupements (smallholder farmer collectives), composed mainly of women. Once formed, the groupements receive agricultural extension services, such as farming inputs, capital and trainings, from the programme in order to build their production capabilities. The goal is that through capacitating these groupements over an extended period of time, the groupements will be able to sufficiently increase their outputs to both supply school canteens and sell more produce on local markets. Groupements' ability to supply school canteens in whole or in part varies, though some school canteens are provisioned 50 per cent of the time by groupements' commodity donations. While impact evaluations on the PIP/CS' procurement model have yet to be conducted, anecdotal evidence from Ivorian stakeholders suggests an expansion of local markets due to higher availability of produce and groupements' enhanced production capacities.

The PIP/CS' procurement strategy has two important features that render it truly developmental: 1) the fact that communities mobilise groupements to participate in the PIP/CS on their own volition helps ensure that communities see school feeding as a benefit to their own development; and 2) the groupements' ongoing receipt of agricultural extension services helps support a progressive augmentation of their production capacities. Going forward, Côte d'Ivoire is committed to the PIP/CS' reliance on groupements to supply school canteens, demonstrating its long-term dedication to capacitating smallholder cooperatives through agricultural extension services and to finding sustainable models for universal coverage of school feeding.

With strengthened involvement from regional and district levels in the procurement process, increased procurement from local producers and purchasing from smallholder farmers/cooperatives can be expected. Therefore, increased levels of local procurement for school feeding commodities, either through trading enterprises or farming cooperatives, as well as transport of commodities, should be realised. When incorporating more local procurement sources, policymakers should ensure that the requested orders are not too big so that only large enterprises can participate; if possible, orders should be divided into smaller lots, thus enlarging the pool of applicants. In Madagascar, school feeding policymakers switched to tenders of smaller lots so that farming cooperatives could compete, as policymakers noticed that too-large tenders proved a barrier to entry for cooperatives. Or, in Mozambique, smallholder farmers are allowed to pool their bids and produce the required order together. At the policy level, school feeding stakeholders can advocate for the inclusion of a certain percentage of local procurement to supply commodities into school feeding guidelines or frameworks, but only if production capacities can support such a provision.

Concurrently, developmental procurement strategies for school feeding programmes should also focus on furthering supply-side responses, particularly for local agricultural production for HGSP, as well as infrastructure necessary to support and foster more local production. Once supply-side conditions are suitably improved, school feeding programmes can serve as a platform to generate and strengthen structured demand for locally produced and grown commodities. By capacitating local producers and farmers through trainings and inputs, the creation of structured demand can result in the expansion of local markets and local employment opportunities, as next to the school feeding programme, producers and farmers can sell their goods directly to a wider market. This study emphasises direct linkages between producers and markets, i.e. limited or no involvement of middlemen to facilitate sales of commodities to school feeding programmes.

Empowering local producers to take full ownership of their financial transactions helps assure that producers set and negotiate prices in line with their own standards and perceptions of fairness, as well as ensures that all revenues from sales go back to the producer.

Box 23. Introducing structured demand programmes

The Cantines Scolaires programme in Burkina Faso, supported by WFP, has succeeded in introducing structured demand and in capacitating local producers to produce value-added goods. A local yogurt factory run by an all-female enterprise in northern Burkina Faso sells directly to several schools participating in the school feeding programme; the locally produced yoghurt is served as breakfast in schools. However, prior to the introduction of structured demand, the factory workers received extensive trainings in how to improve the hygiene and quality standards of their yoghurt, as well as in how to scale up production levels. Through the capacitation of the yoghurt producers and the generation of structured demand through the Cantines Scolaires programme, a shift from low-added value to high-added value production was marked, therewith utilizing the school feeding programme as a platform to generate and sustainably support profit-making industries. Additionally, and as a result of this relationship and increased production levels, the yoghurt factory was able to increase income for the factory workers, hire more factory workers and transporters, and expand the number of milk producers from whom they buy, thus demonstrating the range of local economy spillover effects that successively executed structured demand programmes can achieve.

Moreover, it is recommended that linkages with agricultural extension services are established and continuously strengthened by school feeding programmes and other sectoral actors. While a few school feeding programmes on the continent have already established such linkages, the majority of the programmes have not integrated agricultural policies with school feeding yet. It is by no means the role of a school feeding programme to design and implement agriculture sector policies; but nevertheless, integration with the aim of increasing local production capacities is desired, to in turn increase the supply of locally produced commodities for the school feeding programme. In Kenya, school feeding was successfully linked to agricultural extension services under the *Njaa Marufuku Kenya* (NMK) – or Eradicate Hunger in Kenya – programme. The NMK was launched as part of the 10-year action plan for poverty and hunger reduction in Kenya and aimed to contribute to the reduction of poverty, hunger and food insecurity among poor communities, support health and nutrition interventions that target the poor and the vulnerable, as well as strengthen and support private sector participation in food security and livelihood intervention. Hence, the NMK programme was geared towards agricultural development and therewith capitalised on the Ministry of Agriculture's expertise and integrated community food and nutrition security with school feeding. Next to the provision of school meals in targeted schools, the NMK programme provided agricultural extension services to smallholder farmers and involved the participation of community-based organisations (CBOs), NGOs, private sector organisations and other independent food security innovations. Therewith, the NMK relied on a range of agricultural capacity trainings and inputs, implemented as part of the Ministry of Agriculture's agricultural extension strategy.

Investing in local production to provision school feeding programmes, with the goal of having locally produced commodities purchased for school feeding to the greatest extent possible, helps grow local economies through the expansion of markets and engagement of more people in income-generating activities. But, any growth needs to be backed up by coherent and supportive developmental procurement strategies that are sensitive to domestic agricultural, infrastructural, geographic and economic contexts and that promote the sustainable enlargement of the agricultural sector through responsive supply-side strategies and durable linkages to markets. Finally, a developmental procurement strategy needs to be backed up financial investments and commitments from all involved actors and sectors in order to be durable, sustainable and effectual.

Table 15. Indicators for recommendation 4: Commit to developmental procurement strategies

Recommendation 4: Commit to developmental procurement strategies that exert a strong focus on increasing local production capacities	
Indicator(s)	Output(s)
1. The extent to which developmental procurement strategies are sensitised to local contexts.	<p>1.1. Preliminary assessments on existing production capacities, school feeding demands and supportive infrastructure conducted.</p> <p>1.2. Linkages between developmental procurement strategies and industrial and/or agricultural policies identified.</p>
2. The extent to which developmental procurement strategies allow for expansion of local production capacities.	<p>2.1. Support from agricultural MDA and/or other agricultural sector actors in expanding local production capacities provided.</p> <p>2.2. Plan for how developmental procurement strategy plan will gradually increase reliance on local production sources outlined.</p> <p>2.3. Percentage of locally produced goods that supply school meals specified by developmental procurement strategy.</p> <p>2.4. Percentage of locally produced goods that supply school meals met by school feeding programme.</p>
3. The extent to which local producers are linked to markets.	<p>3.1. School feeding programmes purchase commodities directly from local producers.</p> <p>3.2. Structured demand programmes to supply school feeding established.</p>
4. The extent to which supply-side responses are integrated into developmental procurement strategies.	<p>4.1. Agricultural extension services offered to local producers.</p> <p>4.2. Infrastructure linking producers to markets improved.</p> <p>4.3. Improved agricultural inputs made available to producers, either through cash or in-kind transfers, or linking producers to capitals and/or loans.</p>
5. The extent to which local producers are empowered.	<p>5.1. Local producers' efforts to form cooperative societies and/or trading enterprises assisted by stakeholders.</p> <p>5.2. Financial status, empowerment and resilience of local producers enhanced.</p>
6. The extent to which domestic markets are expanded and improved.	<p>6.1. Participation in the labour market and income-generating activities increased.</p> <p>6.2. Range and availability of commodities increased.</p>

1.5. Innovate financial arrangements by diversifying sources of financing for school feeding programmes and/or putting into place co-financing mechanisms

The subject of school feeding costs has been briefly addressed in earlier parts of the study, particularly through the continental survey results on average annual meal costs per student and presentation of the range of costs involved in school feeding programmes in Chapter 1. As revealed by these survey results and presentation, school feeding costs vary significantly and depend on a range of factors, including the level of centralisation, targeting approach, inclusion of complementary interventions and the procurement strategy, among other factors. Budget constraints to school feeding programmes are faced by many AU member states, however, a more expensive programme does not necessarily mean a more effective programme. Therefore, the focus of the financial arrangements section is not on how much money to spend on a school feeding programme, but on how to best allocate available money in order to maximise returns and future impacts, which in turn maximise programme sustainability.

The availability and levels of school feeding funding are, by far, the greatest concerns faced by school feeding policymakers in AU member states, with money for school feeding not always assured or embedded in national policies or frameworks. Furthermore, financial support from donors or technical partners may vary from year to year. As such, school feeding policymakers should advocate for a national-level budget line item for the school feeding programme – if not existent yet – to assure annual financing for school feeding programme for the forthcoming years, and render the funding less vulnerable to political or economic changes. In the presence of any limitations or uncertainties vis-à-vis financing for school feeding programmes, the school feeding MDA should strategise on how to innovatively use available funds to achieve the strongest outcomes against programme objectives. At the micro-level, these innovations can include incorporating local herbs and plants as cost-effective forms of micronutrient supplementation. For instance, school cooks in Niger grind up baobab leaves – which are abundant locally and are high in fibre – and sprinkle them on school meals.

Also in Niger, the school feeding programme has identified another cost-effective and innovative strategy for amplifying outcomes against programme objectives through strategically targeting areas in line with established criteria. Various approaches to targeting (universal, geographic, categorical, individual) and pros and cons thereof were discussed in Chapter 1; and the utility of targeting in addressing cross-sectoral objectives was discussed in section 1.2.4 of this chapter. Targeting, in relation to the financing of school feeding programmes, can be adjusted to expand or contract the coverage of school feeding, and can be useful in narrowing a programme's focus on certain groups of beneficiary students. For example, if a school feeding programme seeks to increase school enrolment levels or gender parity in schools, but does not have the resources for universal coverage, it can target the programme to areas with the lowest performance on these indicators.

While sensitising school feeding programme design features, such as complementary interventions and targeting, to be cost-effective, innovating and diversifying financial arrangements through co-financing mechanisms, briefly introduced in Chapter 2, constitute relevant avenues to ensure sustainable programme financing at the institutional arrangements level.

1.5.1. Co-financing mechanisms

The key to innovating and protecting financial arrangements and for expanding funding sources for school feeding programmes lies in enacting co-financing arrangements. As a school feeding programme can form an important platform for enabling returns to other sectoral interventions in health, education, nutrition and agriculture, various line ministries might agree to make financial contributions to the school feeding budget under the recognition that this investment delivers a positive return. Securing viable co-financing sources is also dependent on strong cross-sectoral relationships, and policymakers should endeavour to formalise any co-financing through legal frameworks, strategic plans or policies. However, there are also opportunities for lower levels, such as communities, to increasingly co-finance parts of school feeding programmes, particularly as the number of supply chain actors who benefit from the programme increases. For example, more economically empowered communities, in line with progressive realisation of HGSE components, are more able to contribute to school feeding programmes, either financially or through in-kind donations of cooking materials or commodities, thereby lowering long-term, overall programme costs following an initial investment. The expansion of local actors involved in school feeding and community economic empowerment are important factors in the financial sustainability of a school feeding programme; but, as mentioned in the passages on community participation in section 1.3.1, school feeding programmes must not overburden communities with responsibilities or costs, and should stress that any community contributions to school feeding programmes are done so voluntarily.

There is a multitude of ways for innovative co-financing arrangements for school feeding programmes and across the AU, there are already examples of national school feeding programmes with inventive financial arrangements. Table 16 presents examples of how African school feeding programmes are maximising resources and diversifying financial sources.

Box 24. Co-financing school feeding programmes

One of the most persistent challenges for school feeding across Africa is the limited availability of funding. As such, policymakers place great importance on ensuring that scarce resources are allocated as effectively as possible, yielding the best value-for-money outcome for the particular policy or intervention. However, assessing the value-for-money of an intervention is a complex endeavour and one should critically assess the means by which policy makers determine such effectiveness.

This study argues that the potential of school feeding as an enabler of impacts, rather than a driver, is what makes school feeding a structural intervention with potential multi-sectoral returns. Hence, the value-for-money of a school feeding programme should be determined through a cross-sectoral analysis. A cross-sectoral analysis reveals the cost-effectiveness of an intervention across different sectors that are likely to benefit from the intervention in one way or another. Such a cross-sectoral analysis is likely to reveal significant benefits to various sectors, in turn increasing the single sector’s willingness to pay (WTP) for the intervention in question. Oftentimes no single actor is willing to pay the whole programme cost alone, however, a splitting of cost across sectors, according to the single sector’s WTP, can render the financing of an intervention more feasible and realistic. In other words, in this co-financing approach, policymakers utilise a cost-effectiveness analysis to decide how much they want to contribute to the programme, under the condition that other sectors are willing to fund the costs that remain.

In the case of school feeding, the WTP signifies the extent to which different stakeholders are willing to share the cost of funding a school feeding programme, given the degree of cross-sectoral returns of the intervention. Thus, the co-financing approach, based on sectoral WTP defined according to a broad cost-effectiveness analysis of the school feeding programme, moves beyond a silo approach to resource allocation. Co-financing therewith provides an opportunity to realise developmental synergies, enabling the sharing of the burden of financial costs of a school feeding programme. The challenge to the co-financing approach lies in sectors underreporting their benefits of a programme and hence their WTP, hoping that instead another sector picks up a bigger share of the required programme financing. Thus, for the co-financing approach to function and result in fair shares of financing commitments across sectors, transparency on potential benefits through information revelation mechanisms from public good evaluations, along with mechanisms for cooperation and negotiation between multiple actors and policy sectors, are necessary.

Table 16. Innovative financial arrangements for school feeding programmes

Country	Innovative financing methods	Key results/takeaways
Cabo Verde	<ul style="list-style-type: none"> As part of efforts to increase the supply of local products to school feeding and to increase local production capacities, the national school feeding institution and the Ministry of Agriculture are starting a project that supplies local producers with inputs in exchange for the producers giving a part of their harvest to schools for school meals. For example, local fishermen are provided with boats and then give some of their catch to schools. 	<ul style="list-style-type: none"> Through this model, the school feeding programme and local producers benefit: the school feeding programme benefits through lower costs associated with food purchases and local producers benefit from receiving better quality inputs.

Country	Innovative financing methods	Key results/takeaways
Côte d’Ivoire	<ul style="list-style-type: none"> For the HGSF programme, the school feeding programme and other technical partners provide local <i>groupements</i> of producers with agricultural extension services over an extended period of time. As the <i>groupements</i>’ production capacities grow, they progressively give more of their produce to schools for school meals and sell the remainder on the market. 	<ul style="list-style-type: none"> The goal is for schools to be supplied 100 per cent by donations from the <i>groupements</i>, thus relieving the national school feeding institution from costs associated with purchasing, delivering and transporting commodities. Some schools are supplied 50 per cent by <i>groupements</i>’ donations.
Egypt	<ul style="list-style-type: none"> The Egyptian government is undertaking energy subsidy reforms, and is then progressively distributing savings incurred to finance a range of social protection programming, including school feeding. 	<ul style="list-style-type: none"> Energy subsidy reform and progressive distribution have provided an extra pool of financing for school feeding, without the Egyptian government having to take money away from other budget line items.
Ghana	<ul style="list-style-type: none"> The Ministry of Gender, Children and Social Protection houses all social protection programmes, to include school feeding. The school feeding programme is fully funded by the Ghanaian government and costs about USD 100 million per year. A new draft school feeding bill outlines additional financial sources for the programme, such as oil revenue, percentage share of petroleum revenue, national lottery and value-added tax (VAT). Additionally, the national school feeding programme directly transfers school feeding funds on a quarterly basis to local levels, as a means of reducing delays in service delivery for school feeding. Typically, at the end of each term, the number of school feeding beneficiaries is verified and appropriate funds are transferred as an accountability measure. 	<ul style="list-style-type: none"> The new draft bill on school feeding seeks new sources for ensuring that school feeding financing levels remain stable, while the system of directly transferring funds to local levels reduces administration time and bottlenecks in receiving funds, and guarantees timely delivery of services related to school feeding.
Senegal	<ul style="list-style-type: none"> -At the national level, the Ministry of Education allocates 3500 CFA/child/school year (~USD 4.24) to all schools, and then directly transfers funds into authorised bank accounts for school management committees to use on costs related to school administration. Of these funds, 16.4 per cent are to be used on school feeding. Cash is used for the national school feeding programme, while WFP is using vouchers for the school canteens that it supports; with decision-making decentralised to lower levels. The government and WFP view the decentralised cash and vouchers system as a more cost-effective way of providing commodities for school feeding, as it eliminates the necessity to transport commodities long distances or store commodities in large warehouses. Cash and vouchers place purchasing in the hands of local actors who are able to buy commodities more in line with local availability. 	<ul style="list-style-type: none"> The direct allocation of funds to schools, a percentage of which is to be used on school feeding, is part of efforts to expand coverage of school feeding in Senegal. Directly transferring funds to school management committee accounts reduces overhead costs associated with the purchase, transport and storage of school feeding commodities; reduces administration time at central levels for buying and delivering commodities to schools; and reduces the risk of leakage down the line. Tying financing levels to number of children, rather than allocating a lump sum, represents an innovative way of safeguarding funding levels for the education sector as a whole.

The above table brings into perspective the many actors who can be involved in financially contributing to a school feeding programme, though it is important to note that the more actors involved, the more accountability measures need to be set in place to assure that funding is actually reaching its intended destination. For example, with a school feeding programme’s increased reliance on locally produced goods to supply school feeding, increased local financing and purchasing responsibilities to local levels typically follow. This arrangement can be facilitated by opening an official bank account for local purchasing or management committees so that funds can be directly transferred into it, thus reducing the risk of leakage down the line. Or, an independent auditor can be appointed to cross-check and verify reported school feeding expenses. The issue of financial accountability is not only relevant to tracing funding flows, but to enhancing the sustainability of a school feeding programme. For, if services cannot be delivered to beneficiaries due to lack of funding, outcomes from school feeding programmes can be adversely affected, thus jeopardising the future returns from school feeding programmes. Strong and comprehensive M&E systems that facilitate real-time reporting and data collection constitute an additional safeguard to school feeding programme sustainability, both through their ability to identify gaps in implementation and service delivery and to capture school feedings returns.

Table 17. Indicators for recommendation 5: Innovate financial arrangements

Recommendation 5: Innovate financial arrangements by diversifying sources of financing for school feeding programmes and/or putting into place co-financing mechanisms	
Indicator(s)	Output(s)
1. The extent to which school feeding funding levels remain stable.	1.1. Budget line for school feeding in national budgets included. 1.2. Funding levels for school feeding programme less reliant on external sources.
2. The extent to which school feeding policymakers identify cost-effective options for programmes.	
3. The extent to which co-financing mechanisms are put into place.	3.1. Cross-sectoral financial analyses of school feeding conducted. 3.2. School feeding programme included in other MDA’s budgets. 3.3. Official partnerships with other funding entities, either from public or private sector, enacted. 3.4. Communities empowered to take on more financial responsibility in school feeding programmes. 3.5. Increased national revenues from subsidy reform re-allocated to social programmes.
4. The extent to which financial accountability measures are elaborated.	4.1. Dedicated team for ensuring financial accountability identified. 4.2. Financial accountability plan and guidelines elaborated and enforced. 4.2. Bank accounts for actors involved in purchasing school feeding commodities opened. 4.3. Number of actors handling school feeding funds reduced.

1.6. Devote resources to stronger M&E systems and automate feedback processes to improve policy outcomes

Without a concrete and executable approach to M&E, there is no way to track and measure outcomes from school feeding programmes; and without evidence of progress against programme indicators, it is difficult to evaluate a school feeding programme's success in reaching its stated objectives or encourage financial contributions, often linked to the sectoral returns, from other involved line ministries. However, just as there is no 'right' way to design a school feeding programme, there is no 'right' way to design an M&E framework for school feeding programmes. The structure of M&E reporting depends on a range of factors, such as the level of centralisation for programme implementation and programme objectives, and as such, the M&E section focuses on how comprehensive, integrated and ultimately automated cross-sectoral school feeding M&E should be pursued as part of programme sustainability and strengthened national capacity.

The first step is to define how to clearly measure programme objectives. Subsequently, the school feeding MDA should carry out baseline evaluations on relevant indicators that cover these programme objectives; having this baseline will then allow for easier comparative analysis of results as the school feeding programme moves forward, whilst simultaneously supporting advocacy efforts for scale up. The responsible MDA should also establish timelines for follow-up evaluations that test the same indicators. For programmes that may be introducing a new M&E system, policymakers should try to gather as much information as possible for selected indicators, as a way of setting up baseline data. These same indicators should be used for future evaluations. In both scenarios, the establishment of clear M&E reporting schedules, guidelines and forms by the school feeding MDA – as well as the capacitation of all actors involved in M&E and reporting – is key to setting up consistent M&E systems that allow for policymakers to track changes and identify any problems.

Going forward, school feeding programmes should start to integrate reporting across sectors into M&E plans. Finding ways to collect information across sectors is especially important once complementary interventions scale up. At the same time, policymakers should be careful not to increase reporting workloads too much, and should try to introduce cross-sectoral reporting with actors from other sectors. For example, some schools in the countries visited for this study receive visits from school nurses or other health staff, thus demonstrating how the school feeding MDA can work with the health sector to share and collect information. Stakeholder interviews with the *Office National de Nutrition* in Madagascar revealed plans to further cross-sectoral M&E through the introduction of a standardised *carnet de santé* (health booklet) into all primary schools that is filled out by medical personnel and that tracks a child's physical development. Once implemented, this health booklet presents an opportunity for Malagasy school feeding policymakers to monitor the anthropometric measurements of children who benefit from school feeding. Setting up relationships and formalising linkages for cross-sectoral information sharing not only presents advantages to the school feeding programme but to other sectors, as well, and the school feeding MDA should highlight these advantages when forming relationships and linkages.

Box 25. Measuring local economy effects and impacts

To capture the full range of effects and impacts a school feeding programme may have, it is advised to adopt a comprehensive, cross-sectoral approach to M&E activities. As outlined above, this ideally entails the creation of integrated databases and sharing of workload and resources across sectors. At the same time, a comprehensive approach to M&E of school feeding programmes, attempting to reveal the full range of effects and impacts such a programme may have, requires progressive methods in measuring these. Local economy effects of school feeding implemented in schools within the area are amongst the more complex to measure, and hence require appropriate methods and models.

From a local economy-wide perspective, school feeding programmes are a conduit through which new economic activity is generated, ultimately resulting from an inflow of cash into the local economy. The cash can be introduced into the local economy via multiple channels, including the hiring and paying of community members as cooks, the purchasing of food commodities from local farmers and producers and the hiring of local transporters, to name but a few. As individuals and households spend the cash, the general equilibrium (GE) effects – describing the behaviour of supply, demand and prices in an economy – are unleashed. It is expected that with heightened availability of cash in the local economy, the demand increases, following which the supply-side responds, with potential outcomes being an expansion in the local supply to meet the demand; or rising imports from other regions, for instance. Through such GE effects, programmes transmit impacts to others in the economy, including individuals and households not directly benefitting from the school feeding programme.

Building on an analysis of the GE effects in an economy, the Local Economy-wide Impact Evaluation (LEWIE) method was designed to understand the full impacts of cash transfers on local economies, including on the productive activities of both beneficiary and non-beneficiary groups (Taylor, 2013). LEWIE sheds light on how these effects change when programmes are scaled up to larger regions, and why these effects occur. The LEWIE method builds household-farm models for beneficiary and non-beneficiary households within the area of interest, which describe each group's productive activities, income sources and expenditure patterns. Utilising these household models together with data and estimates on market behaviour, the LEWIE method can assess the effects of a specific programme on the local economy. Building on the LEWIE method, a similar methodology that compiles household data and activity of beneficiary and non-beneficiary households could be employed to measure the local economy-wide effects and impacts of school feeding programmes.

Gathering a thorough understanding of how a school feeding programme affects the local economy is vital for the design and evaluation of the former. Furthermore, painting an adequate picture of potential benefits across sectors, such as local economic development, can support financing decisions and negotiations amongst different stakeholders and MDAs. Although the LEWIE method has not applied in school feeding programme evaluations as of yet, it is recommended to be taken into consideration in future evaluations of African school feeding programmes.

The school feeding MDA should also work on creating more integrated and streamlined M&E databases. The first step in achieving this is to ensure that collected data is standardised and stored in a central location. The school feeding programme in Namibia has developed the Namibian School Feeding Information System (NaSIS), a web-based platform used for capturing, analysing and reporting on school feeding programme indicators. Currently, the regional and circuit levels input information from paper-based reports, received from schools, into the NaSIS, but data collection is being systematically decentralised to the school level for faster and more comprehensive data collection. The introduction of standardised, electronic M&E databases

reduces time spent in compiling reports and can be more cost-effective, as the amount of paper-based forms filled out and sent in is lowered and/or eliminated. Moving to electronic forms of data reporting, though, does involve upfront costs of providing computers and/or other devices to M&E collectors, and training data collectors on how to use electronic systems. But these initial investments can have longer-term payoffs in terms of the breadth of information that can be stored in an electronic database, the ability to use technology to create detailed reports on the evolution of school feeding indicators, and the time saved in digitising data sources. Moreover, tracking the evolutions within school feeding target groups and communities can also help policymakers to adjust school feeding objectives to be more in line with current needs and realities.

Finally, school feeding policymakers should work to fully capitalise on technological advances and automation in M&E collection and reporting, particularly in real-time data collection. Usage of mobile phone applications (apps) can greatly facilitate the collection and sending of data in real-time to central databases, across a range of indicators and topics. The automation of M&E processes in African school feeding programmes is limited, but there are some promising examples. A pilot in South Africa is capitalising on mobile phone technology by giving school principals smartphones with electronic questionnaires that capture information on school feeding implementation processes and particularly the provision and composition of meals, and that are sent on a daily basis to the central NSNP office, thus allowing the NSNP to immediately intervene if any problems are identified. Some other scenarios for how real-time data collection through mobile phone technology can work for school feeding programmes is to have monitors collect and send information on classroom attendance, test scores, school meal distribution and nutritional composition, student handwashing before eating, and other relevant data; and for HGSF programmes, market volunteers or monitors can record daily prices and availability of commodities for school feeding programmes, thus tracking any price fluctuations or shortages. Price monitors may hold interest for national Ministries of Commerce, many of whom already follow changes in commodity prices. Using mobile phones apps for data collection has particular relevance for the African continent, where mobile phone ownership and Internet access is growing at exponential rates. In this regard, more technologically sophisticated modes of M&E can both make the most out of increases in smartphone usage and knowledge, while also capacitating M&E collectors for school feeding programmes on how to use smartphones and modern technology as an instrument for M&E data collection.

Creating stronger, faster and more multi-faceted M&E systems helps inform more easily adaptable school feeding programmes that respond to changing contextual needs and that reveal longer-term trends. Moreover, faster data collection can allow for school feeding programme data to be more easily compared to data from other sectors; for example, comparing increases in levels of educational attainment with any changes to child marriage rates or average income, over a specified period of time. Correlations do not necessarily mean causation, but a more multi-dimensional, hybrid and developmental way of organising and analysing data in larger development contexts is useful in fostering a systems approach to development, designing more responsive development programmes and promoting an evidence-based approach to policymaking. Furthermore, more comprehensive data sets can be helpful to African policymakers in identifying regional and pan-African evolutions or trends, as a means of harmonising pan-African development agendas and goals, and in enabling more South-South learning.

Table 18. Indicators for recommendation 6: Monitoring & Evaluation

Recommendation 6: Devote resources to stronger M&E systems and automate feedback processes to improve policy outcomes	
Indicator(s)	Output(s)
1. The extent to which school feeding M&E plans set ways in which to measure progress.	1.1. M&E plans set indicators and targets for objectives. 1.2. Baseline data for indicators collected. 1.3. Actors involved in M&E sufficiently capacitated and trained in how to collect and report on data.
2. The extent to which school feeding M&E systems are standardised across reporting levels.	2.1. Uniform reporting templates and forms introduced and distributed. 2.2. Clear and enforceable reporting timelines and guidelines set. 2.3. Electronic databases that centralise all reporting introduced and maintained. 2.4. Appropriate tools for updating and accessing electronic databases allocated.
3. The extent to which school feeding M&E systems capture cross-sectoral results and information.	3.1. Reporting forms containing space for reporting on indicators beyond education and learning introduced. 3.2. Data sharing between school feeding programme and other sectors undertaken.
4. The extent to which school feeding M&E feedback processes are improved and streamlined.	4.1. Automated data capturing and reporting mechanisms, such as apps, developed. 4.2. School level actors trained and capacitated on how to use automated data mechanisms. 4.3. Appropriate tools for capturing data in real-time allocated. 4.4. Guidelines for how to quickly respond to real-time feedback put into place.
5. The extent to which M&E informs evidence-based policymaking for school feeding.	

1.7. Deepen and learn from South-South and pan-African cooperation to optimise policy impacts

The final recommendation set presented is the need to strengthen South-South and pan-African cooperation as part of efforts to reach higher levels of development, resilience, equity, growth and social cohesion across the African continent. South-South and pan-African cooperation entail AU member states working together towards common goals, in line with strategic documents like the SDGs, Agenda 2063 and CESA 16-25, as well as capitalising on forums for closer economic collaboration, development and learning. The idea of enhancing South-South cooperation as part of development initiatives in the Global South⁸⁶ is not new, and South-South cooperation stresses that initiatives must be determined by the countries of the South, guided by the principles of respect for national sovereignty, national ownership and independence, equality, non-conditionality, non-interference in domestic affairs and mutual benefit⁸⁷.

⁸⁶, The term 'Global South' traditionally refers to developing countries located in the Southern Hemisphere.

⁸⁷, (United Nations Office for South-South Cooperation, 2017)

The United Nations Office on South-South Cooperation highlights numerous advantages of more South-South engagement, which include⁸⁸:

- Use of experience and capacity that already exists and the development of new capacities in developing countries;
- Opening of additional channels of communication among developing countries;
- Promotion and strengthening of economic integration among developing countries on as wide a geographic basis as possible
- Enhancement of the multiplier effect of technical cooperation;
- Fostering of economic, scientific and technological self-reliance;
- Increased knowledge of and confidence in the capacities available in developing countries;
- Coordination of policies on development issues relevant to a number of developing countries; and
- Development of indigenous technology and the introduction of techniques better adapted to local needs, particularly in traditional subsistence sectors such as agriculture.

This study recognises the applicability of the above benefits, and encourages the use of school feeding programmes as a pathway to more profound South-South and pan-African cooperation. The benefits of seeking more pan-African cooperation, either through strengthened policy directives from the AU, increased intra-Africa trade, learning exchanges or other forms of support and cooperation, are plentiful.

In terms of economic cooperation and development within the AU, the primary forums for this are through the Regional Economic Communities (RECs)⁸⁹. With relatively low but growing levels of intra-African trade – only about 10 to 12 per cent of African trade is taking place between African nations⁹⁰ – procurement processes for school feeding programmes can expand usage of RECs even further. Moreover, higher levels of trade in support of HGSF programmes is consistent with the AU's continental strategy to use HGSF programmes to enhance retention and performance of children in schools and to boost income generation and entrepreneurship in local communities⁹¹. For example, school feeding programmes should utilise RECs in procurement of commodities to the extent possible, thus capitalising on favourable trade conditions and common regional food preferences and production. Especially as countries work to increase and specialise their production capacities, particularly for agricultural products, more intra- and inter-regional trade can follow. Through specialisation in higher added-value production, countries can start developing comparative advantages that make intra-regional – and eventually intra-African – trade increasingly attractive. For example, the women producers who run the yoghurt production factory in northern Burkina Faso may gradually be able to export their products. Exploiting economies of scale and scope in production granted by its links to the school feeding programme might enable the factory to export quality products at competitive prices to other countries in the region. In addition, due to increased production, these women now consider buying milk from nearby Niger, thereby delivering cross-border gains. Although this type of regional trade is at the moment still relatively small-scale, it demonstrates the potential effects of higher local production levels on cross-border trade with neighbouring countries. However, it is critical to establish links with regional industrial strategies so as to further coordinate specialisation and expansion efforts.

88, (United Nations Office for South-South Cooperation, 2017)

89, (Hartzenberg, 2011)

90, (Hartzenberg, 2011)

91, (WFP Centre of Excellence against Hunger, 2016)

As highlighted in previous sections of Chapter 3, communication is key to productive and cooperative relationships, and it is important that AU member states incept communication with regional counterparts about any opportunities for closer engagement.

Box 26. Lesotho Initiative: South African smallholder farmers support Lesotho

In response to a major food crisis that was declared in Lesotho in 2012, following a prolonged dry season, the Lesotho Initiative was brought to life through cooperation between the South African Government and WFP. Under this initiative, the South African Government contributed 180 million Rand worth in assistance to WFP, enabling the latter to provide food assistance for 22 months in Lesotho. The assistance was particularly targeted at vulnerable children and women in the country. Through the existing Lesotho School Meals Programme, WFP distributed the South African food donations to pre-school and primary school children, while pregnant and nursing women were provided with special, fortified food products (South African Government, 2015).

At the same time, as part of its commitment to support smallholder farmers, in cooperation with the Government of South Africa, WFP sourced 40 per cent of all the cereals needed for Lesotho from smallholder farmers in South Africa. Thus, under the Lesotho Initiative, WFP purchased more than 4,300 metric tonnes of maize and sugar beans, worth 21 million Rand from smallholder farmers. In addition to the donations purchased from smallholder farmers, WFP also procured some 16,000 metric tonnes of commodities, from commercial traders in South Africa (South African Government, 2015).

Supporting this initiative, and as part of a wider move to empower and capacitate smallholder farmers, WFP and partners have provided training on a range of subjects including storage and post-harvest handling to hundreds of members of South African farmer organisations and government officials. Concluding, the Lesotho Initiative serves as an example of pan-African cooperation to address food insecurity, whilst helping to advance market access for smallholder farmers.

This engagement is not restricted to trade or economic activities, as South-South and pan-African cooperation likewise aim to bolster school meals programmes across the continent through horizontal learning exchanges while promoting further international recognition of AU member states' success stories in various sectors of development⁹². Closer communication also affords occasions for the analysis of primary development issues, and for AU member states to present their own expertise and knowledge of such issues, thus formulating the requisite strategies to address them⁹³. Horizontal learning, in which participants share what they know, constitutes a valuable platform through which communication between countries in the Global South can occur. In this regard, the WFP Centre of Excellence in Brazil supports and co-leads regional and national workshops and networks across Africa to promote knowledge exchange on school feeding programmes, thereby fostering national policy dialogues and enhancing learning opportunities between countries. For example, national stakeholders from Cameroon and Burkina Faso undertook reciprocal study visits to each country; while in Togo, the WFP Centre of Excellence assisted the national government in drafting an HGSF policy. Further example is the Pan-African School Feeding Network – REPANS (from the French Réseau panafricain sur l'alimentation scolaire). REPANS is an initiative born of the need felt by a group of countries, originally French-speaking, to create a permanent, dynamic framework open to all African countries to exchange and pool practical and theoretical experiences, resources and tools. At the outset, the affinity of the language was an enabler-factor for rapprochement and the cement of the grouping. However, the need to form a network

92, (ASUL, 2017)

93, (United Nations Office for South-South Cooperation, 2017)

has its driving-roots in African common eagerness to anchor school feeding in public policies and to make it a lever to improve the educational situation and boost the performance of the economy in different countries. Today, the network encompasses more than 20 African countries and includes non-French-speaking states.

Box 27. The MENA School Meals and Social Protection Initiative

The true meaning of South-South cooperation is that countries across the Global South engage in closer communication, knowledge sharing and integration. With this meaning in mind, AU member states can look beyond the borders of the African continent for partners in achieving multi-sectoral development goals. For example, the Middle East and North Africa (MENA) Initiative for School Meals and Social Protection (hereafter referred to as the “Initiative”) – in which Morocco, Jordan, Lebanon, Syria, Iran, and AU member states Tunisia, Egypt, Sudan and Algeria take part - brings together regional governments and stakeholders to leverage complementary capacities and expertise from different sectors to enhance school meals coverage, quality and impact, and better embed them in wider social protection policies (World Food Programme, 2017). The Initiative was a key output from a multi-stakeholder meeting, convened by WFP in mid-2016. The key objective of the Initiative is to ensure that vulnerable boys and girls are reached with high quality, high impact school meals. Moreover, by supporting national governments to take on more ownership of school feeding programmes and by linking programmes to local economies and agriculture, the Initiative contributes to the achievement of several SDGs. The Initiative aims to accomplish multi-dimensional goals and deliver mutually reinforcing benefits through helping participating states to realise their own multi-sectoral objectives through strengthened school feeding programmes while simultaneously utilising South-South cooperation to share best practices, knowledge and evidence bases to improve programme quality, strengthen national governance systems and policies, and reinforce linkages between school feeding and social protection.

Within countries participating in the Initiative, several barriers, such as conflict, poverty and gender inequality, prevent children from going to school and, therefore, building their human capital potential. Using the platform of the school meal and capitalising on South-South learning, the Initiative stands to enhance the coverage, quality and sustainability of national school feeding programmes, while also furthering cross-sectoral cooperation in realising national development goals and expanding social protection systems.

Furthermore, school feeding programmes can use the canteen itself as an expression of pan-African solidarity cooperation. For example, school feeding programmes can be implemented to alleviate negative pan-African phenomena of sudden cross-border population displacements associated with droughts, natural calamities or conflicts. Such occurrences can lead to interruptions to affected populations’ access to education, health, housing, food and other services, and/or heightened demands for such services. Heightened demands from displaced populations for education, health, housing, food and other services can affect host communities’ access, which can lead to tensions between both populations. While each emergency, whether caused by natural or man-made circumstances, requires unique responses, there are various ways in which school feeding can be used to alleviate negative side effects for displaced populations and host communities, as evidenced in the example of *cantines d’urgence* in Niger presented in Chapter 1. African countries’ demonstrated commitments to providing comprehensive responses, such as school feeding, to African emergencies is important to ensuring that displaced populations’ human capital development is not affected. And this commitment to protecting displaced persons from neighbouring or other African countries demonstrates mutual support and solidarity, which in turn can deepen levels of pan-African cooperation.

Ultimately, school feeding can contribute, from a systems perspective, to closer South-South and pan-African cooperation through its contributions to bettering education, learning, nutrition and health indicators, and

overall human capital development. Rising levels of human capital help form stronger, more competitive and more productive labour forces that strengthen regional markets and increase national production levels. In the presence of more capable workforces and higher production levels, regional policymakers should discuss how to harness these capabilities to meet development targets and goals, working together and with partners throughout the Global South to harness these advancements to boost local production levels, expand employment opportunities for more skilled workforces, improve indigenous technologies and spur more African development. Likewise, harnessing such advancements can augment efforts to exert more national ownership over development programmes, such as school feeding, and to encourage nationally owned programmes to operate from a systems approach to development.

Table 19. Indicators for recommendation 7: South-South and pan-African cooperation

Recommendation 7: Deepen and learn from South-South and pan-African cooperation to optimise policy impacts	
Indicator(s)	Output(s)
1. The extent to which school feeding programmes utilise RECs and intra-African trade to provision school meals.	1.1. Trans-national consultations between policymakers on increased trading opportunities and industrial and agricultural strategies conducted. 1.2. Level of intra-REC trade increased. 1.3. Level of intra-African trade increased.
2. The extent to which policymakers engage in horizontal learning to inform decision-making.	2.1. National participation in South-South and pan-African study tours and exchanges. 2.2. Decision- and policymaking, based on evidence and experience from international exchanges, enhanced.
3. The extent to which school feeding is incorporated into response systems to African emergencies.	3.1. Emergency canteens to feed students displaced by manmade or natural disasters set up. 3.2. School feeding integrated into comprehensive response systems to emergencies.

2. Building National School Feeding Programmes from a Systems Approach

The above sections on the core 7 are intended to provide guidance on how African school feeding policymakers can strengthen and sustain their school feeding programmes. A progressive boosting of national capacities to lead school feeding programmes, in addition to increasingly strong returns from programmes, can pave the way for national ownership. With an increasing number of countries in Africa already have or are transitioning to nationally owned school feeding programmes, other countries still rely on the capacity and assistance of donors and technical partners to implement school feeding programmes. And while the involvement of technical partners and donors provides valuable support and expertise in advocacy, policy development, budget support and increased coverage for school feeding programmes, exercising more national ownership over school feeding programmes is a worthwhile aim sought by many African countries. A nationally owned school feeding programme, designed from a systems perspective, adequately linking to other social protection programmes as well as sectors such as health, education, and agriculture, is desirable in order to ensure sustainability over the long run and maximise the potential cross-sectoral effects and returns that school feeding programmes can have. And even though countries follow different approaches and timelines in building their school feeding

programmes, several basic building blocks following a systematic and sequenced approach are needed to build a national school feeding programme integrated into the wider social protection landscape in the country.

In a first step, raising awareness on the importance of school feeding programmes and the wealth of returns they can yield, if adequately designed and implemented, is required at all levels and audiences, ranging from politicians to the general public. Such awareness raising can be supported by evidence-based research, such as ex-ante cost benefit analysis and investment cases of school feeding, revealing the returns such programmes can have. Here, countries can be supported by the expertise that actors such as the WFP Centre of Excellence, the WFP country offices and other technical partners hold. Next to raising awareness, a country needs to define the scope of the national school feeding programme. What is the national vision for programme, and how can it be integrated into national development plans and/or poverty reduction strategy? Addressing such high-level decisions is vital to ensure that the forthcoming programme is appropriately embedded in ongoing national activities and initiatives.

Moreover, countries planning on transitioning to a nationally owned school feeding programme have to make vital decisions on the design and institutional set-up of the programme. Here, enhanced South-South and pan-African cooperation and knowledge sharing can serve to assist counties in making these decisions. Learning from experiences of counties in the region and beyond can play a substantial role in designing context-specific programmes, whilst learning from the challenges and opportunities that other countries encountered in the course of the process. The WFP Centre of Excellence, together with the AU, have over the last years cooperated extensively in fostering South-South cooperation across the continent and can therefore provide technical assistance in this process. The potential formation of an AU School Feeding Cluster would also be instrumental in guiding AU member states in how to progress towards higher levels of national ownership.

However, consistent with the conceptual framework and core 7 recommendations, efforts towards national ownership should operate under a systems approach to development. As should be evident from the conceptual framework and core 7, there are areas of overlap and complementarity between each recommendation and various programme design features, or policy levers. For example, community participation and level of centralisation closely interact, with both developing in concert with and in response to the other; and cross-sectoral response and coordination is necessary for implementing more integrated M&E that collects and compares outcomes across sectors. These complementarities underline how one recommendation or design feature cannot drive a systems approach to school feeding on its own, but rather how each should work with other recommendations and policy levers to build a systems approach to school feeding. Additionally, realising a systems approach to school feeding requires that each sector go beyond silo-based approaches to integrated planning and execution.

As with the transition to national ownership, there are concrete steps that policymakers can take towards a systems approach to school feeding. School feeding design and implementation elements, coupled with integrated institutional arrangements, can facilitate progress towards more unified planning in which different sectors work together and around school feeding to minimise potential threats to overall stability and populations' resilience. For example, sudden shocks to income, such as those caused by droughts or crop price volatility, can cause households to remove children from school. Indeed, field visits to schools in Ethiopia, Niger, Madagascar and other countries revealed that this negative coping mechanism is utilised by households in drought-prone areas. Removing children from school can result in the loss of human capital in affected households,⁹⁴ as their education and learning are interrupted. In these situations, school feeding policymakers

94, (FAO, 2011)

must go beyond the idea of simply serving school meals as a way to attract and retain schoolchildren, and consider larger environments – physical, cultural, economic, demographic – in which school feeding operates. For example, in drought-prone areas, serving multiple, nutritious school meals per day can help households undergoing shocks keep children in school, as is the strategy in drought-prone areas of Niger; or, providing additional cash transfers to households in shock-prone areas can also help households keep children in school until their situations stabilise. Hence, designing school feeding programmes as part of comprehensive social protection responses, addressing all aspects of social protection policies, including prevention, protection, promotion, and transformation, requires the participation of policymakers across sectors to identify how to combine and implement appropriate interventions.

Another design element within school feeding programmes that can promote a systems approach is a multi-sectoral, developmental procurement strategy that incorporates local production to increasingly supply commodities over time. Procurement of commodities is a major element of a school feeding programme, and is largely affected by several policy levers and the participation of various actors. For instance, increasing local production capacities often requires the provision of agricultural extension services, thus requiring the participation of actors from the agricultural sector; while improving the quality of local produce may require the participation of actors from the nutrition or commerce sectors. But beyond the potential for procurement strategies to involve a range of cross-sectoral actors, a developmental procurement strategy that successfully improves the levels and quality of local production, links local producers to expanded markets and potentially facilitates the transition to higher value-added production and specialisation has the potential to transform national and regional markets, therewith contributing to overall socioeconomic development.

The above examples and scenarios highlight some ways in which a nationally owned school feeding programme, operating from a systems approach, can be promoted. These examples, though, are not meant to be recommendations per se, as the achievement of a systems approach to school feeding is not linear or based on fulfilling a certain set of requirements. The key to developing sustainable, systems-led school feeding programmes lies in finding mutually beneficial relationships between school feeding and other sectors, and developing those relationships by optimising design and implementation elements to the benefit of all actors and target populations involved. Therefore, this study can serve as a valuable resource for countries aiming to build or scale up to a national school feeding programme.

Concluding Thoughts

This chapter builds on the current trends of school feeding programmes on the continent and the existing evidence of outcomes and impacts presented in Chapter 1, as well as the conceptual framework for sustainable school feeding programmes developed in Chapter 2. Drawing on insights and conclusions generated in the preceding chapters, Chapter 3 presents recommendations and ways forward for school feeding programmes in AU member states, aimed at ensuring sustainability and national ownership, and promoting a systems approach to school feeding. Moreover, this chapter continues to assess school feeding programmes from a systems perspective, asserting that a country's policy landscape and development programmes function most successfully if policies and programmes are constantly influencing each other and evolving together; therewith, ultimately enhancing the sustainability of each individual programme.

Many school feeding policymakers already see the need to adapt current school feeding structures and models in line with current development priorities and strategies, and as a means of increasing school feeding programme sustainability. For example, school feeding policymakers interviewed during country missions reported the importance of embedding school feeding into cross-sectoral plans and frameworks, and some countries have achieved the integration of school feeding into social protection or other development frameworks. This is an important step in growing the sustainability of school feeding programmes at strategic, national levels through more multi-sectoral coordination and buy-in, with the expansion of HGSF and local production capacities complementary steps in increasing sustainability at the community level.

However, there is still more work to be done for enhancing sustainable school feeding on the continent. Here, the priorities and needs for reform differ for each AU member state, but every member state will need to identify its own school feeding priorities and areas of focus going forward. Nevertheless, as mentioned in Chapter 1, finding intersections and commonalities between school feeding programmes and high-level continental priorities can serve as useful learning and cooperation platforms for African policymakers. As a way of summarising the core 7 contained in Chapter 3, some priorities per recommendation requiring policymakers' attention across the continent are identified below:

- 1. Link school feeding programmes to international, continental and national development agendas:** Inclusion of school feeding into national development plans and/or social protection strategies.
2. Design and implement school feeding programmes to achieve cross-sectoral policy objectives:
 - » **Complementary interventions:** Going beyond health-focused interventions, complementary interventions in form of cash or in-kind transfers, potentially targeted to specific groups of students, can serve as instruments to support particularly vulnerable households. Additionally, more elaborate linkages to income-generating activities could be established; as such, linking school feeding programmes to public work schemes for the provision of necessary supply-side infrastructure serves as an example.
 - » **Menu design:** Diverse school meals that vary from day to day rate high in terms of nutritional content and student satisfaction. **Higher levels of locally produced goods, including fresh produce, can help ensure diverse menus and promote good dietary habits to schoolchildren.**
 - » **Delivery modality & timing:** **The provision of at least one, nutritious meal per school day in a year can help achieve education, health and nutrition outcomes of school feeding programmes.**
 - » **Targeting:** **With** rising levels of secondary school enrolment due to higher levels of primary school completion in Africa,⁹⁵ policymakers may need to consider expanding coverage of school meals to secondary school. Additionally, completion of secondary school can yield higher returns on long-term earnings, health, fertility, gender equality, and civic and political participation than primary school education.⁹⁶

95 (The Africa-America Institute, 2015)

96 (Duflo, Dupas, & Kremer, 2015)

- 3. Invest in and empower multi-sectoral response and coordination mechanisms:** The formalisation of multi-sectoral partnerships and arrangements in school feeding programmes, either through national policies and/or legal frameworks, should be pursued to add protection and sustainability to increased multi-sectoral cooperation.
 - » **Level of centralisation & community participation:** Investing more in the capacitation of local actors and communities in school feeding programme management can have long-term payoffs as communities take on more implementation responsibilities. Capacity development is also vital to teaching communities better financial management skills in decentralised school feeding structures.
- 4. Commit to developmental procurement strategies that exert a strong focus on increasing local production capacities:** Foster the continued growth of HGSF through more decentralised procurement processes that rely on communities for purchasing, transport and storage of commodities, and on local farmers to supply commodities. As such, school feeding programmes should concentrate on increasing local production capacities and ensuring a developmental procurement process, particularly one that consistently ensures sufficient supply-side responses to support growth.
- 5. Innovate financial arrangements by diversifying sources of financing for school feeding programmes and/or putting into place co-financing mechanisms:** Actively seeking out more financing sources for school feeding programmes is key to programme expansion and sustainability. In addition, implementing co-financing mechanisms has the ability to maximise returns to a country and its population.
- 6. Devote resources to stronger M&E systems and automate feedback processes to improve policy outcomes:** There is need for stronger M&E, not just on programme indicators and traditional school feeding outcomes, but on comparing the results of different school feeding modalities, targeting, institutional arrangements and/or complementary interventions; and comparing developmental outcomes across sectors. More comparative and cost-benefit analyses of school feeding models can be used in evidence-based policymaking on the most appropriate and effective school feeding model for a particular country and its contexts. Additionally, the uptake of more digitised, automated and electronic M&E capturing and reporting methods is important in creating more comprehensive data sets on school feeding outcomes.
- 7. Deepen and learn from South-South and pan-African cooperation to optimise policy impacts:** While regional procurement of school feeding commodities already happens in some areas, particularly Southern Africa, further pan-African cooperation could still be fostered. While this study is intended to take a first step towards increased pan-African and South-South cooperation in the area of school feeding, a more all-embracing exchange of ideas and good practices amongst policymakers of different countries is still encouraged. Moreover, the potential of school feeding to act as a vehicle to further grow regional cooperation and trade, with the overarching aim of maximising developmental outcomes and impacts of national school feeding programmes, is yet to be exploited.

Furthermore, concrete transition plans to national ownership of school feeding will be a main concern as WFP country offices, in a number of African countries, seek to reduce their role in school feeding implementation and occupy more of a technical advisory role.

Going forward, African policymakers and countries should strongly consider school feeding's place in strategic conversations on improving human capital, increasing access to income-generating activities, boosting national production and reaching desired impacts across the education and learning, health and nutrition, and agricultural and local economic development sectors. Building the skill levels of national workforces

through better education and health outcomes is particularly critical, given the more knowledge and services-focused trajectory of the global economy; while improving agricultural production and farming capacities are important aspects for the livelihoods and food security of many Africans who depend on agriculture as their source of income and food. The goals and objectives of the SDGs, Agenda 2063 and CESA 16-25 help set benchmarks for African policymakers' development plans, but the path to those benchmarks will require a set of adaptable and progressive interventions guided by a systems approach to development. However, in the continent's desire to foster social cohesion, promote inclusive social development and achieve sustained equitable economic growth, school feeding is well positioned to facilitate progress across goals, objectives and development agendas.

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