Improving Local Food Systems in East Africa using Schools as Catalytic Platforms, WFP

Key results:

- Driving improved climate resilient food systems as supply for school meals through scaling up climate smart, sustainable and inclusive home-grown school feeding programmes.

- Through the Danish support, WFP aims to reach around 21,500 small-holder producers to help them transition to climate-smart production practices.

- The outputs related hereto are: i) smallholder producers trained or received technical assistance, ii) increased awareness of climate-smart production across targeted value chains, iii) smallholder producers, other value chain actors and schools are linked, iv) Schools and national authorities are trained to efficiently operationalise school meals programmes including procurement practices.

Justification for support:

The project directly delivers on overall priority in The World We Share on building resilience in climate vulnerable countries. Specifically, it is relevant for the Danish intention of preventing humanitarian crises and being a strong humanitarian partner before, under and after humanitarian crises, including through enhancing longer-term sustainable nexus approaches, by addressing climate change as an underlying factor of vulnerability.

Further, the engagement delivers on the Danish government's priority of enhancing nexus approaches, through enhancing climate resilience for food security with national and local ownership in Kenya, Rwanda and Uganda, thus responding to climate change and lowering local vulnerability to climate and weather-related shocks, including in displacement contexts.

Finally, the project is a joint endeavour of the Alliance between the Danish MFA and some of the philanthropic foundations, Novo Nordisk Foundation and Grundfos Foundation, delivering on the public-private-partnership model.

Major risks and challenges:

- Decline in national priority of school meals and/or climate resilience building, leading to decreased cooperation and support from national authorities.

- WFP organisational changes in 2024 and strained overall budget, leads to pressure to focus on direct humanitarian relief efforts, consequently leading to down-prioritization of resilience building programmes and projects.

File No.	24/26602				
Country	Regional				
Responsible Unit	HUMCIV				
Sector	31120				
Partner	UN World Food Programme				
DKK million	**2024**	**2025**	**2026**	**2027**	**Total**
Commitment	40.0	0.0	0.0	0.0	40.0
Projected disbursement	20.0	0.0	20.0	0.0	40.0
Duration	December 2024- 31 December 2027				
Previous grants	None				
Finance Act code	06.39.03.13				
Head of unit	Birgitte Nygaard Markussen				
Desk officer	Thomas Thomsen				
Reviewed by CFO	Tobias Grønlund Nissen				

Relevant SDGs

Objectives

To improve the climate resilience of Rwandan, Kenyan, and Ugandan food systems around schools by scaling up climate-smart, sustainable and inclusive HGSF programmes, to supporting nutrition and educational outcomes for children, as well as sustainable local production by smallholder farmers in climate vulnerable countries.

Environment and climate targeting - Principal objective (100%); Significant objective (50%)

	Climate adaptation	Climate mitigation	Biodiversity	Other green/environment
Indicate 0, 50% or 100%	**100%**	0	0	0
Total green budget (DKK)	**DKK 40 mill.**	0	0	0

Justification for choice of partner:

WFP is a long-term trusted strategic partner to Denmark, providing both humanitarian and development efforts in fragile and climate vulnerable contexts. Under the current Multilateral Strategic Development Agreement between DK MFA and WFP, building climate adaptation in WFP's food assistance to strengthen resilience, sustainable food systems and climate smart agriculture is one of the key strategic objectives.

Summary:

Together with Grundfos Foundation and Novo Nordisk Foundation, the Danish MFA supports WFP's Home-grown School Feeding Programme in Kenya, Rwanda and Uganda to improve local food systems, using schools as catalytic platforms through three pillars: i) Transition of local smallholder producers to climate-smart production; ii) Improve the quality of school meals, iii) promote cleaner cooking technologies and practices schools. MFA support is targeted pillar 1.

Budget (engagement as defined in FMI):

Impact pillar 1: Transition of local smallholder producers to climate-smart production	DKK 34.88 million
Direct support cost	DKK 2.63 million
Indirect support cost (6.5 pct.)	DKK 2.48 million
Total budget	**DKK 40.0 million**

'Improving Local Food Systems in East Africa using Schools as Catalytic Platforms' Joint Project Document for the Grundfos Foundation and Danish Ministry of Foreign Affairs

November 2024

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List of Acronyms

ACR	Annual Country Report
CSA	Climate-smart agriculture
CSP	Country Strategic Plan
CRF	Corporate Results Framework
DSC	Direct Support Costs
FLA	Field-Level Agreement
FSC	Farmer Service Center
FSQ	Food Quality and Safety
FWGA	Fortified Wholegrain Alliance
GMCCs	Green Manure Cover Crops
HGSF	Home-Grown School Feeding
ISC	Indirect Support Costs
KNSFP	Kenya National School Feeding Programme
LRP	Local and Regional Procurement
M&E	Monitoring and Evaluation
NARO	National Agricultural Research Organisation
NNF	Novo Nordisk Foundation
NSFP	National School Feeding Programme (Rwanda)
OFSP	Orange Fleshed Sweet Potato
PHM	Post-harvest management
PMT	Programme Management Team
RBN	Regional Bureau Nairobi
RCSHN	Research Consortium for School Health and Nutrition
RF	Rockefeller Foundation
SAMS	Smallholder Agriculture Market Support
SBCC	Social and Behaviour Change Communication
SDG	Sustainable Development Goals
SMC	School Meals Coalition
TOC	Theory of Change
WFP	UN World Food Programme
ZARDI	Nabuin Zonal Agricultural Research Institution

1. Introduction

This project document outlines the background, rationale and justification, objectives and management arrangements for the development cooperation concerning the joint project 'Improving Local Food Systems in East Africa using Schools as Catalytic Platforms' 2025-2027, as agreed to by the World Food Programme (WFP) and the Grundfos Foundation (GF) and the Ministry of Foreign Affairs of Denmark (MFA). The project document will be an annex to legal bilateral agreements between WFP and the MFA and WFP and GF, respectively, and constitutes an integral part hereof together with the documentation specified below. The project is a collaborative partnership between WFP, the Novo Nordisk Foundation (NNF), the MFA, and GF. This project will focus Kenya (Turkana, Baringo and West Pokot Counties), Rwanda (national), and Uganda (Karamoja Region).

The overall project aims to drive improvement of Rwandan, Kenyan and Ugandan food systems around schools by scaling up climate-smart, sustainable and inclusive Home-Grown School Feeding (HGSF) programmes, with the objective of supporting nutrition and educational outcomes for children, as well as sustainable local production and opportunities for cleaner cooking technologies and practices in climate vulnerable countries. In Kenya, specifically the refugee and host community populations in Turkana County, has been added due to synergies with the existing programme 'the Alliance for Inclusive Refugee Response'[1] (of which three of four parties are included). The project is centred around the roll out of a holistic and tailor-made solution to improve local food systems. The framework outlined below has been co-created with strategic priorities at the intersection of WFP's operations and NNF, GF and the MFA strategies. The overall project will adhere to three impact pathways:

1) Transition local smallholder producers to climate-smart production and build linkages to schools to enhance productivity, improve livelihoods, increase sustainable water access, and build climate preparedness;

2) Improve quality of school diets and food preparation by providing technical support and assistance to governments and schools in delivering affordable, diverse, nutritious, safe and locally-sourced meals, health services and water access to improve overall health and nutrition of school-going children;

3) Promotion of cleaner cooking technologies and practices for schools, through support to reduce the need for traditional cooking fuels such as firewood and charcoal, reducing deforestation and environmental degradation around schools as well as increasing health benefits by decreasing harmful emissions.

More detailed information about the project can be found in the full project proposal for NNF[2] while this joint project document specifies the support from the MFA and GF.

As the implementing partner, WFP will work to improving and climate proofing food by strengthening existing HGSF programmes enhancing children's health and nutrition through the provision and preparation of local nutritious school meals sourced from smallholder producers and other local value chain actors, contributing to the local economy. WFP, together with relevant partners (such as FAO, UNICEF, UNHCR),[3] enables access to healthier diets through its own programming as well as through collaboration and technical assistance to governments.

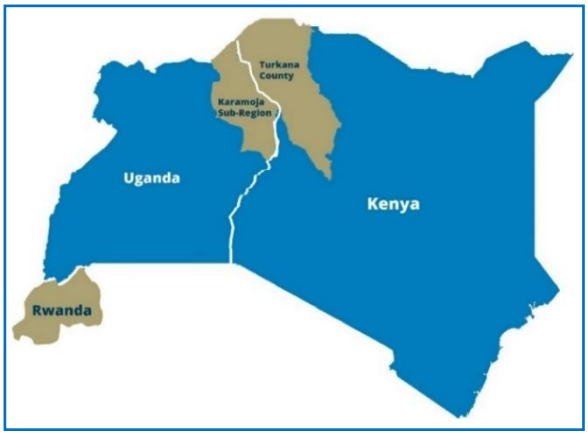
[1] Alliance for Inclusive Refugee Response: An alliance of the Danish MFA, the County Government of Turkana and NNF, Lego Foundation and GF – joined efforts in supporting inclusive refugee responses and promoting more durable and longer-term solutions in refugee hosting areas in Kenya. In the "Improving Local Food Systems in East Africa using Schools as Catalytic Platforms" project, WFP Kenya activities will be reaching the same geographic area and beneficiary schools in Turkana.

[2] NNF project proposal in Annex 10

[3] By nature of HGSF, multisector engagement is critical for successful programmes, brining key actors across education, health, nutrition and agriculture together. In many countries, UNICEF is the natural partner for WFP linked to school health and nutrition services to achieve quality education. With FAO, WFP oftentimes partners or complements FAO's work in school gardens, conservation agriculture, milk value chains and aquaculture.

2. Context, strategic considerations, rationale, and justification

2.1 The Context



Project Map: Rwanda, Uganda (Karamoja sub-region), and Kenya (Turkana County)

Food insecurity is at a tipping point in East Africa. As of July 2024, 62 million people were food insecure.[4] The region is exposed to increasingly more frequent and extreme shocks caused by climate change and weather-related events, man-made conflict, and socio-economic disruptions, all combined to create record levels of hunger, malnutrition, and a crisis of children out of school. Food systems in the region are deteriorating at an increasing rate, negatively affecting the resilience of local communities.[5]

Climate related shocks are a cross-cutting threat to communities and governments alike, countries face exponential collateral damage, posing systemic risks to their economies, infrastructure investments, water, agriculture, and livelihoods. Consequently, inefficiencies and vulnerabilities of agri-food systems are exposed and further exacerbated by conflict, displacement, security challenges and poor governance.

Climate change is already undermining food systems in many parts of this region, contributing to a rise in hunger and threatening the livelihoods of millions of farmers, herders and fishers. WFP identifies five distinct capacities that are key to a resilient food system in the face of climatic shocks: (i) to anticipate, (ii) to prevent, (iii) to absorb, (iv) to adapt to an evolving risk and (v) to transform in cases where the current food system is no longer sustainable.[6]

In tackling these challenges, this project is guided by a holistic approach where interventions are designed to be context-specific, leveraging WFP's vast experience and operational presence in the region to deliver sustainable solutions that address the causes of food insecurity and build long-term resilience. This is pursued through a focus on immediate food and nutrition needs, improved health and education outcomes, and sustainable livelihoods, while enhancing the efficiency and effectiveness of humanitarian and development efforts. WFP's approach emphasizes people-centred action, adherence to humanitarian principles, context-sensitive programming, integrated partnerships across the humanitarian-development-peace nexus, risk-based decision-making, and evidence-driven impact.

As a multi-mandated United Nations (UN) agency with an extensive operational footprint, WFP operationalises the nexus in two ways: a) by contributing to broader efforts of the UN and governments to strengthen the coherence and complementarity of humanitarian, development and peace efforts while advancing food security and nutrition priorities as part of these efforts; b) through its own programming across the humanitarian, development and peace domains, which is undertaken in collaboration with other H, D and P stakeholders, and which contributes to collective outcomes for the achievement of the Sustainable Development Goals.

UN partnerships across the 3 countries vary depending on the context and needs. These partnerships aim to deliver in an integrated and impactful manner key interventions identified in vulnerable populations. In Rwanda, WFP is working closely with United Nations High Commission for Refugees (UNHCR) to address the humanitarian needs of refugees and asylum seekers and strengthen their self-

[4] WFP, Food Security And Nutrition Situation In Eastern Africa July 2024
[5] Regional Sustainability, Climate change risk, resilience, and adaptation among rural farmers in East Africa: A literature review
[6] Regional Sustainability, Climate change risk, resilience, and adaptation among rural farmers in East Africa: A literature review

reliance and livelihood opportunities. WFP also partners with FAO, UNICEF and the WHO to strengthen Government capacities to improve nutrition among Rwandans, and FAO, IFAD and WFP work closely together with Rwanda's Ministry of Agriculture and Animal Resources to sustainably transform food systems in Rwanda. In Kenya, WFP works with FAO and IFAD under the Rome-Based Agencies (RBA) collaboration on the National Food System dialogue and UNHCR in Kakuma Refugee Camp and Kalobeyei Settlement in Turkana County. Partners with UNICEF, FAO, IFAD, and UNESCO on the UN Joint Programme on Sustainable Integrated Water Management. In Uganda, WFP partners with the UN Central Emergency Response Fund (UNCERF) and has established partnership agreements with UN agencies including UNHCR, FAO, WHO, UNICEF, and the United Nations Capital Development Fund (UNCDF). In Karamoja, WFP and FAO already support a concerted effort to strengthen the shock-responsiveness of national social protection systems, including through the scale up of Anticipatory Action. WFP and FAO supported the co-development of comprehensive Anticipatory Action Plans (AAP) for drought and floods in Karamoja.

Central to WFP's mandate are the goals of eradicating hunger and malnutrition (SDG 2) and fostering strong partnerships (SDG 17). The ways in which WFP operationalises the nexus depends on a range of contextual factors. For example, in some contexts, there is strong government control and leadership across the development and humanitarian spheres. WFP works to support national governments' efforts in building resilience by implementing operations at the nexus between humanitarian assistance and development initiatives. These efforts are complemented by other partners' support to ensure resilience building through integrated and layered efforts.

The breakdown of food systems puts rural farming communities at an exponential risk. They not only rely on functioning food systems for their livelihoods but are now faced with increased adversities of climate change, causing poor crop and livestock yields along with water scarcity. Inadequate post-harvest management (PHM) systems in addition to the pervasive issue of poor food safety and quality (FSQ), exacerbate leakages and losses in these already limited environments. Food losses also have an impact on economic development. In 2021 alone, Kenya lost the equivalent of USD 160 million and Uganda USD 120 million from post-harvest loss of major staple crops like maize and sorghum.[7]

Food systems in East Africa are additionally challenged by a lack of water availability due to increased temperatures in arid and semi-arid areas, requiring agricultural production systems to adapt to current and projected climate changes and to cope with changing ecosystems. In this context, WFP ensures either through in-house expertise or in partnership with contracting partners that it promotes nature-based solutions,[8] new partnerships, and innovative approaches to provide crucial support to building livelihood resilience and helping communities adapt their food systems to climatic changes and climate shocks.

The term "food system" refers to the constellation of activities involved in producing, processing, transporting and consuming food. Food systems touch every aspect of human existence[9]. Addressing the problems of food systems demands the full recognition of the interrelationships among diet, food production, ecosystems, public health and human rights. Re-examining food systems, from production to consumption, has never been more important.

In Sub-Saharan Africa, women make up 50 percent of all agricultural workers in crop, livestock, fisheries and forestry production.[10] Despite their critical role in food systems and care work, gender inequality fundamentally drives numerous vulnerabilities for women and girls in local food systems. The needs of women as producers and consumers are systemically overlooked in the design of production and market systems, which are compounded by a lack of access to productive resources

[7] Financial importance of PHL on the GDPs of some Eastern African countries, https://www.aphlis.net/en/data/tables/financial-impact/ET/all-crops/2021?metric=prcWHO Africa, Deaths from noncommunicable diseases on the rise in Africa

[8] NBS proposed in this project include solutions such as conservation agriculture, agroforestry, organic fertilizer usage etc.

[9] https://www.un.org/en/food-systems-summit/about

[10] FAO. 2023. The status of women in agrifood systems. Rome. UNESCO Institute for Statistics, 6 Out of 10 Children and Adolescents Are Not Learning a Minimum in Reading and Math

and agency in decision-making at home. Moreover, women are disproportionately burdened with food shortages and poor diets during a time of food crisis, impacting their overall well-being, nutrition, and maternal health.

Growing populations, rise of urbanization, and the continued use of unsustainable practices in food systems are also disrupting the environment. Currently, food systems contribute to a third of all human-induced greenhouse gas emissions. In East Africa, high volumes of food produced is wasted throughout the value chain, meaning that significant amounts of resources utilized for food production (i.e. land, water, fertilizers. etc), are also wasted, driving biodiversity loss.

Sub-Saharan Africa is facing a nutrition crisis, as malnutrition continues to affect a significant part of the population, either as hunger, food insecurity, or diet-related diseases.[11] In East Africa, 65-95 percent of households cannot afford a healthy diet, resulting in 30-40 percent of children (including adolescent girls) suffering from one or more forms of malnutrition,[12] thereby compromising learning preparedness and health. The unaffordability of a healthy and nutritious diet shapes consumption patterns and drives access to unhealthy foods.

Failed food systems affect children the most. The combined effects of conflict, climate, and food systems crises contribute to learning poverty in Sub-Saharan Africa, with one in five children unable to attend school,[13] and 90 percent of children aged 6 to 14 failing to achieve minimum proficiency in reading and mathematics.[14] Providing children with nutritious school meals can provide safety nets that fuel and sustain educational opportunities, social protection, gender equality, and economic growth. Across the East African region, 15.5 million children received school meals in 2023, provided either by the Government or WFP. The HGSF model offers a sustainable, holistic solution to transform local food systems. Its design ensures that children, including displaced children, receive nutritious daily school meals while smallholders can count on steady demand and fair pricing.

2.2. Rationale for Climate Resilient Home-Grown School Feeding

The following briefly presents the national commitments and priorities within climate adaptation and national school meals programmes.

National Climate Policies

Kenya: Kenya's national policies and commitment to strengthening climate resilience, particularly in its agriculture and food systems, is evident in its alignment with national climate policies, including the Nationally Determined Contributions (NDC), and the National Climate Change Action Plan, which underscores the urgency of integrating climate adaptation measures across all sectors to safeguard and enhance food security for populations vulnerable to climate impacts. The project will directly support this commitment by enhancing climate resilience in the Arid and Semi-Arid Lands (ASALs), areas most susceptible to climate-induced variability. It aligns with Kenya's strategic focus on climate adaptation and resilience as crucial components of its Bottom-up Economic Transformation Agenda and Medium-Term Plan IV (2022-2027).

Rwanda: In 2011, the Government of Rwanda introduced the Green Growth and Climate Resilience Strategy (GGCRS), Rwanda's first attempt at plotting a climate resilient and carbon neutral development pathway. In 2023, the GGCRS was revised to align with the Government's Vision 2050, defining a clear development pathway for Rwanda that fosters a climate-resilient and carbon neutral economy and harnesses green economic innovation.[15] The Strategy reaffirms the Government of Rwanda's long-term commitment to effectively implement green and solidarity-based growth, to

[11] Research Consortium for School Health and Nutrition, SCHOOL MEALS AND FOOD SYSTEMS: Rethinking the consequences for climate, environment, biodiversity and food sovereignty, 2023

[12] UNESCO; Ready to learn and thrive: School health and nutrition around the world, 2023

[13] UNESCO Institute for Statistics, Education in Africa

[14] UNESCO, 250 million children out-of-school: What you need to know about UNESCO's latest education data, 2023

[15] https://www.rema.gov.rw/fileadmin/user_upload/Rwanda_Green_Growth___Climate_Resilience_Strategy_06102022.pdf, 2022

achieve the country's climate action agenda, which focuses on climate resilience and low carbon development through both adaptation and mitigation. The Strategy's objective is to achieve sustainable land use and water resource management that results in food security, appropriate urban development and the preservation of biodiversity and ecosystem services.

Uganda: The Government of Uganda acknowledges the impact of climate change on the environment and economy in the Comprehensive National Development Planning Framework, particularly in terms of reduced agricultural production, productivity and incomes. Uganda was the first country in Africa to sign the NDC Partnership Plan in 2018, as part of its efforts to meet its obligations to the Paris Agreement of reducing national greenhouse gas emissions and adapting to climate change.[16] Uganda's NDC prioritizes adaptation, with specific focus on (i) reducing vulnerability in agriculture and livestock, forestry, infrastructure, water, energy, health and disaster risk management; and (ii) scaling up sustainable land management and climate-smart agriculture (CSA) efforts to increase resilience at grassroots level.[17] In 2021, Uganda launched the National Climate Change Act that governs Uganda's national response to climate change.

National School Feeding Policies

Kenya: The Kenya Operational Plan for scaling up the School Meals Programme (SMP) from 2024 to 2030 aims to address food insecurity, malnutrition, and disrupted education in Sub-Saharan Africa. The plan highlights the strategic importance of school meals in promoting education and supporting local agriculture, particularly through a climate-smart, home-grown approach. Despite Kenya's strong commitment to a universal SMP by 2030, challenges such as learning poverty, climate change, and food insecurity continue to hinder progress. Kenya's history of SMP, which began in 1980 and was strategically transferred to government control in 2008 for sustainability, is now managed by the Ministry of Education and aims to provide school meals to over 10 million children by 2030. The current budget, however, falls short of meeting the needs of 2.3 million learners, especially in Kenya's ASALs and vulnerable areas. To scale up the SMP effectively, the plan outlines five key areas: prioritizing beneficiaries based on aridity and socio-economic factors, providing cost-effective and nutritionally valuable meals, optimizing delivery and procurement models, integrating climate-smart practices, and securing sustainable funding. The SMP will focus on local procurement, promoting climate-smart agriculture, and introducing clean cooking practices, all of which aim to support smallholder farmers and reduce environmental impacts. Key enablers of this scale-up include sustainable funding, collaboration with non-governmental SMPs, advocacy, and improved monitoring and evaluation systems, with an emphasis on digitization at the school level and enhancing the smallholder aggregator model for efficient implementation.

Rwanda: In Rwanda, the Government has developed a comprehensive School Feeding Policy (2020) and Strategic Plan, which focuses on six key areas: expanding school feeding coverage, ensuring nutrition-sensitive programming, promoting school gardening, securing sustainable financing, linking local farmers to school feeding markets, and fostering partnerships and coordination across sectors. The School Feeding Policy aligns with national and international strategies, including Rwanda's National Strategy for Transformation (NST1), Vision 2020, and the Sustainable Development Goals 2 and 4. Its vision is for all Rwandan children to achieve their full development potential through a sustainable program providing nutritious meals at school. The policy emphasizes the use of locally sourced food to support farmers, while promoting capacity development for stakeholders. Additionally, multi-sectoral collaboration and a robust monitoring and evaluation system are integral to track progress and ensure the program's success over a five-year period.

Uganda: In Uganda, WFP has been working with the Government to implement school feeding in Karamoja for more than 40 years. The Government of Uganda's National Vision 2040 and the National Development Plan III recognizes school feeding, health, and nutrition and WFP has supported the

[16] https://cgspace.cgiar.org/server/api/core/bitstreams/41ab96c2-3889-4b59-89b6-10a803af8e6b/content, 2020.
[17] WFP; State of School Feeding Worldwide, 2023

Government to develop a multi-sectoral School Feeding Policy, which is expected to be released in 2024. The Government of Uganda has recently joined the School Meals Coalition and submitted their national commitments, which are yet to be published. Their increased engagement over the past year is evident through their work on the School Feeding policy, Menu Formulation, and other related initiatives, reflecting a growing commitment to improving school feeding systems.

Climate Resilient Home-Grown School Feeding

HGSF presents a salient opportunity for more climate-friendly, scalable models for food systems transformation. Through HGSF, schools source ingredients locally, from smallholder farmers (SHF) in their local community. By starting with a nutritious, climate-smart school meal and working in reverse through the supply chain to the smallholder, HGSF programmes can catalyze demand-driven changes within the system.[18] These actions include the adoption of climate-smart production practices and the diversification of crops grown and consumed as part of local food baskets. Sourcing food locally is also more environmentally sustainable, because it shortens supply chains, cuts transport time, and minimizes food waste. Children receive safe, nutritious food, while farmers can count on steady demand and fair pricing for their fresh produce.

In alignment with WFP's Global School Feeding Strategy (2020), HGSF programmes are anchored in national frameworks, promoting strong partnerships with governments and alignment with national priorities. Since the establishment of the Global School Meals Coalition (SMC) in 2021 – 98 countries including Uganda, Rwanda and Kenya – have joined the SMC. Governments are prioritizing these investments because they have significant social and economic returns. Existing evidence indicates impressive multi-sectoral benefits for school meals; for every USD 1 spent on school meals, there is an estimated economic return of USD 9. This is achieved by improving outcomes related to education, health and nutrition, social protection and local agriculture.[14]

Smallholder market support and value chain approaches

SHFs are the backbone of the agricultural sector in East Africa, producing many of the major commodities consumed in the region. Despite their central role, SHFs are among the most vulnerable to climate change and its impacts, and many are at risk of food insecurity and poor nutrition. Climate adaptation of agriculture and food systems is critical, not least in East Africa, where most people depend on this sector for their livelihoods. The lack of climate adaptation in agri-food systems contributes to increasing food insecurity.

WFP is currently implementing smallholder market system development programmes in over 40 countries globally – including Kenya, Rwanda and Uganda – to help farmers gain better access to structured markets. WFP promotes a value chain approach to address systemic barriers to accessing markets. To achieve this, WFP collaborates with public and private actors, including local government, universities, research, implementing partners and private sector actors. These programmes are considered one of the main avenues by which WFP can influence and reshape how food systems function to make them more equitable, robust and sustainable.

The provision of a guaranteed market for SHFs, through reliable and predictable formal contracts from private and public buyers, is a game-changer that drastically changes the way the whole value chain works.[19] WFP trains farmers on bulking and price negotiations, in order to help SHFs link directly to bigger markets, and bypass middlemen, thus reducing costs. The organization is uniquely positioned

[18] Hunter D, Loboguerrero AM, Martinez-baron D. Next-generation school feeding: Nourishing our children while building climate resilience. UN Nutrition Journal VOLUME 1: TRANSFORMING NUTRITION. Avai;ab;e at: https://cgspace.cgiar.org/bitstream/handle/10568/125753/journal%20article.pdf?sequence=1

[19] This is demonstrated by a rich literature on contract farming. See Da Silva, C.A. 2005. The Growing Role of Contract Farming in Agri-food Systems Development: Drivers, Theory and Practice. Rome: Agricultural Management, Marketing and Finance Service, FAO, http://www.fao.org/sustainable-food-value-chains/library/details/en/c/266526/; Prowse. 2012. Contract Farming in Developing Countries - A Review. Institute of Development Policy and Management, University of Antwerp. https://www.researchgate.net/publication/321224983_Contract_farming_in_developing_countries_-_a_review.

to implement successful demand-led value chain development programming,[20] either through direct implementation of smallholder market development programmes or through strengthening the systems within which other actors operate in parallel to our interventions. WFP envisions to influence other public and private buyers to adopt pro-smallholder business models to catalyse change at scale.

A value chain development approach looks beyond individual actors, such as SHFs and cooperatives. It puts the connections between actors in the chain at the centre and the rules and regulations that govern the market systems, when considering how to achieve development goals. Interventions focus on bringing changes within the entire system – improving performance at the level of producers, processors and other value chain actors and the (contractual) relationships among them, the flow of knowledge and information and the overall governance and coordination in the chain.[21]

WFP is cognisant of the fact that the duration of this project is not sufficient to allow for all the interventions necessary for successful value chain development given the complexity of interventions and the myriad of partners that are needed to ensure this. WFP will aim to leverage continued support and integration into national systems to ensure sustainable results, highlighting the importance of multi-year finance to ensure successful resilience building to be done through integrating and layering activities within WFP and other organizations ongoing programs throughout the value chains.

Addressing Gender Inequality

Food systems improvement cannot be achieved without gender equality. For WFP, the pursuit of gender equality and women's empowerment is central to fulfilling its dual mandate to end hunger and save lives. Discriminatory gender norms and harmful power dynamics play a key role in driving food insecurity and poor nutritional outcomes for women and girls. Backed by a robust body of global evidence on these critical linkages between gender inequality, food security, and nutrition, WFP's current Gender Policy prioritizes in-depth, gender-transformative approaches that address the root causes of gender discrimination and the marginalization of women and girls across all of WFP's intervention areas. Gender transformative approaches seek to understand and directly address the root causes of such inequalities and discrimination.

To strengthen the resilience of women and marginalized people, WFP considers the complex drivers of vulnerability that hamper their livelihoods. For example, WFP helps to address barriers and norms that impede women SHFs' access to essential services (e.g. information, extension and financial services) and empowers women through greater control over resources to strengthen their capacity to manage shocks. In addition, WFP is increasingly prioritizing gender transformative approaches to address the root causes of gender inequalities that drive food insecurity, malnutrition and women's economic exclusion, in order to secure deeper impact and sustainability of gains made.

WPF has evidence-driven programming targeting boys and girls including holistic planet friendly school feeding, and complimentary nutrition and Early Childhood Development and Early Childhood Education interventions. WFP's nutrition interventions are purposefully designed to reduce acute malnutrition, boost micronutrients and healthy diets, and support children's development in the first 1000 days. WFP's Planet-friendly school meals programme targets both pre-primary and primary children and has proven education, health and nutrition, agriculture, and social protection outcomes. School feeding programmes are proven to improve enrolment and attendance, and as such are essential platforms for play-based learning in schools, especially in more acute humanitarian settings.

[20] Eastern Africa, Evaluation of Local and Regional Food Procurement Pilot Programmes 2021-2023 | World Food Programme (wfp.org)

[21] Donovan J., Cunha M., Franzel S., Gyau A., Mithofer D. CTA. 2015. Guides for Value Chain Development: A comparative Review, http://www.worldagroforestry.org/sites/default/files/Review%20guides%20VCD%20-%20ICRAF%20CTA%202013.pdf; UNIDO. 2011. Pro-poor Value Chain Development: 25 guiding questions for designing and implementing agroindustry projects. United Nations Industrial Development Organization (UNIDO). Vienna, Austria, https://www.unido.org/sites/default/files/2011-12/Propoor_value_chain_development_2011_0.pdf.

An independent strategic evaluation of WFP's contribution to school feeding initiatives found widespread evidence of the positive effects of school meals on enrolment, especially for girls.[22] In addition, evidence shows that school meals attract students to schools serving a "magnet effect," and when school feeding is combined with a conducive educational environment creates a "catalyst effect" that can improve learning outcomes. These programmatic areas provide ideal entry points for WFP to capitalize on, in the interest of strengthening sustainable and transformative impact for gender equality, food security and nutrition.

2.3 Localization

Localization and Policy Context

The localization agenda gained traction during the 2016 World Humanitarian Summit. Since then, localization has been prioritized by the humanitarian community in key multilateral and inter-agency fora, such as the Grand Bargain and the Inter-Agency Standing Committee. As a signatory of the Grand Bargain Workstream 2 on "more support and funding tools for local and national responders", WFP had committed to transferring at least 25 percent of humanitarian funding to local and national responders as directly as possible by 2020 to improve outcomes for affected people and to reduce transactional costs.

The strategic plan for 2022–2025 commits WFP to strengthening the capacity of local governments and organizations and to prioritizing local and equal partnerships. WFP is making substantial investments in localization through its programming on integrated resilience and on HGSF; by strengthening national and local social protection, supply chain and food systems; and by supporting women-led groups and local organizations in coordination mechanisms. The key components of localization – partnerships, capacity strengthening, funding, participation, and coordination – are embedded across several of WFP's policies, key strategies and pieces of guidance[23].

WFP is developing a localization policy in view of its strategic objectives and commitments and building on its localization efforts through a broad spectrum of operations across different contexts. The policy aims to define the scope of its localization efforts and to bring clarity to better position WFP as it continues to invest and support a diverse range of local actors. WFP has developed a draft policy and conducted consultations with various stakeholders, including Denmark, to further refine the policy draft which will be presented to the Executive Board at its annual session in June 2025. Moving forward, WFP sees this as an opportunity for Denmark to provide catalytic expertise and support to WFP.

Local Production & Procurement

Domestic production is better value for money, supports the local economy, and strengthens national food systems, especially when over-reliance on imports creates food insecurity when global supply chains are disrupted (as with COVID and the Ukraine war). A WFP procurement report shows that local pro-smallholder farmer procurement costs an average of 13 percent less than the respective import parity prices. Overall, local food procurement using pro-smallholder modalities has enabled WFP to achieve savings of more than USD 42 million compared with the costs of purchasing and importing the same commodities, revealing that purchases from SHFs can be cost-efficient and can even result in cost savings compared to importation.

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[22] Strategic evaluation of the Contribution of School Feeding Activities to the Achievement of the Sustainable Development Goals | World Food Programme (wfp.org); Kenya, McGovern Dole International Food for Education and Child Nutrition 2016-2022: Evaluations | World Food Programme (wfp.org); Rwanda, Food for Education and Child Nutrition (2016-2020): Mid-term and Endline Evaluations | World Food Programme (wfp.org); Rwanda, Home-Grown School Feeding (2020-2025): Evaluation | World Food Programme (wfp.org)

[23] Among others, the draft resilience policy update (2024), the cash-based transfer policy (2023), the country capacity strengthening policy update (2022), the gender policy (2022), the WFP strategy for supporting social protection (2021), the protection and accountability policy (2020), the school feeding strategy (2020–2030), the local and regional food procurement policy (2019), the emergency preparedness policy (2017) and the peacebuilding policy (2013).

Additionally, local and regional procurement stimulate countries' GDP / production. In particular, WFP's Lewie study[24] found that across the RBN region, each dollar spent by WFP increases the value of total production by USD 2.30 on average and that real GDP increases by USD 1.42.

Transport emission data is not yet readily available or reliable because the complexity in calculations stem from multiple modes of transport, each with varied carbon footprints. However, research states that consuming local food can reduce the carbon footprint and improve sustainability. WFP's Logistics Execution and Support System enables the organization to have clear visibility of any food movement from the suppliers to the distribution handover. Using this information, WFP logistics developed a comprehensive model and tool for the calculation in real time of the carbon emissions - which has informed the analysis of the comparative advantage of local and regional food procurement versus international procurement in terms of carbon emissions. However, the demand of food in the region is so high that local and regional sourcing alone cannot satisfy the needs. Therefore, WFP is pursuing a dual objective: increasing local and regional procurement and modernising the regional and in-country logistics infrastructures.

Defining 'Local' in HGSF programmes: HGSF is rooted in local sourcing of food from SHFs. As previously referenced, "local" is defined differently across the three countries. In Rwanda, the government's procurement guidance promotes procurement from within a district, when possible, and "local" means from within the borders of the country. In Kenya, "local" is defined within the county where the school is located, and food should be sourced from local markets, avoiding imports. In arid and semi-arid counties in Kenya, food for school feeding is oftentimes sourced from surrounding counties. In Uganda, local means food that is purchased directly from SHFs in the region.

Reliable and sustained sourcing from smallholders: With the end goal in mind (government ownership and management of HGSF programmes), WFP must ensure that local sourcing from smallholders is reliable, paid for at attractive prices, and sustained through systems, strategies and guidelines. In each of the three countries, WFP will take a different but similar approach to procurement of food from smallholders, as described in more detail below.

Kenya

In a county like Turkana with harsh climatic conditions, ensuring that sufficient quantities of food are produced locally is a key priority. Agricultural production is possible in certain parts of the county, and a shift to more CSA and regenerative practices creates potential to increase the production of drought tolerant and nutritious crops. Sustainable business models with strong linkages to the private sector, along with the development of pro-smallholder procurement strategies, are critical to ensure adequate food supply to schools. Lake Turkana offers opportunities to link fisheries to school meals, an area WFP is already engaging in. Promotion of pastoral production, such as dairy, in school meals is another potential area to ensure local procurement of foods for schools.

To ensure sufficient supply of food for HGSF in Turkana, some food for schools is sourced from neighbouring counties Baringo and West Pokot. WFP has a strong and long-standing partnership with county governments in the ASALs and is already working in Baringo and West Pokot on the supply and market side, supporting SHFs and cooperatives with CSA practices and strengthening local farmers' market access. The county government plays an important role on the supply side to the KNSFP, and strong linkages are needed between the national and the county government to ensure the supply and demand sides meet.

In the aggregator model, the Government will enter into Framework Agreements with farmers organisations who aggregate the food from registered SHFs. This model is built on existing work by

[24] Corong, E., Kagin, J., Taylor, E., and van der Mensbrugghe, D.(2022) Economic Assessment of World Food Programme Expenditures in East Africa. WFP RBN.

WFP in Kenya, where food is being aggregated from local farmers and capacity is being built. Counties have adopted strategies where they commit to procure a minimum of 30 percent of their institutional food needs from local SHFs. WFP is also working upstream with off-farm value chain actors such as Farmer Service Centers (FSC), agro-dealers, and aggregators, providing business development training, service provision, access to finance, and transportation.

Rwanda

The Government of Rwanda has prioritised school feeding as a programme that can transform the local food system. The NSFP is the largest market in the country for food procurement, and thus an attractive platform for farmers. The Government's new procurement model - developed together with WFP - directs schools and districts to source foods for school meals from local markets. WFP is working with the ministries of agriculture, trade and industry and education to ensure that the NSFP procures as directly as possible from local SHFs, and builds capacities of both the buyers (schools and districts) and the SHFs to maximise the linkages. The new local procurement model facilitates long-term planning and security for both districts and farmers.

WFP has informed the design of this model through pilot testing and technical assistance. Data shows that most of the food purchased for the NSFP is indeed produced in Rwanda. The main food where importation continues to bridge a local production gap is fortified food: fortified oil, salt, and maize meal. Occasionally, ingredients for Rwandan-made fortified flours are also imported from the region (particularly maize). In WFP's HGSF programme, WFP supports local markets through cash transfers to schools, to create a demand for fresh fruits, vegetables and animal protein, to complement the core meal. In 2023, WFP injected USD 160,000 into local economies in Rwanda, for the purchase of fresh foods from SHFs.

Uganda

WFP's HGSF model in Karamoja is based on centralized procurement directly by WFP. HGSF has the potential to transform local food systems, despite the region's agricultural and climatic challenges. Local procurement of staple crops creates a reliable market for SHFs and encourages agricultural diversification. WFP's procurement from SHFs has increased and in 2023, WFP sourced over 2,000 MT of maize and beans from SHFs in Karamoja, resulting in USD 1.9 million injected into the local economy.

In Uganda, WFP works with 36,000 SHFs. In order to enhance capacity of SHFs' participation in the market through this project, as well as guarantee adequate supply for schools, contract farming and forward contracting will be used by WFP. Other pro-smallholder procurement modalities will be explored, including vouchers. Price setting will be determined to ensure alignment with market prices.

In Karamoja, WFP works with a network of farmer organizations and medium and small enterprises involved in bulking and collective trading of agriculture food commodities. To guarantee SHFs produce the right quantities and quality of food, capacities in good agronomic practices, entrepreneurial skills, PHM practices, and agribusiness, will be strengthened. SHFs, especially women, are also supported with skills on financial literacy and business management. Lastly, WFP supports CSA through small-scale irrigation provision and regenerative practices.

Farmers have the autonomy to choose their buyers, ensuring they receive competitive prices. While WFP anticipates that most of the production will be sold to schools, while the rest will be available for sale on the open market, enhancing market dynamics and farmers' incomes. By not imposing predetermined obligations, WFP supports a balanced market, which allows farmers to benefit from the best prices. WFP's programme is led by the Government and WFP is building stronger relationships with the ministries of education and agriculture. HGSF can ensure a reliable market for

the farmers supported under Government-led agriculture development programmes, such as the Karamoja Feeds Karamoja Initiative.

Partnerships for Implementation

In each country, WFP has existing, strong relationships with local and national governments. This engagement is multi-sectoral in nature, involving all relevant sectors, including agriculture, environment, finance, education, health, social protection and gender. In addition, WFP Cooperating Partners remain an essential part of the implementation and achievement of WFP's Country Strategic Plans (CSP). WFP has a wide range of existing partners linked to ongoing engagements, and this will be expanded during the project implementation. WFP continues to advance the localization agenda, through collaboration with National Non-Governmental Organizations (NGO) and Governments to increase its footprint in hard-to-reach areas, strengthen capacities, and leverage local knowledge, skills, and solutions while fostering stronger coordination amongst various stakeholders for sustainability.

Kenya

WFP Kenya adopts holistic context-based approach to value chain development, (availability of water, soil, waste management, climate information dissemination, post-harvest loss, food safety and quality, value addition, market linkages, policy development) and green technologies in smallholder practices. Programmes are linked to other programs including HGSF and relief/refugee operations and strong advocacy for women and youth engagement, reduced food waste, a nutrient and market driven approach (what can be consumed thus mitigating waste). WFP Kenya has strong working relationships with county governments which provide extension services and leverage on government investments on climate smart production practices as well as private sector actors in the space of food systems.

WFP leverages activities on existing government integrated development plans. The activities are handed over to the community with support from the County government. The FSC model and other established local structures including Farmer Organizations ensures knowledge is retained with the programme beneficiaries.

Uganda

WFP works closely with District Local Governments (DLG) in Uganda, the implementing arm of Government, who have also led the development of the Karamoja Resilience Strategy. The DLGs will provide oversight of the activities, including through their district extension officers as well as provision of technical support. The Karamoja Resilience Secretariat is the sub-region's platform that is mandated by the DLGs to coordinate the resilience and livelihoods sector in Karamoja and is the entity that supports and enables collaboration with other development partners in a manner that ensures synergies across programmes, pooling and optimisation of resources.

WFP has long experience in partnering with reliable and highly skilled NGO partners.

To effectively implement the activities in the proposal while maintaining a close connection to the HGSF in Karamoja, strategic partnerships with various stakeholders are important. The Ministry of Education and Sports (MoES) and DLGs in Karamoja are essential partners due to their deep understanding of local socio-economic, cultural and environmental contexts. Their involvement ensures that the proposed interventions are aligned with national and district development plans. These DLGs can facilitate community mobilization and ensure sustainability through local ownership.

Collaborating with the research bodies like the National Agricultural Research Organization is critical for the development and promotion of drought-resistant and nutrient-dense crops, as well as for

introducing innovative regenerative farming techniques. Educational institutions and other agricultural training institutes will play a pivotal role in developing educational narratives on climate change and training local technicians.

WFP can also count on NGOs partners such as and Andre Food International with their strong community presence and expertise in livelihoods programming, water systems, nutrition and climate resilience are well-positioned to support training and capacity-building in Karamoja. Other partners such as Danish Church Aid and Water Mission can also be considered based on their technical expertise and field experience leveraging other interventions.

The private sector partnerships with companies like Tulima Solar and other local companies is essential for the successful deployment of mobile solar-powered irrigation systems. WFP has existing partnership with private sector in Uganda to support refugee farmer groups with solar-powered irrigation to increase productivity while making use of clean and sustainable solar energy. These partnerships are strategically chosen to align with the specific needs of the proposed activities while ensuring they contribute to the overall goas of the school feeding programme in Karamoja. By leveraging the strengths of each partner, WFP can ensure that the activities are effectively implemented, sustainable, and closely tied to improving the nutrition and livelihoods of school children in Karamoja.

Rwanda

WFP remained a key strategic partner to the Government of Rwanda. In 2023, WFP and the Government signed new agreements through the Ministry of Trade and Industry to enhance local procurement for the NSFP, and with the Rwanda Standards Board to collaborate on ensuring food security and quality. Moreover, WFP and Cultivating New Frontiers in Agriculture (CNFA) formally committed to make use of synergies between their programmes "Feed the Future Rwanda Hinga Wunguke Activity" funded by USAID and "Shora Neza" funded by the Mastercard Foundation. This partnership aims to increase agriculture productivity, improve access to finance and profitable markets, improve nutrition outcomes, and create an enabling environment for food systems strengthening, while increasing employment opportunities for youths, especially young women. Through the technical working group on Shock-Responsive Social Protection, WFP engages regularly with the World Bank, KfW, and other key agencies. This helped to identify synergies and work in complementarity in support of the Government to strengthen national social protection mechanisms. Among the areas for technical cooperation, it was agreed to focus on disaster risk financing in the year ahead.

As part of WFP's commitments under the Grand Bargain to localize initiatives, WFP is working with 24 cooperating partners in Rwanda: ten Government agencies, seven non-governmental organizations (NGOs), three of which are local NGOs, and seven UN agencies. In addition, 425 rural cooperatives benefitted from WFP's support to SHFs. WFP's partners play an important role in delivering food and nutrition assistance to refugees and asylum seekers, in implementing home-grown school feeding, resilience and social protection as well as support to SHFs. In Rwanda, WFP currently partners with CNFA Hinga Wunguke, Duhamic ADRI, Rwanda Rural Rehabilitation Initiative, Good Neighbors International, Gardens for Health International, Mennonite Central Committee, and One Acre Fund within the agriculture and smallholder market development spaces.

2.4 Actors and key stakeholders

Novo Nordisk Foundation – Funding Partner

HGSF and the localization of food production for humanitarian operations are thematic areas of focus within the Social and Humanitarian programme of NNF. These themes complement two out of three

of the pillars within the NNF 2030 Strategy: Health and Sustainability. In 2022, NNF supported WFP with a USD 4.1 million grant over 18 months for HGSF and SHF support programmes in Rwanda and Uganda. The first project phase has allowed NNF to establish a solid partnership with WFP. NNF established a Letter of Intent with WFP in 2022.

NNF will support up to USD 30,500,000 for this second project phase, pending Board of Directors decision 25 September 2024. NNF's funding will support core programming, and all three impact pathways as all cross-cutting issues. NNF is also a partner of the Global SMC and supports the work of the Research Consortium for School Health and Nutrition (RCSHN), an initiative of the SMC.

Danish Ministry of Foreign Affairs – Funding partner
Supporting sustainable food systems transformation as part of the larger climate change adaptation and resilience building in climate vulnerable countries is a central Danish development cooperation priority. Denmark has a long-standing partnership with WFP, currently based on the 2022-2025 partnership agreement[25] and the Danish organization strategy for WFP. This project falls under the WFP-Danish priority area 2 (Advance climate adaptation and anticipatory action in WFP's food assistance programmes). The priority aligns with the objective of the Danish development cooperation strategy, *The World We Share*, on strengthening action to support climate change adaptation, nature, the environment and resilience in the poorest and most vulnerable countries, including by supporting CSA and sustainable food systems, preventing food loss and food waste, promoting agro-organic cultivation methods, and strengthening green value chains. This will build resilience, improve food security and generate employment. Further, The Danish government is a member of the SMC.

Under the joint project, the MFA will support Impact Pathway 1, focusing on transformation of smallholder producers to climate-smart production, including innovative solutions for climate resilient agriculture, as this is viewed as a long-term solution to reducing local vulnerability to climate shocks. With the project's and Impact Pathway 1's focus on enhancing climate resilience in HGSF, including in refugee and displaced settings, thus bridging between climate, humanitarian and development efforts, this project also supports the Danish priority of enhancing nexus activities in fragile contexts in Africa. The MFA will support with up to 40 million DKK, conditional on approval by the Minister for Development Cooperation, anticipated in Q4 of 2024.

Grundfos Foundation – Funding partner
The Grundfos Foundation has a focus on developing resilient societies using water as a catalyst[26] for sustainable change. With this partnership, the GF broadens its committed to expanding water access and providing climate adaptation solutions in Eastern Africa. By supporting water solutions for climate-smart production, the HGSF programmes in Kenya and Uganda will be strengthened. The focus on CSA will include the rehabilitation and establishment of water access and irrigation based on sustainable water management. GF will support with up to 20 million DKK, conditional upon the Foundation's Board of Director's decision on 10 September 2024. GF's funding will support the addition of a water component within Impact Pathway 1 (Transitioning smallholder producers to climate-smart production).

Key Stakeholders and Partner Collaborations
Target stakeholders are based on WFP's existing programming in each of the countries, strong partnerships, understanding of key stakeholders and past experience implementing these types of programmes, built over decades of engagement in school feeding, agriculture and food systems. The project employs inclusive approaches, ensuring that all population groups—particularly the most vulnerable—are actively considered in the design and implementation of interventions. By engaging

[25] Currently, an agreement and a strategy are in place between WFP and the MFA. These include the Multilateral Partnership Agreement and Denmark's engagement strategy for WFP 2022-2025. This project will go beyond the existing strategy and is rooted in a longer-term vision when it comes to the WFP/DK partnership.
[26] Grundfos Foundation Annual Report, 2023.

NGOs and local communities, the project leverages local knowledge and skills to ensure that assistance reaches those in hard-to-reach areas, fostering self-reliance and working to ensure that no one is left behind. While the broader project with NNF outlined in Annex 10 will engage additional stakeholders such as students, teachers, and school committees, this project document highlights the stakeholders directly supported by the MFA and GF. These include:

- **Smallholder producers and other value chain actors, particularly women:** Smallholder producers and other value chain actors – such as food processors and traders – will be supported in value chain development activities, food safety and quality, etc., and will be directly engaged in the procurement for school meals by schools. Cooperatives are also key stakeholders to facilitate services and aggregation and can act as learning centres to promote climate-smart technologies and practices.
- **Local and National Governments:** The WFP country teams have existing, strong relationships with local and national governments in each country. This engagement is multi-sectoral in nature, involving all relevant sectors, including education, agriculture, environment, finance, gender and health.
- **Private sector and financial institutions:** WFP will work in partnership with a broad coalition of private sector actors – at both country-level as well as regionally – to overcome bottlenecks and identify solutions together. This coalition will also include partnerships with financial institutions to support innovative finance approaches for smallholders and other value-chain actors.

Partner Collaborations: UN Rome-Based Agencies

The UN agencies seek to leverage the strengths and expertise of each organization to enhance resilience in fragile environments and improve food security for those who need it most. FAO, IFAD and WFP cover a spectrum of work that spans from humanitarian responses to emergencies and shocks, to resilience and development activities, aligning with the 2030 Agenda. At the regional and country levels, the RBAs have been working to reposition their strategies and enhance their effectiveness in the areas of agrifood systems, nutrition, gender equality and women's empowerment, resilience building, youth, and climate change, environment and biodiversity. The operations of the individual RBAs in-country are based on their respective mutually complementary and distinct mandates which often require them to engage with different stakeholders, including ministries covering a variety of (sub-)sectors. Individual RBA operations are also often located in geographically distinct zones, addressing a diverse set of contexts and stakeholders. Despite their unique footprints, the RBAs have resolved to identify operational commonalities and administrative synergies.

WFP's corporate school feeding policy highlights that WFP will support the design of planet-friendly school meal programmes and policies that leverage local procurement to promote shorter, more sustainable and inclusive value chains for diverse, culturally appropriate and nutritious food. The RBA have a special role in this area. By working together, FAO, IFAD and WFP can support home-grown approaches and provide SHFs and other local actors involved in the food value chain, particularly women, young people and Indigenous people, with access to information, innovative productive practices, inputs, finance and reliable markets.

Partner Collaborations: Non-RBA UN Collaborations

School Feeding programmes require collaboration with many key actors across education, health, nutrition, agriculture and energy. National school feeding platforms such as technical working groups, seek to bring multisectoral actors together to ensure cross-sectoral engagement. UNICEF and WFP have joined forces to ensure that millions of vulnerable school children globally, in fragile countries receive the health and nutrition support they need in schools to grow, learn and thrive. Through this initiative, WFP and UNICEF are aiming to implement complementary operational capacities to support Governments to implement an integrated approach to improving school health and nutrition programmes. Additionally, in refugee and emergency settings, WFP partners with UNHCR to deliver school feeding, nutrition and resilience building interventions. Both partners aim to ensure that school

feeding programmes in refugee settings are designed in alignment with national standards and protocols, and with an eventual aim to transition and scale up towards nationally owned and operated school feeding programmes, where possible.

2.5 Lessons learned and past results

The design of this Project has been informed by lessons learned in WFP's previous work on food systems, smallholder agriculture market support (SAMS), local and regional procurement (LRP) and HGSF programmes and initiatives in Eastern Africa and beyond. WFP is a trusted 'enabling' and capacity strengthening partner of governments in Kenya, Rwanda and Uganda, and well aligned to these Government's general and technical development policies, as highlighted in recent WFP evaluations and programme reports. All climate and resilience interventions - including climate-resilient HGSF – build on WFP's global experience and technical knowledge.

Lessons learned on Climate-Resilient Home-Grown School Feeding

WFP has learned that a home-grown approach to school feeding provides a significant return on investment for the entirety of the ecosystem surrounding the school, including by creating stable and predictable markets for smallholders. More recently, WFP is recognizing that HGSF provides an opportunity to drive the demand of climate-smart and resilient food crops locally, in turn driving positive improvements in the food system to adapt to the changing climate. This shift from carbon-demanding food imports to local procurement, strengthens the sustainability of programmes and could contribute to reducing their carbon footprint.

Rwanda and Kenya have adopted HGSF policy frameworks, developed jointly with WFP, and made significant government commitments to the Global SMC to reach nationwide school meals coverage, backed by significant budget increases. WFP continues to provide strong school feeding technical support in both countries including on food procurement, designing school menus, and scaling up the national school feeding programmes in both Kenya and Rwanda.

Strong government commitment is key to the scale up and sustainability of more climate-resilient HGSF programmes. In Kenya for example, President Ruto has declared a scale-up of the Kenya National School Feeding Programme (KNSFP), requesting WFP to support its new climate-friendly HGSF approach, shifting away from carbon-heavy food imports and transitioning to cleaner cooking.

Climate-Smart Production

Climate adaptation of agriculture and food systems is important in order to build resilience, especially in East Africa, where the majority of populations rely on farming for their livelihoods. WFP is uniquely positioned to support value chain development programming through its direct implementation of SAMS. WFP has the capacity to leverage significant quantities of pro-smallholder demand for food through its own procurement requirements. WFP also has the facilitation influence over other buyers to promote pro-smallholder procurement (e.g. school feeding, national reserves, cast-based transfer retailers, millers and brewers). Through its convening power, WFP can become the driver or catalyst for demand-led value chain development, including the promotion of more nutrition-sensitive and climate-resilient food.

Investments in boosting agri-food systems are leading to increased productivity through climate-smart approaches. The adoption of conservation agriculture (CA) by farmers has been proven to increase crop productivity between 5 and 40 percent over time, while reducing soil erosion by more than 50 percent.[27] In addition, CA improves soil health, increases water productivity up to 40 percent, reduces labour and increases incomes. Overall, CA improves livelihoods, conserves and regenerates soil health and biodiversity and reduces greenhouse gas emissions.

[27] Scaling conservation agriculture-based sustainable intensification systems in Ethiopia, International Maize and Wheat Improvement Center (CIMMYT).

An integrated HGSF model fosters an enabling environment for climate-smart agri-business, using schools as an entry point to provide a predictable market for farmers. In Uganda, NNF's phase 1 investment enabled WFP to introduce a new nutritious value chain in schools and communities – orange-fleshed sweet potatoes (OFSP). Students are now eating OFSP in their school meals, grown from farms and gardens around their schools. WFP has learned that to better ensure the sustainability of food production quality and quantities, a market approach must be used to incentivize farmers.

Evaluation evidence has shown that WFP has developed strong partnerships with governments and contributed to strengthening national and local capacities, supporting sustainability. Examples include Rwanda's national commitments on CSA, greening school feeding and food standards and Uganda's multi-sectoral school feeding policy development currently underway.

Local and Regional Procurement & Local Economies

Modern food systems face numerous challenges, including food insecurity, malnutrition, and greenhouse gas emissions. The current model heavily relies on fossil fuels for production, transportation, and processing, contributing significantly to greenhouse gas emissions and climate change. Deforestation and land-use changes for agriculture further exacerbate the problem, releasing more carbon dioxide into the atmosphere. Therefore, in order to form a more resilient and sustainable future, the transformation of food systems is imperative.

In the face of climate change and its profound implications for food security, school meal programs present a unique opportunity to lead the charge toward sustainable food systems transformation. By prioritizing nutritious, climate-friendly meals produced locally and sustainably, schools could contribute to reducing their carbon footprint and inspire the next generation of environmentally-conscious citizens. As we invest in improving the health status of children and the planet, collective efforts to rethink the food systems around school meal programs can drive us closer to a more resilient and sustainable environment.

School meals make up about 70 percent of a country's publicly procured food, in countries that have school meal programs.[28] Public procurement can be used as a catalyst to influence farmers to grow new types of crops (indigenous, drought-tolerant) and use climate-smart practices that regenerate soil, restore ecosystems and support biodiversity.[29] Local procurement can drive the diversification of school menus to include new fresh, nutritious and indigenous foods while strengthening women's empowerment through the important role they plan in food production and meal preparation.

WFP's ability to leverage its capacity to influence market systems based on its own procurement, is a driver and catalyst of value chain development and a promoter of nutrition sensitive food production. From a local and regional procurement perspective, there is demonstrable evidence[30] that when local procurement approaches are integrated into programming, it can be an effective mechanism for addressing bottlenecks in value chains, enhancing food systems, and for improving livelihoods and resilience of smallholders. Evaluation evidence has highlighted the effectiveness of WFP directly procuring from smallholders both in price transmission and as an incentive to improve productivity and quality.

Domestic production supports the local economy, and strengthens national food systems, especially when over-reliance on imports creates food insecurity when global supply chains are disrupted (as with COVID and Russia's war in Ukraine). In Uganda, WFP's HGSF programme has already made significant strides in stimulating economic growth. From 2022 to 2023, WFP registered a fivefold increase in the amount of food procured from smallholders in Karamoja, injecting USD 1.9 million into the local economy. In Rwanda, WFP provides cash transfers to schools for the purchase of fresh fruits,

[28] Research Consortium for School Health and Nutrition, SCHOOL MEALS AND FOOD SYSTEMS: Rethinking the consequences for climate, environment, biodiversity and food sovereignty, 2023

[29] Research Consortium for School Health and Nutrition, SCHOOL MEALS AND FOOD SYSTEMS: Rethinking the consequences for climate, environment, biodiversity and food sovereignty, 2023

[30] Local and Regional Procurement Evaluation, RBN 2024.

vegetables, and animal-source foods to increase the nutritional value of the meal. In 2023, these local purchases injected over USD 450,000 into the local economy. WFP's Lewie study[31] found that across the RBN region, each dollar spent by WFP increases the value of total production by USD 2.30 on average.

In Rwanda, the procurement model for school feeding has proven to be a key entry point for the sustainability of the NSFP model. The WFP Rwanda country team supported the NSFP's initial home-grown design when the programme was first launched in 2021, as well as its recent procurement model reform. WFP's capacity strengthening and technical assistance support to the Government is focused on procurement (with a focus on maize and beans value chains and now through NNF's partnership, increasingly on procurement from environmentally sustainable sources). Additionally, WFP's SAMS programmes have granted WFP entry points for designing suitable contracting modalities and developing guidance together with relevant ministries, districts and local authorities in Rwanda.

Investments have increased in all three countries to advance decentralized procurement models for HGSF, enhance linkages with smallholder producers and the diversification and improved nutritional quality of school meals. Examples include Baringo County in Kenya, where the Government created a 30 percent smallholder procurement requirement for public procurement and Rwanda where the Government increased the NSFP budget from USD 37 million in 2021 to USD 74 million in 2023.

Additionally, by changing the emphasis to menus that demand locally produced climate-friendly foods with high nutritional value, one can help influence food systems and agricultural practices. They can also stimulate crop diversity and broaden the local food basket especially as some forgotten foods are valued, thereby supporting food security. These changes will promote a shift towards sourcing school meals from ecologically sustainable production systems, using HGSF approaches or embedding local procurement in school guidelines. Local procurement from SHFs can boost agricultural development, strengthen local food systems, stimulate crop diversity, and move people out of poverty. Government and community-led changes to the national school meals programs can catalyze regenerative agricultural practices which, if appropriately designed, can promote biodiversity and climate change resilience. Procurement practices have also been shown to enable food sovereignty. HGSF provides an important framework to empower farmer organizations and food producers to take climate action, improve biodiversity, reduce supply chain length and support local and regional food systems. There are also additional positive multiplier effects for other groups of people along the HGSF value chain such as local catering businesses, many led by women, traders and transporters, as well as SMEs, many in rural areas, who can achieve higher incomes and improved livelihoods thus increasing resilience and providing pathways to adaptation to climate change.[32]

WFP's corporate logistics system enables the organization to have clear visibility of any food movement from the suppliers to the distribution handover. Using this information, WFP has developed a comprehensive model and tool for the real-time calculation of carbon emissions – which has informed the analysis of the comparative advantage of local and regional food procurement versus international procurement in terms of carbon emissions.

Water Security for Food Security

In the East Africa region, the water-energy-food nexus is becoming an increasingly important and urgent topic to address as resources are being constrained under economic, climatic and humanitarian crises. After the historic drought of 2020-2023 in the Horn of Africa, which devastated livelihoods across the region, as well as recurrent floods, WFP is scaling up its efforts to deliver high-quality, holistic water-energy-food programming in Eastern Africa, as a pathway to climate resilience and food systems strengthening with the goal of bringing humanitarian needs down. While HGSF programmes

[31] Corong, E., Kagin, J., Taylor, E., and van der Mensbrugghe, D.(2022) Economic Assessment of World Food Programme Expenditures in East Africa. WFP RBN.

[32] Rethinking food systems and school meals: climate, environment, biodiversity and food sovereignty https://schoolmealscoalition.org/wp-content/uploads/2023/10/Planet-Friendly-School-Meals-White-Paper-Executive-Summary_en.pdf

offer a sustainable, holistic solution to transform local food systems – a lack of access to sufficient and clean water is limiting the success of these programmes.

Recognising that water and food are inextricably linked and are two sides of the same coin in building local resilience, WFP has decades of experience in enhancing communities' water access and security through asset creation and livelihoods activities. These activities – often facilitated through food, cash, or voucher transfers – increasingly require the involvement of qualified engineering staff from WFP, government or implementation partners. WFP's asset creation activities in fragile and climate vulnerable contexts have benefitted communities through a wide array of interventions revolving around water – such as water harvesting, soil conservation, land rehabilitation applying agroecology principles, the creation and rehabilitation of community gardens and irrigation systems, flood protections, and the development of water points in communities.

In Kenya, WFP's investments in water infrastructure in the ASALs has enhanced access to water for multipurpose use (crop production, livestock, and domestic use), increased land under cultivation and helped communities to reduce dependence on external assistance. Integrating water and land management interventions (i.e. rainwater harvesting, production of drought-resistant crops) has been a critical link to enhance water collection, improve soil health and reduce land degradation.

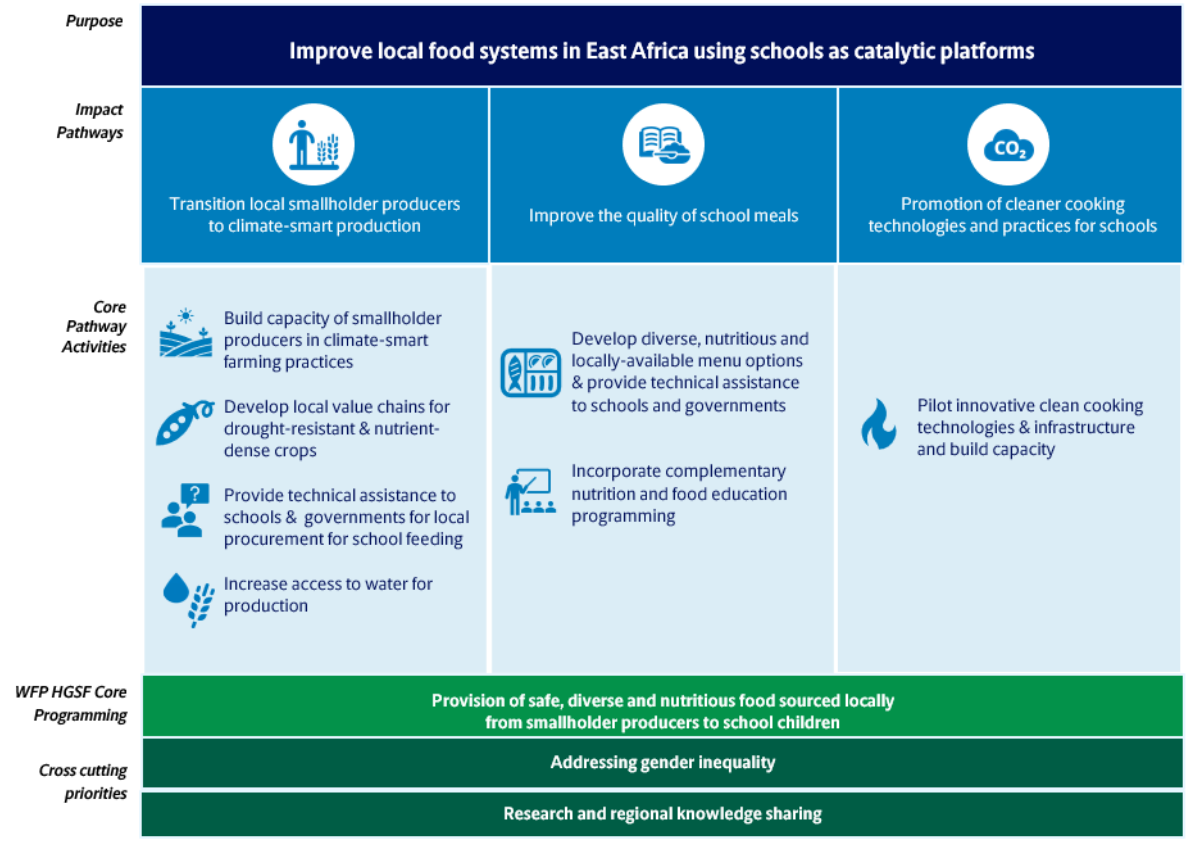
By restoring landscapes and ecosystems and bolstering water access and management, WFP is able to enhance food security and resilience building, improve communities' capacities to adapt to climate change, and contribute to global mitigation efforts. Research on WFP's asset creation interventions related to water management have highlighted increased water availability, reduced runoff and soil erosion, and improved management outcomes.[33] These interventions have led to expanded agricultural areas, enhanced crop yields, and improved livestock health and productivity.

3. Project Description and Objective

3.1 Project Visual

Figure 1 summarises the framework for this engagement.

[33] https://odi.org/en/publications/water-for-food-security-lessons-learned-from-a-review-of-water-related-interventions/



3.2 Challenges, Project Overview, & Expected Results

Challenges

Climate change is negatively affecting food systems in Kenya, Rwanda and Uganda, contributing to increasing hunger levels and threatening the livelihoods of millions of smallholders. To address these challenges, this project is guided by a holistic approach where interventions are designed to be context-specific, leveraging WFP's vast experience and operational presence in the region to deliver sustainable solutions that address the causes of food insecurity and build long-term resilience.

WFP's approach emphasizes people-centred action, adherence to humanitarian principles, context-sensitive programming, integrated partnerships across the humanitarian-development-peace nexus, risk-based decision-making, and evidence-driven impact. This project prioritizes vulnerable populations, addressing structural inequalities and ensuring marginalized groups benefit from climate resilience strategies. By working closely with local and national governments, WFP ensures that its interventions respect human rights principles while promoting local ownership, which is critical for sustainable, equitable outcomes.

Gender and Youth: The project includes gender-responsive approaches and actively involves youth in climate resilience efforts, acknowledging their role in sustaining future climate action. When it comes to gender equality, HGSF programmes have proven to be a game-changing intervention. They give poor families a powerful incentive to send or keep their children in school. Without inclusive design for gender, we fail to recognize and empower women as key contributors to food systems and hinder the potential for inclusive and effective solutions. Backed by a robust body of global evidence on these critical linkages between gender inequality, food security, and nutrition, WFP's current Gender Policy prioritizes in-depth, gender-transformative approaches that address the root causes of gender discrimination and the marginalization of women and girls across all of WFP's intervention areas. Food systems improvement cannot be achieved without gender equality. For WFP, the pursuit of gender

equality and women's empowerment is central to fulfilling its dual mandate to end hunger and save lives.

Project Overview and Expected Results

The objective of the *Improving Local Food Systems in East Africa using Schools as Catalytic Platforms* project is to improve the resilience of Rwandan, Kenyan, and Ugandan food systems around schools by scaling up climate-smart, sustainable and inclusive HGSF programmes, with the objective of supporting nutrition and educational outcomes for children, as well as sustainable local production by smallholders and other value chain actors and opportunities for cleaner cooking technologies and practices in climate vulnerable countries. Governments are prioritizing these investments because they have significant social and economic returns. Existing evidence indicates impressive multi-sectoral benefits for school meals; for every USD 1 spent on school meals, there is an estimated economic return of USD 9. This is achieved by improving outcomes related to education, health and nutrition, social protection and local agriculture.[34]

WFP has strong and long-standing partnerships with governments and provides technical assistance to rural farmers to enhance production and commercialization of agricultural production. WFP's experience suggests a need for stronger facilitation of market linkages between farmers and school feeding.

Target stakeholders are based on WFP's existing programming in each of the countries, strong partnerships, understanding of key stakeholders and past experience implementing these types of programmes, built over decades of engagement in school feeding, energy and agriculture.

Taking a systems approach, the support in this project document will focus on enhancing outcomes of the first pillar of the broader joint project: Transitioning local smallholder producers to climate-smart production. WFP will achieve this by accelerating the uptake of sustainable and climate-resilient water and production solutions by smallholders to enable climate-smart production for HGSF programmes. By supporting the uptake of these solutions and drawing lessons learned and best practices, WFP will leverage its' operational footprint in some of the most remote and fragile contexts in Eastern Africa to support food security in fragile food systems, using HGSF as the entry point.

3.3 Project Activities: MFA

The activity lists below are indicative. Following project approval, WFP and the MFA will further define activities and targets.

Kenya

- Promote the production of climate-smart and nutritious crops (i.e. sorghum, millet, orange-fleshed sweet potatoes (OFSP), biofortified beans, etc) through advocacy with the County government for increased investment in production and provision of agricultural extension services.
- Facilitation of linkages with private sector players for quality inputs and services including certified seeds, fertilizers, mechanisation, transportation and financial services.
- Support formation of Village Savings and Loan Associations and Savings and Credit Cooperatives for ease of access to financial services.
- Conduct trainings and HGSF learning events targeting Government Officers including members of School Boards of Management and Education Officers in Turkana County, to support implementation of the aggregation model and the climate-smart HGSF programme.
- Support county Government and other stakeholders to operationalize Turkana County's pro-smallholder procurement strategy and guidelines, to enable local procurement of 30 percent of institutional food requirements in Turkana and stimulate demand.

[34] WFP; State of School Feeding Worldwide, 2023

- Build capacity of smallholder groups. Capacity will be built through: 1) trainings (climate-smart production & sustainable post-harvest management techniques), 2) the provision/linkage to certified quality inputs (i.e. seed banks) and services to smallholders, and 3) the construction, rehabilitation and renovation of agriculture infrastructure (aggregation centres, cold storage, irrigation, and demonstration farms).
- Promote low-carbon practices and solutions with SHFs at the farm level through training (waste disposal, reduction of food losses, logistics, PHM solutions and linkages to quality inputs and services, solarization of technologies, etc).
- Support formation and training of farmer organisations, Farmer Service Centres (FSC) and other aggregators on leadership and governance, management and dealings with structured markets like schools, record keeping, financial management and investment.
- Support implementation of FSQ guidelines along major value chains and establish mini labs (for the rapid testing of mycotoxin and food quality as well as building the capacity of market actors) to ensure marketable surplus is safe and of high quality.
- Sustainable land management practices that ensure long-term farm productivity by preserving and enhancing soil fertility will be implemented within farms. These will include improved soil water storage through establishing on-farm/in-situ water harvesting structures, the use of mulching and reducing the intensity and frequency of tilling and integrated pest management. Notably, the starting point for these interventions will be through training and demonstration of the related agroecosystems techniques to the farmers. Sustainable land management will also enhance the capacity of the natural resources to recover from disturbances like pests, diseases and extreme weather events.
- Introduction of agroforestry through creation of shelterbelts that will have the multiple benefits of conserving soil moisture, preventing soil erosion and protecting the crops on the farms.
- Support and strengthen climate change planning committees, extension officers, and FSCs to interpret and disseminate actionable climate information services to farmers.
- Support smallholders and other value chain actors' transition to climate-smart practices to enhance productivity, diversity and resilience. This will include the promotion of labour-saving climate-smart technologies such as the use of rippers and planters, improved crop and pests management and enhancing community seed banks that feature the collection of indigenous varieties of the local food systems.
- Advocacy for CSA input subsidies, friendly standards and certification. Decarbonization practices at farm level will be promoted on proper waste disposal and effective utilisation of harvest by-products. It will enhance support for exhibitions that showcase climate-smart agriculture produce and products including practices, technologies and inputs.
- Support promotion and linkages to sustainable context-specific post-harvest management practices and context specific solutions including dry and cold chain solutions along the value chain for indigenous crops especially horticultural produce. These practices help preserve produce that would otherwise spoil. By ensuring that produce is available beyond the immediate harvest season, farmers can access markets that require a consistent food supply throughout the year, such as schools. Additionally, developing, maintaining, and managing cold chain facilities and other post-harvest infrastructure creates employment opportunities in rural areas, particularly benefiting young people and individuals with disabilities.
- Support the development of digital marketing platforms to provide linkages between smallholders and schools and further diversify markets for surplus produce thereby increasing farmers' income which will be reinvested into the adoption of climate smart practices.
- Support the dissemination of early warning and climate information services to farmers, crucial for enhancing resilience to climate variability.[35] This involves creating tailored messages in local

[35] WFP Kenya will work with NDMA and KMD to generate and disseminate climate information. Currently, WFP Kenya does not have any funding for AA activities in Turkana, and is actively exploring funding opportunities to roll AA out in this region.

languages that provide specific, actionable advice. Utilizing FSCs, extension officers and technology such as mobile phones and radio ensures broad and effective reach to the last mile with information services. In addition, integrating climate information services in farmer training programs, demonstration plots, and community workshops will empower farmers to use the information effectively. With access to timely climate information,[36] farmers can optimize the use of resources such as water, fertilizers, and pesticides, minimizing waste and reducing costs. It also informs and incentivizes the adoption of CSA practices, such as using drought-tolerant crop varieties or implementing water-saving irrigation techniques.

Uganda

- Promote biodiverse alley cropping. In this system, beneficial tree and shrub species are lined between fields of annual crops. Conservation agriculture principles will be integrated namely, minimising soil disturbance, ensuring permanent organic soil cover, and promoting diverse crop production including through rotation or intercropping of legumes with cereals. This approach ensures more resilient production through conservation of soil and water in Karamoja's semi-arid climate.
- Develop educational narratives on climate change to build awareness among students and communities, demonstrating the project's contribution to climate change mitigation and adaptation.
- Strengthen district capacity and ownership to support regenerative farming systems through training of trainers in regenerative resilience.
- Provide rainwater harvesting facilities in schools to collect and store rainwater to provide dry season irrigation for kitchen gardens. This will complement the usual school meal and improve the dietary diversity of meals served to students. The rainwater harvesting facilities will be used to enhance the production capacity of these gardens, which also serve as educational tools for schools.
- Design context-specific regenerative farming systems together with communities through a participatory process. Site design will leverage local knowledge and practices around ecosystem stewardship and food production.
- Stabilise landscape hydrology by creating farm-based rainwater harvesting structures including bioswales, contour dams and half-moons to slow, sink, spread and save variable rainfall to support land restoration and production while reducing flood risk. Without these water harvesting structures, fields are more vulnerable to fast-moving run-off as well as dry spells due to reduced soil moisture retention.
- Establish protected riparian (riverbanks) buffer zones through a combination of farmer managed natural regeneration and indigenous tree planting to provide a range of ecosystem services, notably by reducing flood risk, recharging groundwater, and intercepting sediment, nutrients, and chemicals (e.g., from pesticides) from surrounding land use, to promote long-term ecosystem health.
- Work with institutions such as the Nabuin Zonal Agricultural Research Institution (ZARDI) and the National Agricultural Research Organisation (NARO) to develop a seed system for identified indigenous species that are nutritious as well as drought and disease tolerant.
- Support the creation of dedicated governance structures in districts, school and communities (including youth) to monitor, maintain and oversee activities and expand regenerative resilience.

Rwanda

[36] This activity is not weather forecasting - which is done by Kenya meteorological department (KMD). In this activity, WFP supports **last mile climate information dissemination** to ensure that SHFs have access to tailored climate information that inform their farming decisions e.g. optimal date for planting, what crops to plant, type of seeds etc.,

- Develop tailored approaches to promote climate-resilient practices and improve natural resource management for each of the key communities. This will include:
  - Build capacity through tailored training, coaching sessions, and knowledge exchange visits of SHFs and actors on the uptake of conservation agriculture.
  - Promote the adoption and effective employment of climate-resilient practices including methods and tools for minimum tillage, soil erosion control, and time-saving practices adapted to women farmers
  - Promote agroforestry, Green Manure Cover Crops (GMCCs) and compost making. This includes the establishment of nurseries, training, demonstration plots for compost making and introducing different GMCCs to lead farmers.
- Promote hillside water catchment approaches and structures for improved water management and small-scale irrigation.
- Promote community seed banks and seed saving systems that feature the collection of indigenous nutrition sensitive varieties
- Generate evidence on the impact of climate-resilient practices in different micro-climatic zones.
- Support the coordination of the CSA multi-stakeholder platform to effectively promote and scale-up CSA as described in the government's new Strategic Plan for Agricultural Transformation (PSTA5) this includes workshops/trainings/exchange visits and exhibitions to share best practices, research findings and advocate for strengthened policy involvement, with communities and government participants.
- Support dissemination of and access to early warnings and climate information to farmers on key climate risks and hazards (climate tailored extension message, technologies).

3.4 Project Activities Grundfos[37]

The activity lists below are indicative. Following project approval, WFP and the Grundfos Foundation will embark on an inception phase in which activities will be further defined, work plans drafted, partnerships further explored and the project's Monitoring, Evaluation, Assessment and Learning component developed.

Kenya

- Rehabilitate and establish agricultural water infrastructure[38] to increase the area under irrigation for expanding crop production for agro-pastoralists producing nutritious crops (sorghum, pulses etc) for school meals.
- Expand water harvesting through the creation of water pans in Turkana West, to enable the production of locally produced vegetables for school feeding.
- Establishment and refurbishment of rainwater harvesting and irrigation infrastructure for school gardens and orchards.
- Identification of innovative solutions to address water salinity challenges, in close collaboration with technical partners and private sector. This will entail water quality testing, assessment of the existing and available desalination methods and testing of small-scale desalination.

Uganda

- Establish vegetable plots around schools and train young people (who will be targeted to boost job creation in agriculture) on regenerative agriculture (including establishment of water harvesting and storage structures) and business management.

[37] Given the high costs of water production activities and the size of this initial allocation from GF, two of the three project countries have been prioritized for this first allocation.

[38] Water infrastructure development and rehabilitation will take into account improved water distribution and use efficiency through installation of drip irrigation systems, translating into enhanced crop yields per unit of water used. In addition to increased yields, improved water use efficiency will support the farmers to mitigate risks associated with water scarcity, droughts and erratic rainfall patterns while reduced usage per unit of output will minimize the environmental footprint of crop production.

- Expand the provision of innovative, mobile solar-powered irrigation systems[39] to young men and women to enhance their agricultural practices while contributing to the rural economy and healthier nutrition in and around schools where produce will be sold.
- Train local technicians within existing farmer groups to maintain community-managed irrigation farms.
- Support these young people to access quality seeds, capital, equipment and markets beyond the school, thus empowering them to tap into more opportunities to sustain their livelihoods.

4. Theory of change, key assumptions, and impact framework

4.1 Theory of change

This theory of change (ToC) has been developed at a high-level for this project document, and is aligned with current Country Strategy Plans across the three countries. Country-level ToCs will be developed for Kenya, Uganda and Rwanda once the project has been kicked off.

WFP aims to enhance local sustainability and resilience of food systems and improve diets for children from sustainable local sources through healthy, diverse, climate-smart, locally sourced school meals. In this long-term vision, procurement for nutritious school meals will prioritize and source more of its meal requirements from local producers in a consistent and reliable manner, ensuring stable demand for local producers and other value chain actors. Supply from local smallholder producers and other actors will, in term be able to consistently meet this demand with safe, quality, nutritious commodities that meet the requirements of school meal menus.

Given climate-induced vulnerabilities and wider environmental issues, e.g. water availability, soil health and land productivity, consistent supply will depend on local producers and other actors producing in a climate-adaptive, environmentally sound way with sufficient water for food production (overarching project Pillar I, and the focus of this proposal). WFP and its partners posit that local production can be more climate-adaptive and nutritious, IF there if there is a **stronger enabling environment for climate-smart production** (from quality inputs, climate information, appropriate aggregation, access to finance, improved food safety and quality assurance, national and sub-national government and school-level awareness and knowledge to invest and operationalize pro-smallholder procurement strategies), IF there is **increased availability of water for production** (through increased smallholder access to water harvesting, improved water catchment, implementation of water efficient agronomic practices, etc.), IF **local smallholder producers adopt more climate-adaptive practices and methods** (such as conservation agriculture, adoption of climate-smart technologies, and others), AND IF **smallholder producers, especially women and youth, have increased access to viable markets** (particularly school markets). Supporting these results and wider project objectives are strengthened procurement practices for school meals, improved school menus and food preparation (overarching project Pillar II) and increased energy efficiency of school meals preparation (overarching project Pillar III). In addition, and central to each result is to tackle roots causes of gender inequality in production, and implement in a way that drives gender transformation, from the research and selection of any new crop or seed varieties, climate-smart agronomic practices, water solutions, and others.

4.2 Impact Framework & Key Assumptions

Visually articulating and further detailing the theory of change, the project Impact Framework (Figure 2 below) will guide programme implementation and inform the monitoring and evaluation framework and overall programme learning. Figure 3 below, is a more detailed visual for Pathway I of the project

[39] Danish Ministry of Foreign Affairs through the WFP IGNITE Innovation Hub has provided Seed capital to Omia, an agri-tech and input provider in Uganda. Scaling of the solar powered irrigation provision is currently underway through Danida funds, with further financing requested for this project. The project overview is included in the innovation lookbook shared in annex 6. While this project is taking place in another region of Uganda, learnings will be generated to inform WFP's implementation in Karamoja.

– which is the focus of this proposal. The framework also provides an overview of the targeted activities, social changes (outputs, outcomes, impacts) in the project, aligned with the proposal.

Figure 2: Overarching Programme Theory of Change

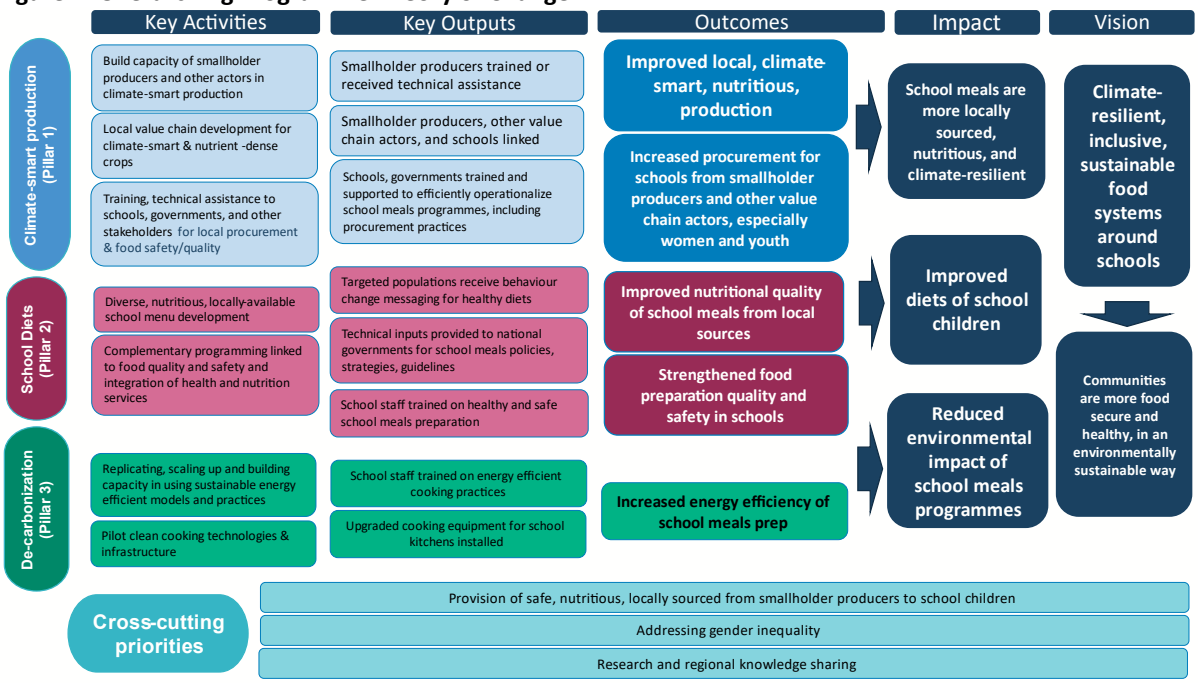
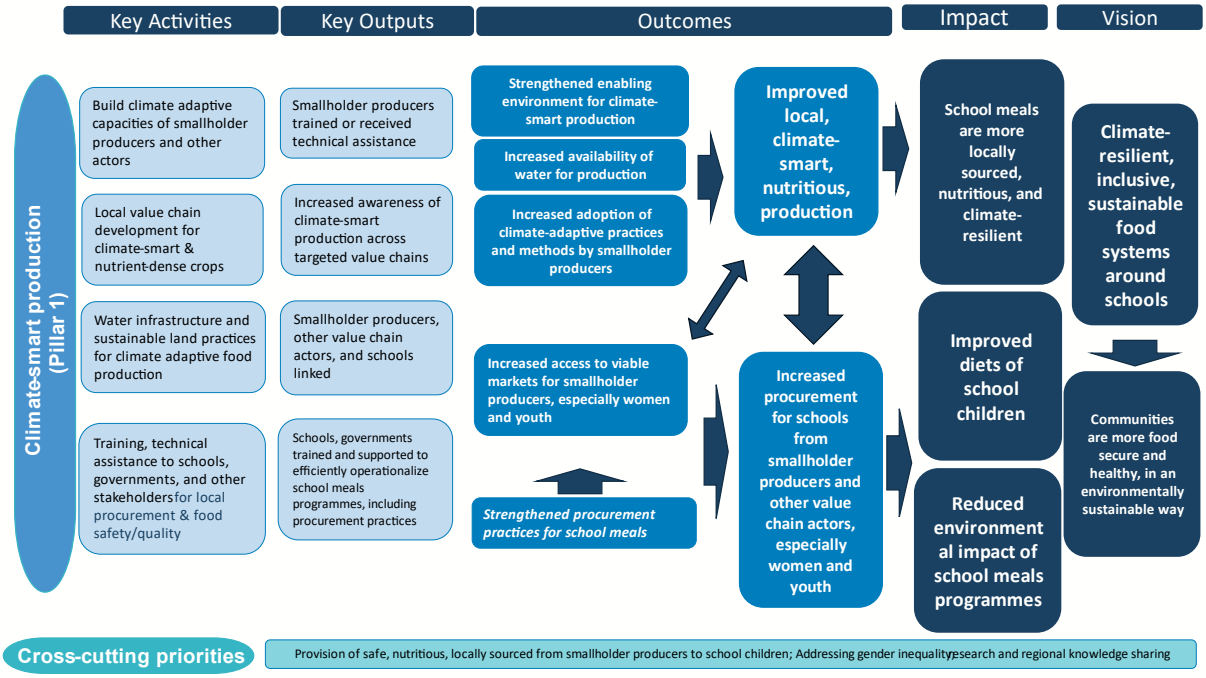


Figure 3: Pillar I - Climate-smart Production Theory of Change Detailed Visual



Underpinning the achievement of these results are several key assumptions that must hold true that WFP and its partners will be mindful of, seek to address, but also acknowledge is out of the full control of the project. These are:

- There is an adequate market (including and beyond school markets) to effectively incentivize farmers to grow appropriate local nutritious commodities in a climate-adaptive way;

- Farmers/farmer organizations are able to meet production requirements for schools in a timely manner and receive adequate prices for production for schools;
- There is adequate access to affordable finance, where needed, that enables the adoption of climate-smart practices and employing water for production solutions, by farmers and clean cooking solutions in schools in the region
- The governments in Kenya, Uganda and Rwanda exhibit political will and action toward policies and programmes that promote local and nutritious meals in schools
- Governments in Kenya, Uganda, Rwanda, prioritize and are willing to promote, support, and ultimately invest in (for sustainability) climate-smart production, including water solutions, as well as clean cooking solutions
- Key stakeholders (e.g., schools, farmers and farmer organizations, private sector, and government bodies) are willing to and see strong enough incentives to engage with the project at adequate levels

Across these assumptions, there is emerging evidence emanating from different contexts as to the likelihood of them holding true. Some examples of emerging evidence include:

- **School Meals Programme Demand and the ability of smallholder farmers to meet this demand**: Based on evidence from WFP's recent evaluation on Local and Regional Food Procurement, where programming was anchored in school feeding programming in Karamoja, WFP successfully procured quality commodities[40] from SHFs and this procurement served as a strong incentive for increased SHF productivity and quality production of maize. This resulted in some farmers reporting progressing from subsistence to surplus in as little as 1-2 seasons, and attracting larger traders to expand their procurement into WFP intervention areas. This evaluation, however, and echoed in another school feeding and local procurement evaluation in Rwanda, also noted the heavy level of support and time needed by most SHFs to be able to meet WFP quality standards and quantities required. Furthermore, evidence of the ability of local supply and demand to meet at adequate levels and continue to serve as mutual incentives require continued study and evaluation as dynamics are different and can change over time for each country and local context, and depending on the procurement models used (by WFP or national governments).
- **Government ownership & political will**- Particularly in Rwanda and Kenya, government ownership and political will are strong and evident. From recent evaluation evidence from Rwanda and Kenya, this ownership has been key to ensuring a strong foundation for sustainability and sustaining results beyond the project. In Rwanda, a recent evaluation found that WFP effectively leveraged its relationships with government, programme knowledge, and resources to help strengthen government capacity. As well, WFP made progress in facilitating inter-ministerial collaboration necessary for scale up and to help ensure adequate resourcing. In Kenya, results from a post-hoc evaluation in 2022 noted the sustainability of attendance, retention, and learning gains even after handover, pointing to the strengthe of the handover process for schools supported under a USDA programme.
- **Access to affordable finance** – Access to affordable finance remains a challenge for SHFs and many actors along the value chains in target countries. At the start of the project, dedicated research under NNF funding will focus on identifying contextually appropriate climate-smart practices and identifying bottlenecks and challenges for adoption. This aspect is currently an evidence gap as the exact practices to be introduced are yet to be determined, but will likely be part of the focus of research, monitoring, and evaluation exercises.

[40] In total in 2023, WFP Uganda Country Office locally procured a total of 76,854 metric tons of maize, beans, and maize meal, in part from Karamoja linked to the home-grown school feeding programme.

As required by MFA, the following results framework details the specific project objectives and draft indicators at the impact, outcome, and output level. In line with the focus of this proposal, the results framework focuses on key outcomes and outputs associated with Pillar I – Climate-smart production, of the overall programme and draws from Figure 3. Indicators selected below are also taken from existing indicators in use by each country office and from the standard WFP Corporate Results Framework. Overall indicators and targets will be further developed and refined during project inception and kick-off, in line with wider project processes.

MFA Results framework for Improving Local Food Systems in East Africa using Schools as Catalytic Platforms

Table 1. Summary Results Framework

Programme	**Improving Local Food Systems in East Africa using Schools as Catalytic Platforms**
Programme Objective	Drive the improvement of Rwandan, Kenyan, Ugandan food systems around schools by scaling up climate-smart, sustainable, and inclusive home-grown school feeding programmes to help achieve zero hunger
Impact Indicator	Dietary Diversity for School Children Food Consumption Score SDG 2: Zero Hunger
Outcome	Increased adoption of climate-adaptive practices and methods by smallholder producers

The MFA-funded portion of this project aims to reach approximately 21,500 smallholder producers across Uganda, Rwanda and Kenya with an aim to transition smallholders to climate-smart production practices such as conservation agriculture, agroforestry, Green Manure Cover Crops, etc. To provide context in relation to WFP's overall reach in the three countries, based on 2023 figures in Annual Country Reports, WFP supported 217,554 smallholder farmers with a variety of capacity building, market linkage, and facilitation.[41]

5. Institutional and management arrangement

5.1 Project Governance and Coordination

WFP

Project implementation in the three countries will be directly supervised by the WFP Country Office (CO) project teams to ensure timely and effective delivery of outputs, while the WFP Regional Bureau Nairobi (RBN) will provide project technical support, integration with regional strategies and knowledge sharing and linkages at regional and country levels.

Throughout the implementation period of this project, WFP will keep the funding partners informed on the state of play of the foreseen activities, through regular email exchanges (when relevant and required) and coordination mechanisms to be put in place during the inception period. The aim of these meetings will be to exchange views on activities, review implementation, review the appropriateness of partnership objectives and commitments and determine whether changes should be made to these objectives and commitments.

[41] Based on 2023, Annual Country Report Figures. Kenya: 54,000 pastoralists and agropastoralists reached through comprehensive self-reliance programming, including value chainsupport. Uganda: 36,554 smallholder farmers were reached with support such as post-harvest management training and other value chain activities. Rwanda: 127,000+ smallholder farmers benefitted from WFP capacity building, value chain coordination, and facilitation.

Multiple layers of both internal and external coordination structures and formats will be implemented from global- to regional- and national-level, as further outlined below.

- **Regional- to national-level coordination** – RBN will lead on the coordination between implementing country offices (CO) in the region, including joint knowledge management and learning formats, such as joint thematic webinars. Regular coordination meetings will be held between CO and RBN teams to ensure continued technical support to the project implementation.

- **National-level coordination** – The COs in the selected countries will establish coordination mechanisms that will ensure the integration of all CO teams across the three pillars to ensure that there is cross-fertilisation of information on progress, learning and challenges.

The Alliance

The project is part of the Alliance between MFA and Lego Foundation, NNF and GF with a common mission and vision and a framework of cooperation, meaning that the project management set-up will be linked to- and coordinated with the framework of cooperation of the Alliance. This project will be incorporated in the already established coordination framework for the Alliance with regular coordination meetings and workshops.

Further, to encourage further synergies and ensure effective implementation of this project, WFP has proposed a potential project governance and coordination structure outlined in Annex 10 (full NNF proposal). The proposed governance and coordination mechanisms represent an opportunity to work together with NNF, GF and MFA to achieve common goals and collaborate in areas where project partners have complementary skills, networks and additional financial resources or expertise. These mechanisms are anchored in the opportunity for the organizations to jointly learn from the project's successes and failures. The proposed structure will be further refined by WFP and the three funding partners at project start.

This project complements larger WFP programmes in each of the three countries, and WFP has based the governance and coordination structure on this fact. WFP's scale, scope and approach in each country is different and specific to the context and needs. Considerations were also made for Government capacities and also existing investments and active stakeholders within the relevant sectors in each country.

Project Governance Structure

The project governance structure is explained and outlined in Annex 10 as part of the broader project proposal with NNF.

With respect to measuring the performance of WFP and its programmes, the donors will rely on WFP's own reporting, monitoring and evaluation systems. WFP will keep the donors informed on relevant preparation, review and evaluation missions or other activities in relation to the implementation of this project. WFP will facilitate, at the expense of the donors, the participation of officials or designated representatives in any such mission in accordance with WFP Regulations and Rules.

5.2 Monitoring, Evaluation, Accountability and Learning

Guided by the WFP Corporate Results Framework, Monitoring Strategy, and Evaluation Policy, WFP will implement a robust monitoring, evaluation, and learning system to regularly measure project performance, assess overall effectiveness and sustainability (among other areas), generate insights and learn from its data, and adapt the project to maximize impact. Monitoring is conducted internally and publicly available details are available by country in WFP's Annual Country Reports (ACR) and evaluation reports. Any evaluation report will be publicly available, as per the WFP Evaluation Policy.

At the start of implementation, the project theory of change will also be revisited and further refined based on available evidence and implementation experience, followed by the development of a logical framework to guide the MEL system and support project management.

Monitoring

Monitoring data will help measure project performance at regular intervals, leverage corporate and project specific, sex-disaggregated indicators, and standard WFP process monitoring systems. Country teams will ensure timelines of the outcome (baseline and follow up) data collection and measurement of results in line with the monitoring plan. Monitoring teams will share findings with respective programme technical teams for high/medium and low priority issues accordingly enabling the reviews and reporting on progress of programme implementation. WFP will report on progress, assess quality of interventions, and identify areas for improvements.

Evaluation

An evaluation focused on learning will be commissioned and conducted by independent evaluators as part of the Grundfos Foundation focus of the Project in Kenya and Uganda. The exact evaluation focus, questions, and approach will be designed at the start of implementation through a consultative approach to best focus the evaluation on areas relevant to WFP and the Grundfos Foundation, including national government stakeholders. This evaluation focus will also consider and align with wider project focus. Building on current experience and other ongoing evaluations, an adaptive developmental evaluation approach will be considered.

Under any approach, the evaluation will likely focus on project effectiveness, efficiency, contributions to or emerging impact (including elements of systems change), and sustainability, with an emphasis on availability of water for production, as well as gender transformative elements to understand what and how change is occurring on the ground and to validate project assumptions. In addition, it will analyze and bring together evidence from research, monitoring, learning insights, and external evidence, as relevant to the evaluation questions. In line with WFP Evaluation guidelines, key stakeholders, including funders, will be consulted and engaged throughout the evaluation process, including in a co-generation of recommendations process to ensure evaluation recommendations are meaningful, actionable, and feasible to implement.

Learning

Learning activities and processes will be implemented from the start of the project to foster a deep learning culture. Activities will include: evidence and knowledge exchanges, targeted learning "harvests," learning and stock-taking meetings and events, development of user-friendly knowledge products, as well as targeted external engagements to share knowledge beyond the project.

6.Budget, Financial management and Reporting

6.1 Financial management

Financial management will align with WFP's rules and procedures, while respecting sound international principles for financial management and reporting.

6.2 Project Budgets

The budgets below are indicative and subject to exchange rates at the time of approval. Annex 5 includes detailed budgets by country/RBN.

Table: MFA Budget

Cost Categories	Budget (DKK)	Budget (USD)

Activity Budgets, implementation/ staffing costs	34,884,490.61 kr.	$ 5,121,786.90
Direct Support Costs	2,633,663.85 kr.	$ 386,678.00
Indirect Support Costs (6.5%)	2,481,845.58 kr.	$ 364,387.84
Total Project Budget	**40,000,000 DKK**	**$ 5,872,852.74**

**UN Exchange Rate (Aug 15, 2024): 1 USD = 6.811 DKK/kr.*

Table: Grundfos Budget

Cost Categories	Budget (DKK)	Budget (USD)
Activity Budgets, implementation/ staffing costs, evaluation	17,785,140.18 kr	$ 2,611,237.73
Direct Support Costs	994,201.67 kr	$ 145,970
Indirect Support Costs (6.5%)	1,220,658.16 kr	$ 179,218.64
Total Project Budget	**20,000,000 DKK**	**$ 2,936,426.37**

**UN Exchange Rate (Aug 15, 2024): 1 USD = 6.811 DKK/kr.*

6.3 Disbursements

In the project, disbursements will be made by each funding partner as specified in the respective partner agreements.

Danish support for this project will be disbursed in accordance with the following schedule:

Instalment	Amount	Date
1st disbursement	DKK 20,000,000	December 2024
2nd disbursement	DKK 20,000,000	June 2026

6.4 Work Planning

Each country team and the regional bureau will do their individual work planning. An overall plan for the three years of the project will be developed at project start by WFP and shared with both funding partners. Based on this and developments within the projects, annual work plan and budgets will be developed. Work plans will be flexible and allow for adaptive management in dialogue with partners.

6.5 Narrative & Financial Reporting

WFP will produce a joint annual narrative technical progress report for NNF, Grundfos and the DK MFA which will contain key information such as:

- An overview of developments in the contextual framework of each country and the region during the past year;

- Progress on implementation of the work plans, including brief explanations of challenges encountered and deviations from targets/milestones and how these have been assessed and handled;
- Lessons learned from each country/regionally;
- Challenges encountered that required recommended changes and adjustments;
- Progress to date compared to output and outcome targets for the entire project period as stipulated in the results framework, specified for the three funding partners;

WFP will deliver annual financial reports to the funding partners separately.

Financial management, accounting and auditing will align with WFP's rules and procedures, while respecting sound international principles for financial management and reporting. WFP's financial framework is defined in the WFP Financial Regulations and Rules7[42] In line with its Financial Regulations and Rules, WFP is subject to regular external audits, reports of which are presented to the Board and published online on the WFP EB website. WFP, like all other UN organizations, is subject to the Single Audit Principle. The Single Audit Principle is enshrined in Financial Regulation 14.9, which provides 'External audits will be conducted exclusively by the External Auditor appointed by the [WFP Executive] Board'. In accordance with the Single Audit Principle, WFP does not consent to undergo external reviews (including audit of projects) commissioned by its donors when these do not reflect the governance and oversight arrangements at the UN level.

The funds will be managed in line with the Denmark MFA – WFP Multilateral Partnership Agreement, 2023-2025 and respective donor agreements with GF and NNF.

7. Risk Management

The risk considerations in the section represent the joint risks and risk management by the MFA, GF and WFP. The main risks to this project outputs and outcomes are linked to contextual risks and programmatic risks. The matrix below highlights the contextual, programmatic, and institutional risks.

Table: Contextual Risks

Risk Factor	Likelihood	Impact	Risk response
Climate shocks during project implementation put strain on smallholders and other value chain actors and divert focus from enhancing climate-smart practices	Likely	Major	Provide early action and climate risk insurance for farmers to protect their livelihoods before climate shocks, including resources. Redirect funding to protection.
Insecurity and conflicts in the region	Likely	Major	Frequent engagement with stakeholders, including governments, to ensure there are risk mitigation plans in place. Working closely with humanitarian teams to ensure our target beneficiaries are not excluded from support.

Table: Programmatic Risks

Risk Factor	Likelihood	Impact	Risk response

[42] https://docs.wfp.org/api/documents/WFP-0000141150/download/

Change in national government buy-in related to climate resilience building and national school meals programmes	Unlikely	Major	Through their collaboration, WFP will engage with national authorities on regular basis to align project with national priorities. Through joint engagement in the Global School Meals Coalition, Denmark, WFP and NNF will support the global and national support for school meals programmes.
Inability of smallholder producers and other value chain actors to provide nutritious locally produced food year round	Likely	Significant	Explore alternative crops with comparative nutritional value to standard ones, such as indigenous, orphan, and underutilized crops like OFSP and amaranth. Consider factors like drought tolerance, cultural acceptance, and gender-sensitive value chains.
Farmers resist changing traditional farming practices due to attachment to specific crops or farming methods	Likely	Significant	Use SBCC to educate farmers and communities. Engage non-WFP farmers and cooperatives as unbiased advocates.
Smallholders and other value chain actors lack financial resources to make investments in climate-smart infrastructure practices and inputs	Likely	Significant	Advocate for additional financing for climate-smart agriculture initiatives that can explore, new value chains, and potential private sector markets *and* identify local private sector solutions, prioritizing low-tech approaches for WFP's target beneficiaries.
Smallholders and other value chain actors may face market risks due to price volatility and inadequate demand for new products beyond schools	Likely	Significant	Direct pro-smallholder procurement by WFP, acts as a strong incentive to increase production, productivity, and quality. Also, WFP's SAMS programme create opportunities for SHF participation in formal markets. Support SHFs with training in financial and business literacy, establish Village Savings and Loan Association, and provide access to finance options like microfinance.
Government extension systems are not immediately able to adapt and align messaging to support CSA	Likely	Significant	Strengthen the capacity of government actors
Large-scale farmers or other influential players not supportive of CSA adoption	Likely	Significant	Focus WFP support on smallholder producers, avoiding big producers or influential players for CSA assistance.

Table: Institutional risks

Risk Factor	Likelihood	Impact	Risk response
Worsening of WFP's financial situation causes the organisation to down prioritise its longer-term and innovative operations for acute response.	Likely	Major	In addition to earmarked support, Denmark provides core support based on a multi-annual strategic partnership agreement to contribute to WFP's core business. WFP's adjustment to the financial situation has overall focused on protecting field engagements.
New partner constellation may cause coordination problems			Frequent engagement between WFP, MFA, GF and NNF, including building joint governance and monitoring structure to ensure levelled expectations and understanding.

Annex 4 presents the WFP risk management approach. The identified risks and its management will be further developed as part of the detailed development of the project and in line with WFP's risk management systems.

8. Closure and Sustainability

The Project is designed to contribute to the improvement and climate proofing of food systems in East Africa using schools as catalytic platforms in Kenya, Rwanda, and Uganda over the three-year project period. Given the longer-term nature of the Climate-resilient HGSF programmes in each country, the project would also benefit from a second phase following its completion. Additionally, given that the project will include piloting of various innovative approaches and solutions linked to climate-smart production, a second phase would give WFP the opportunity to scale successful solutions identified in the first project phase. The official closure of the project at the end of 2027 will include a final results-report to be shared by WFP within six months of the close-out.

WFP is cognisant of the fact that the duration of this project is not sufficient to allow for all the interventions necessary for successful value chain development given the complexity of interventions and the myriad of partners that are needed to ensure this. WFP will aim to leverage continued support to ensure sustainable results, highlighting the importance of multi-year finance to ensure successful resilience building to be done through integrating and layering activities throughout the value chains. WFP and its contracting partners will continue to advocate for local ownership and future support to ensure the sustainability of these interventions.

Sustainability
Regional Overview:

WFP is an essential member of the United Nations country teams in each country and has existing, strong relationships with local and national governments. This engagement is multi-sectoral in nature, involving all relevant sectors, including education, agriculture, environment, finance, gender and health. Specifically, through this partnership, WFP will build capacity of more than 700 government staff to support/facilitate/operationalize HGSF/local procurement for school feeding.

In addition, WFP Cooperating Partners remain an essential part of the implementation and achievement of WFP's Country Strategic Plans (CSP). In 2023, WFP partnered with 93 partners across Kenya, Uganda and Rwanda. WFP also continued to advance the localization agenda, through collaboration with National Non-Governmental Organizations (NGO) and Governments to increase its footprint in hard-to-reach areas, strengthen capacities, and leverage local knowledge, skills, and solutions while fostering stronger coordination amongst various stakeholders for sustainability. In

2023, 33 percent of WFP Cooperating Partners' expenditure went to national partners and WFP aims to increase this amount. These partnerships have been instrumental in promoting sustainability and self-reliance within the communities WFP serves.

Specifically for Rwanda, the evaluation of WFP Rwanda's CSP 2019–2024 affirmed WFP's value proposition of a dual focus on saving and changing lives and highlighted its role in building national capacities, facilitating WFP's work across the nexus. WFP contributed to Government capacity strengthening by contributing to policy frameworks and coordination mechanisms, disaster risk management, social protection, and school feeding. WFP's contribution to the changing lives agenda is demonstrated by the Government's recognition of, and support to shock-responsive social protection, school feeding, nutrition, and food systems. While the Government and partners recognize WFP's role in changing lives, the role of WFP in humanitarian and crisis response remains critical.

The enhanced focus on country capacity strengthening as a cross-cutting priority aligns with the evolving role of the United Nations within the Government's SDG agenda. The strong policy context in Rwanda allows WFP to focus on enabling policy implementation at sub-national levels and modeling to scale as articulated in the Government's and the United Nations Sustainable Development Cooperation Framework (UNSDCF) priorities and the CSP Theory of Change.

WFP's work on strengthening market linkages across value chains, implementing more cash programming, promoting regenerative practices for SHFs to increase their resilience to shocks, and promoting knowledge sharing enhanced social, technological, and financial innovation. WFP has also expanded partnerships to include private sector entities.

Lessons learned from WFP's past implementation of gender transformative approaches through the Joint Programme for Rural Women Economic Empowerment (JPRWEE) and the SMART resilience project, recommend adopting an asset creation model for natural resource management. This CSP factors in the intersectionality of vulnerabilities, disability inclusion, and addressing gender barriers across the portfolio. It also focuses WFP's climate work on risk mitigation, emergency preparedness, and adaptation.

The CSP is aligned with other national frameworks such as the Health Sector Strategic Plan (2022–2030), the Agriculture Development Strategy (2015–2035), the Strategic Plan for Agricultural Transformation (PSTA5), the National Family and Nutrition Policy 2024, Strategic Plan for Refugee Inclusion (2019 – 2024), the 2021 National Gender Equality and Social Inclusion Policy, the School Education Sector Plan (2021 – 2030), the School Feeding Policy (2019), the National Social Protection Policy (2020), the Disaster Risk Reduction Management Policy (2023) and the National Adaptation Plan (2021 – 2050).

The CSP is aligned with the UNSDCF for 2025 – 2029 and its three pillars: economic, social, and governance pillars. WFP designed a comprehensive stakeholder engagement approach to explore collaboration opportunities and priorities for the CSP. WFP conducted high-level bilateral meetings with Government officials, embassies, donors, Development Partners, the civil society organizations (CSOs), including women's organizations during the national-level multi-stakeholder workshops. At the district level, consultations brought together district-level authorities and technical experts, and recommendations integrated across the CSP outcomes. Demonstrating WFP's commitment to accountability to affected people, WFP held consultations with the youth, women, and persons with disabilities to understand their priorities and identify gaps and opportunities.

Partnerships

WFP works closely with, and provides capacity strengthening to, the Ministry of Agriculture, the Ministry of Youth, the Ministry of Local Government, and district-level stakeholders.

WFP aims to enhance partnerships with the private sector, including agricultural SMEs and micro-enterprises, fintech, and financial institutions. WFP aims to expand its engagement with women-based organizations, organizations with persons with disabilities, foundations, research institutions, NGOs, and industry associations, to generate evidence to inform policy and to promote meaningful engagement with women and girls. WFP is a valued partner of the Government. The CSP outcomes will be achieved in collaboration with the Government, the United Nations, and other Development Partners, including the other RBAs as well as international financial institutions; research partners; community-based organizations; and the private sector.

Partnerships with the RBAs, as well as other UN agencies, is critical, including for climate-sensitive and gender-transformative work, and strategic and operational support aimed at advancing the commercialization of smallholder production.

WFP aims to strengthen its engagement in relevant technical working groups, steering committees, and coordination forums to foster multisectoral approaches to food and nutrition security based on WFP's unique value proposition.

As the Chair of the Programme Management Team, in 2023 WFP led the work by UN agencies in Rwanda on the Common Country Analysis which will serve as the foundation of the new United Nations Sustainable Development Cooperation Framework (2025-2029). Aligned with UNSDCF priorities, WFP seeks joint advocacy and programming opportunities with other UN entities, to coordinate and harmonize activities addressing food insecurity and malnutrition, and underlying causes.

School feeding in Rwanda is a government flagship initiative, with the Government funding daily meals for over 4 million children in all public schools. WFP is the Government's main partner and technical advisor on school feeding and we have a Memorandum of Understanding and a gradual handover plan in place. The vision of the Government is for Government and parents of students to be able to jointly fund this national flagship programme in the next 7-8 years. Partner support is called upon to enable the Government to reach this vision.

Due to the strong national ownership, sustainability of the HGSF programme in Rwanda is very high and will continue beyond the period of the project at hand. The bolstering and expansion of school feeding across the country has come at the heels of both significant steps taken by the Government of Rwanda (GoR) in socio-economic transformation and poverty reduction on the one hand, and proactive ownership of and contributions to school feeding by the people of Rwanda on the other. The process towards achieving the National School Feeding Programme (NSFP) has included a series of national and international commitments made by the GoR; progressive elaborations of sectoral and school-feeding related policies and strategies; two decades of diverse successful iterations of school feeding across the country, implemented both by the Government and development partners; the GoR and the people's financial investment in and support of the Programme; and supportive contributions and advocacy by WFP and other development actors. Nonetheless, not only has this journey been demanding with many opportunities and challenges, but also many key decisions taken along the way have shaped unique characteristics into the programme.

Uganda: The WFP Uganda CSP is aligned with Uganda's Vision 2040 and National Development Plan II. It contributes to the goals of the Uganda Zero Hunger Strategic Review and is integrated with the country's United Nations development assistance framework.

Decades of conflict have led to high levels of poverty in the north and east. People sell assets and resort to livelihood strategies that degrade the environment: collecting firewood, for example, endangers women and girls, and families withdraw children from school. WFP's conditional food or cash assistance ensures access to food during lean seasons and helps communities to build assets such as woodlots, farms, orchards, irrigation systems, ponds and dams that improve their resilience to shocks. In refugee-hosting areas, the aim is to reduce dependence on relief food assistance and enhance self-reliance. School feeding keeps children in school and enables them to learn. Technical assistance to the Government helps to improve shock-responsive social protection mechanisms.

One of WFP's key strategic outcomes is: Food-insecure populations in areas affected by climate shocks have access to adequate and nutritious food all year. The objective is to prevent acute food insecurity and reduce vulnerability to shocks and seasonal food shortages. Key partners under this outcome include UNICEF and FAO.

Another strategic outcome is: Smallholder farmers, especially women, in targeted areas have improved and resilient livelihoods by 2030. This strategic outcome contributes to SDG target 2.3. and the objective is to increase smallholder productivity and incomes and improve the quality of food grains.

WFP's work under this strategic outcome, focuses on providing support to SHFs across the country, including refugee and host community farmers, in improving agricultural practices and adopting technology. This will stimulate production by promoting predictable demand, promote collective marketing of grains to increase incomes and improve household food security. WFP also works with the Government and the private sector to develop sustainable national mechanisms for reducing post-harvest losses.

Partnerships

WFP works with the Ministry of Agriculture, Animal Industry and Fisheries at the national and district levels to train farmers and farmers' groups, ensuring access for women farmers, in topics relevant to smallholder productivity such as diversification of crop production, soil conservation, value addition, quality control, collective marketing and agribusiness development; and build warehouses for farmers' groups to improve food quality and promote collective marketing with equitable access and control of assets. The warehouses will be hubs for extension services and a means to attract potential buyers, including WFP. WFP, the RBAs, the United Nations Industrial Development Organization, the United Nations Development Programme and UNHCR are pursuing synergies to avoid duplication.

WFP has strong relationships with the Government at the national and sub-national levels. District governments, as appropriate and feasible, are involved in the formulation and implementation of activities to ensure local buy-in and support and to maximize opportunities for capacity strengthening and the transfer of expertise.

WFP partners with United Nations agencies and other development partners, and continues to expand its partnerships increasingly to include also bilateral development partners, to better coordinate interventions, avoid duplication and achieve outcomes at scale. The main partners are FAO, the International Fund for Agricultural Development, UNHCR, UNICEF, the World Health Organization, the Joint United Nations Programme of Support on AIDS, the Scaling Up Nutrition movement, UN-Habitat, the World Bank and international financial institutions.

WFP will increase the number of its NGO partners and will work with civil-society organizations to strengthen the capacities of national first responders, seeking in particular strategic partnerships that bring resources and expertise to a more collaborative and less transactional model of partnership.

WFP will facilitate public-private partnerships and continue to work with social enterprises, for example in relation to post-harvest loss reduction for a demand-driven approach to agriculture and market support to leverage expertise and innovation potential.

WFP acknowledges the critical role of government's commitment in ensuring the sustainability of the HGSF programme in line with Uganda's School Meals Coalition commitments. The Ugandan government has pledged to allocate a dedicated budget line for school feeding by 2025, reflecting a strong commitment to gradually sustaining the programme beyond the project's timeline. On top of this, the finalization of the national school feeding policy and the development of a contextualized national school feeding programme are underway thus ensuring a structured and sustainable approach. WFP is actively engaging with government officials at multiple levels through capacity building and policy advocacy. Within these three years, WFP aims to build pathways to a sustainable model. HGSF is already integrated in Uganda's Third National Development Plan (NDP III), creating an opportunity to advocate for an increased budget commitment.

The HGSF programme in Karamoja is designed with sustainability in mind, recognizing the need for stable financing mechanisms. Over the 3-year period of this project, WFP will intensify advocacy efforts with the Ugandan Government and other relevant platforms and initiatives[43], to secure increased budget allocations for the school feeding programme to ensure long-term financial support. By demonstrating the programme's positive impacts on education, nutrition, climate resilience and community well-being, WFP aims to strengthen the government's commitment and ownership especially with the policy in place. WFP will actively engage with other development partners, showcasing the success and scalability of the HGSF model to attract diversified funding sources. Furthermore, WFP will expand school gardens, particularly in the green belts of Karamoja, which have high production potential to increase local food production and self-sufficiency. These gardens are already in place and serve as a demonstration tool and provide supplementary diversified food for school meals, thereby reducing costs and fostering community involvement.

Kenya: In Kenya WFP has been actively engaged in the preparation of the 2021 common country analysis, ensuring that the proposed outcomes of this country strategic plan are derived from and well-aligned with WFP's contribution to the strategic priorities of the United National sustainable development cooperation framework for 2022–2026. Kenya's Vision 2030 is implemented through five-year medium-term plans. The Government's fourth medium-term plan covering 2022-2027, was developed in consultation with all stakeholders, including UN entities. County governments are currently in the process of developing the third generation of country integrated development plans. Validated by the Government and its partners in June 2022, the UNSDCF for 2022–2026 is aimed at assisting Kenya in the post-pandemic period to accelerate progress towards the achievement of Vision 2030 and the SDGs. It is framed by two strategic priorities: promoting "people and peace" and advancing "prosperity and planet". A third pillar is framed as a "strategic enabler" aimed at ensuring that Kenya has the necessary partnerships to finance, provide resources for and achieve the two strategic priorities.

At the national level an all-stakeholder workshop addressed priorities and gaps in food security and nutrition, seeking consensus on the greatest opportunities for WFP to achieve sustainable transformational change. CSOs representing young people, women, persons with disabilities and other underrepresented groups participated in the workshop. Bilateral discussions with key donors sought to understand donor priorities and address concerns. WFP contributed significantly to the United Nations common country analysis and the formulation of the UNSDCF.

[43] The HGSF programme in Karamoja is designed with sustainability in mind, recognizing the need for stable financing mechanisms. Over the 3-year period of this project, WFP will intensify advocacy efforts with the Ugandan Government to secure increased budget allocations for the school feeding programme to ensure long-term financial support. In addition, WFP will leverage platforms such as the Education Development Partners Group, the School Meals Coalition to support the government mobilise additional resources traditional partners and from International Financial Institutions (e.g. GPE). These resource mobilisation efforts are expected to be facilitated by the adoption of the Uganda School Feeding Policy.

“Business as usual” will neither meet humanitarian needs nor address Kenya’s recurring long-term food insecurity challenges. To save lives in Kenya sustainably, WFP must increasingly seek to change lives. To achieve scale and impact, WFP aims to apply a multidimensional conception of its mandate, harnessing innovative, integrated, risk-informed programming within a “changing lives to save lives” agenda, delivering immediate and ongoing support to boost food access and availability and medium- to long-term action to build climate-resilient food systems. Approaching the humanitarian–development–peace nexus as a spectrum of interconnected concerns, WFP aims to continue its drought emergency response in order to meet the projected rises in essential needs while also opening proven pathways from relief to resilience building that link humanitarian action to national and county-level development priorities, calibrated to achieve the broadest measurable impact on the root causes of food insecurity and malnutrition in Kenya. To advance and expand its “changing lives” portfolio, WFP Kenya embraces capacity strengthening of national and county systems as the central strategic driver for supporting shock-responsive social protection, safety nets and disaster and climate risk management. Noting lessons from the independent evaluation of the country strategic plan for 2018–2023, WFP has developed a supply chain strategy that is integrated internally across the country strategic plan portfolio and aligned externally with the priorities of Kenya and its partners in the United Nations system.

A mid-term review found that the “first-generation”CSP for 2018–2023 had transformed WFP’s strategic approach in Kenya, broadening its scope beyond humanitarian issues to embrace work at the humanitarian–development–peace nexus in a strategic shift from implementing to enabling approaches. 19. A mid-term evaluation of work on resilience and food systems under the CSP for 2018–2023 also recommended a shift towards the promotion of climate resilience in affected ASAL counties, with solar-powered irrigation and the active participation of women in agricultural entrepreneurship as the key drivers of success. Several activities such as beekeeping and the production of orange-fleshed sweet potatoes were found to be gender-transformative. The evaluation also recommended that the focus on gender and youth under CSP outcome 2 be sharpened.

WFP works closely with the Ministry of Agriculture and Livestock Development, the State Department for the ASALs and Regional Development and the National Drought Management Authority. Partnerships will also be established with the new Government’s ministries responsible for water, the environment, climate change and gender. Under the UNSDCF for 2022–2026, WFP co-leads work on strategic priority 2 (prosperity and planet) and has initiated a joint programme with UNICEF, the United Nations Environment Programme, FAO and other partners on sustainable integrated water management for enhanced food security and climate-resilient livelihoods. Under the umbrella of the Rome-based agencies’ new country collaboration agreement for Kenya, WFP will continue its collaboration with FAO and the International Fund for Agricultural Development.

WFP is a partner of choice at the county level, as expressed through agreements and joint annual workplans aligned with county integrated development plans and co-financing. At the United Nations system level, the Kenya UNSDCF for 2022–2026 calls for a sustained shift towards collaboration, with the ambition of delivering at least 50 percent of the UNSDCF portfolio through joint programmes. WFP increasingly leverages inter-agency expertise, particularly in relation to cross-cutting areas of gender (United Nations Entity for Gender Equality and the Empowerment of Women, United Nations Population Fund), protection (United Nations Protection Working Group, inter-agency PSEA network), environment (United Nations Environment Programme, FAO), and nutrition (UNICEF, Ministry of Health), as well as relevant government departments. WFP is committed to fostering coalitions that achieve impact at scale, partnering with other United Nations entities in Kenya and expanding joint action under the Rome-based agencies’ 2022 Kenya country collaboration agreement. 103. WFP Kenya recognizes that globally, demand for food assistance outpaces the available resources. WFP will work with the Government and its development partners to secure multilateral funding, including from multi-partner trust funds for joint programming; blended financing models that bring together private sector actors and foundations; international financial institutions such as the World Bank

Group and the African Development Bank; and national and international climate finance mechanisms that offer new and additional funding for development initiatives in the ASALs. WFP will continue to engage with national and international academic bodies and research institutions, industry associations and national and regional specialist networks.

In the case of Kenya, WFP already transitioned the programme to the government which is now fully responsible for provision of food to schools, with WFP support going to systems strengthening. Consequently, the Government plans to scale-up the national school meals programme from the current 2.6 million learners to universal coverage of 10 million learners by 2030. WFP supports the government in this process, and the activities proposed here are meant to support and complement the efforts of the government.

In Kenya, the County Government is the key implementing partner and WFP has already included and will continue to include them in the planning phase. Schools are not intended to take on the financial burden of producing food long term. Food production at school level is to supplement the meals provided by the national government. Through this project, WFP will be able to support government to pilot the Aggregator model, focusing on local food procurement and support to smallholder farmers. Schools are supported in terms of establishment of kitchen gardens to supplement the meals, transitioning to cleaner cooking methods and other infrastructure needs to deliver school feeding.

ANNEXES

Annex 1: Context analysis of each country

Kenya Context Analysis

Context

Kenya, East Africa's largest, most developed economy, remains on the frontline of the climate crisis and is once again facing a food security crisis. Six consecutive failed rainy seasons have led to low livestock yields and poor crop production in addition to scarcity of grazing land and water resources driving localized conflict. The global food crisis has sent food prices soaring, with an estimated 2.8 million people[44] in Kenya's ASALs, enduring crisis levels and above of acute food insecurity. Turkana County – is one of the most food insecure and fragile arid counties in Northern Kenya – bordering the Karamoja sub-region of Uganda to the West. Access to water is the main challenge faced by communities in Turkana who are predominantly pastoralists. Other livelihoods include farming, fishing, weaving and tourism. Smallholders have been disproportionately affected by climate change, which is resulting in low productivity, negatively affecting household incomes and access to healthy foods.

Development problems to be addressed

A large proportion of Kenya's food production is rainfed making it highly sensitive to climate variations. Climate variability, particularly unpredictable and erratic rainfall directly impacts crop yields and livestock productivity. During droughts, water scarcity and reduced soil moisture lead to poor crop growth and increased crop failure while heavy rains cause flooding and soil erosion that damage crops and water infrastructure. Although Kenya has made progress in weather forecasting, this information is often not tailored and effectively communicated to reach the last mile climate information users. As a result, there is a lack of understanding and use of climate information services for making informed farming decisions, such as when to plant or harvest, what crops to grow, and the use of drought-resistant seed varieties.

The lack of PHM practices and cold storage facilities undermines efforts to adapt to climate change and enhance food security. This means that a significant portion of the harvest is lost, reducing overall food availability and surplus for the market. This in turn reduces the ability of farmers to reinvest in the adoption of climate-smart agricultural practices and further contributes to carbon emissions along the supply chains as food is procured from other parts further away.

Unsustainable land management practices such as intense and frequent tilling, inefficient irrigation, and excessive use of chemical fertilizers and pesticides lead to a decline in the productivity of agroecosystems. Poor soil structure affects water infiltration and retention, leading to water stress for crops. As the soil quality deteriorates, its ability to support healthy plant growth diminishes and nutrient depletion and contamination from chemicals further reduces soil fertility, making it harder for plants to obtain essential nutrients. Over time, these factors result in reduced crop yields and this decline in productivity can create a feedback loop, where farmers may resort to even more intense and unsustainable practices in attempt to maintain yields, further degrading the land and perpetuating the cycle of declining productivity.

Home-grown School Feeding

Kenya has a long history of prioritizing and implementing school feeding programmes. Active since 1979 with WFP's support, the KNSFP progressively expanded over time and in 2018, WFP fully transitioned the management and funding of the programme to the Government. While refugee school feeding is currently still implemented by WFP, the Government plans to embed refugees into the KNSFP.

[44] Integrated Food Security Phase Classification. 2023. Kenya: Acute Food Insecurity Situation July – September 2023 and Projection October 2023– January 2024

HGSF is strongly anchored in the work that WFP Kenya is doing together with the Government, to scale-up the KNSFP from 2.3 to 10 million children by 2030. The Government's scale-up plan is grounded in climate-smart HGSF, which forms part of Kenya's school meals strategy. Of the 5,800 schools supported by the KNSFP, 418 are in Turkana County, in Nortwestern Kenya. In Turkana, WFP supports two school feeding programmes: the KNSFP and WFP's refugee school feeding operations in which WFP provides school feeding to more than 74,600 learners daily, providing in-kind meals in 22 schools in Kakuma Refugee Camp and cash transfers for the local purchase of daily meals to 6 schools within the Kalobeyei Settlement.

Smallholder Agriculture Market Support

WFP provides technical assistance to more than 330,000 rural farmers in Kenya to enhance production and commercialization of agricultural production. Building on its strong reputation among SHFs and farmer organisations in providing reliable markets, WFP has created "climate-resilient food systems hubs" in Kenya. These hubs provide an opportunity for SHF communities to be linked to markets and to access services, inputs and support to help them boost their production and sell their marketable produce at scale through aggregation. Schools are a predictable market that incentivize SHFs to enhance productivity and, through aggregation, ensure sufficient supply for HGSF. However, WFP's experience has revealed the need for stronger facilitation of market linkages between farmers and school feeding.

In Turkana, WFP has provided technical support to the County government for the preparation of a Pro-Smallholder Access to Institutional Markets Strategy which aims to promote SHFs' access to public institutional markets. Through WFP's food systems programmes, WFP supports the production of drought-tolerant sorghum, maize varieties, and biofortified crops such as iron-rich beans and OFSP by SHFs. In Baringo and West Poket Counties, SHFs produce maize, beans, sorghum, finger millet, sweet potatoes, select horticultural crops, and dairy. All of these foods can be included in school feeding menus, which WFP supports government to design in a climate-friendly and healthy way, prioritizing local, healthy and fresh foods.

WFP also works upstream with off-farm value chain actors such as FSCs, agro-dealers, and aggregators, providing business development training, service provision, access to finance, transportation etc.

Lessons Learned

Kenya adopted a HGSF approach in 2009 as part of a gradual transition to national ownership for programme sustainability. From the onset of the transition, a model was adopted where schools received cash to purchase food locally. A key lesson learned was that while there was adequate food from the localities, schools were not always able to demonstrate that they procured from SHFs. To address this challenge, WFP and the Kenyan Government agreed to work on a school meals aggregator model that ensures all food is procured from local smallholders. In areas where counties cannot produce enough safe and quality food to meet school demands, the Government will procure from aggregators located in neighbouring counties. This new model will be piloted in Turkana, with additional food sourced from neighbouring counties Baringo and West Pokot.

Partnerships

Robust and strategic partnerships play a critical role in WFP's transformative work aligned with the "Changing Lives" agenda in Kenya. WFP prioritizes sustained engagement with established partners like the Government of Kenya, government donors, and UN agencies alongside non-governmental organizations (NGOs). WFP also diversifies its donor base by actively engaging new partners, including International Financial Institutions (IFIs), national and international private sector companies, and foundations.

WFP aims to strengthen partnerships with local partner responders, ultimately broadening the reach and effectiveness of WFP's interventions in Kenya, while increasing the capacity of local responders. In 2023, WFP engaged 19 NGOs and 10 international NGOs through field-level agreements and signed

19 agreements with national and county Government entities, three academia and research institutions and two regional bodies - the International Potato Center and International Center for Tropical Agriculture. These agreements defined project scope and responsibilities, and the partners underwent annual performance reviews before renewal and to guarantee continued alignment with WFP's objectives and programmatic priorities.

Focus on UN inter-agency collaboration

Aligned with its focus on transformative interventions, WFP engages in strengthening the fish value chain in collaboration with county governments. This initiative focuses on empowering fishing cooperatives like Beach Management Units through capacity building and fostering improved market linkages. Building on these efforts, WFP is partnering with UNESCO on the "Unlocking the Economic Potential of Lake Turkana" project, funded by the Netherlands Government. This project aims to enhance food security and economic well-being for vulnerable populations residing around the lake.

In north-eastern Kenya, the "Promoting Peace and Inclusive Development in Borderlands Counties" project demonstrates a collaborative approach to regional challenges. Jointly implemented by WFP, United Nations Development Programme (UNDP), and the Office of the United Nations High Commissioner for Human Rights (OHCHR), the project engages a diverse range of stakeholders, including national and county governments, civil society organizations, local communities, and development partners. This inclusive model fosters collective efforts in designing and implementing initiatives for peacebuilding, human security, and sustainable development. Notably, the project will prioritize addressing the underlying structural causes of conflict in the target counties, aiming to build long-term peace and stability. It aims to build trust between communities and security forces through Civil-Military Cooperation and strategically implemented livelihood micro-projects as "peace dividends."

Uganda Context Analysis

Context

In Uganda, the Karamoja region in north-eastern Uganda, borders Turkana County in Kenya. Within this semi-arid region, the majority of the population lives in rural settings and depends on livestock and crop production. Karamoja has the highest rates of food insecurity (63 percent) and malnutrition in the country. Karamoja's development trajectory is characterised by significant challenges resulting from high levels of food insecurity, limited access to quality education and healthcare services, inadequate infrastructure (i.e. roads) and a lack of security due to frequent cattle raiding. These challenges are compounded by environmental degradation and climate change impacts, including recurring droughts, which further exacerbate challenges for an already vulnerable population. Average rural water access in Karamoja is 70 percent, with only 63 percent of villages having at least one improved water source, while 37 percent of villages have no improved water source. Within the entire Karamoja sub-region, there are approximately 3,100 rural water point sources - typically boreholes fitted with hand pumps – serving more than 1 million people (approximately 310 people per water point).

According to a World Bank Country Environmental Analysis (CEA 2012), failing to take adaptive measures could result in annual costs ranging from USD 3.2 billion to USD 5.9 billion within the next decade. This would impact sectors such as agriculture, infrastructure, water, health, and energy, threatening Uganda's socio-economic stability.

Uganda has one of the lowest per capita greenhouse gas (GHG) emissions globally, at an estimated 1.39 tons of carbon dioxide equivalent, compared to the global average of approximately 7.99 tons, contributing to only about 0.099 percent to the world's GHG emissions. Despite this low contribution, Uganda is highly vulnerable to the effects of global warming and climate change. From 1990 to 2012, Uganda's GHG emissions increased by 50 percent, with an average annual increase of 4 percent from the agricultural sector, which is the highest emitter at 46.25 percent (22.38 Mt CO2e) of the country's total GHG emissions.

Uganda is strongly committed to global efforts to respond to climate change through its Nationally Determined Contribution (NDC). As a mitigation strategy, the country has implemented a series of policies and measures in agriculture, energy supply, forestry, and wetland sectors. The primary response to climate change, however, is adaptation, focusing on enhancing the resilience of communities, infrastructure, and ecosystems.

To reduce emissions, Uganda is protecting existing forests and implementing a nationwide agro-forestry plan. In pastoralism, methane emissions have been reduced by improving livestock keeping practices, such as using improved breeds and feeding regimes.

Uganda, like many other Least Developed Countries (LDCs), is severely impacted by climate variability. The country's tropical climate is experiencing significant changes, including rising temperatures and unpredictable rainfall patterns. These shifts lead to increased extreme weather events such as droughts, floods, landslides, storms, and heatwaves, which in turn affect various development sectors, including agriculture, water resources, infrastructure, energy, and the overall economy.

The World Bank's Climate Change Knowledge Portal indicates that Uganda's average temperature has risen by 1.3°C since the 1960s. Minimum temperatures have increased by 0.5 - 1.2°C, and maximum temperatures by 0.6 - 0.9°C over the same period. Data shows a significant increase in the frequency of hot days and an even larger increase in hot nights. Meanwhile, precipitation has become highly variable, with a notable decrease in annual and seasonal rainfall. The March-May seasonal rainfall has decreased by 6.0 mm per month, per decade. Over the past 60 years, droughts have become more frequent in Uganda, particularly in the western, northern, and north-eastern regions over the last 20 years.

In 2015, the Ministry of Water and Environment projected a 3°C increase in annual temperatures over the next 50 years, along with 2°C to 3°C increases in seasonal temperatures. Rainfall patterns are expected to shift, with some regions experiencing extended wet seasons while others, particularly the North and Northeastern regions, face reduced precipitation.

Development problems to be addressed

Climate variability has adversely affected agricultural productivity, leading to low yields, food shortages at the household level, and food insecurity at the community level. The impacts of climate change are unevenly distributed, with the most affected households and communities being those already facing significant challenges, such as exposure to climate vulnerability and limited ability to cope with floods, droughts, dry spells, and landslides. These communities such as those in Karamoja struggle to adapt to climate change due to the unpredictability of weather patterns and inadequate support.

Karamoja, a semi-arid sub-region in north-eastern Uganda, is home to 1.37 million people across nine districts. It is one of Uganda's poorest regions, with income poverty rising from 61 percent in 2017 to 66 percent, and food poverty increasing from 70 percent to 75 percent over the same period (UBOS: UNHS 2019/20). Agriculture, primarily rain-fed and subsistence-based, is crucial in Karamoja, focusing on livestock and, to a lesser extent, crops like sorghum, maize, groundnuts, beans, and market-oriented vegetables. Despite its potential for agro-pastoral activities, agricultural productivity in Karamoja is very low. The region has the highest levels of food insecurity, malnutrition, and poverty in Uganda. Climate change and natural shocks, such as droughts and floods, significantly hamper socio-economic development, livelihoods, and overall well-being. These factors lead to soil and rangeland degradation, poor crop and livestock yields, and other issues such as water scarcity and pest and disease outbreaks, including locusts and tick-borne diseases. Additionally, resource-based conflicts and cattle rustling exacerbate the vulnerability of local communities in Karamoja. The region also lacks capacity to deal with climatic shocks and maintenance of shock responsive infrastructures and facilities.

Home-Grown School Feeding

The Government of Uganda's National Vision 2040 and the National Development Plan III recognize the importance of school feeding, health, and nutrition. WFP has supported the Government to develop a multi-sectoral School Feeding Policy, which is expected to be released in 2024. In Karamoja, located in North-Eastern Uganda, WFP works with the Government to provide nutritious hot meals to over 250,000 students in 315 schools (78 percent of schools in the region). In Karamoja, only 42 percent of primary age students are enrolled in school and 84 percent of households cannot afford a nutritious daily diet.

To complement and improve the dietary diversity of the school meal, WFP has introduced the production of OFSP in 83 schools in Karamoja. Students actively participate in the cultivation process, gaining practical knowledge about agriculture, and the importance of a diversified diet. WFP has also started to link HGSF to environmental education through tree planting and the creation of student environmental clubs in select schools. In Uganda, WFP's HGSF programme has the potential to drive state-of-the-art programming, and its success could be instrumental in shaping the National School Feeding Policy and informing model programming in Uganda.

Integrating and linking climate and environment-related alongside the school feeding programme in Karamoja addresses the region's critical challenges, such as deforestation and environmental degradation, by reducing the need for firewood for cooking and promoting sustainable practices. By using schools as hubs for community change, knowledge transfer is facilitated, empowering students and communities to adopt sustainable practices and become community agents for environmental conservation and climate resilience.

Agriculture Market Support

In Uganda, WFP supports 36,000 SHFs in Karamoja to bulk and collectively sell their farm produce. WFP has a proven track record of supporting large scale agricultural projects and is already working with SHFs to ensure they have access to agricultural inputs and extension and financial services to support increased production. In addition, WFP trains farmers in post-harvest management and climate smart agriculture and provides small-scaled irrigation, to improve quality and increase production and income.

Private sector engagement is at the core of WFP's implementation for sustainable input chains and market linkages. WFP has already had significant experience in engaging and incentivising agro-input dealers in hard-to-reach areas to ensure supported farmers get access to quality inputs. WFP's HGSF model creates a market for SHFs in Karamoja, from whom WFP sources 35 percent its beans and maize requirements. In 2023, this represented over 2,000 MTs of food procured from farmers in Karamoja. Moving forward, WFP plans to increase local sourcing within Karamoja to 70 percent, by working directly with farmer organizations to improve the quality and quantity of nutritious foods.

WFP also works upstream with off-farm value chain actors such as agro-dealers, and aggregators, providing business development training, service provision, access to finance, transportation etc. In partnership with the National Irrigation Authority and Departments of Agriculture, WFP supports the expansion of irrigation schemes to support increased production.

Asset Creation and Livelihoods

WFP Uganda, through its ACL interventions, restores productive assets to enhance agricultural production and productivity and build community and household capacity to better manage climatic shocks in the Karamoja region. WFP supports vulnerable households to plant indigenous trees, participate in the rehabilitation of water facilities (both for consumption and production), and set up micro-irrigation facilities to support the production of vegetables throughout the year. Nutritious, early maturing and drought tolerant crops like OFSP have been actively promoted. In partnership with the National Irrigation Authority and Departments of Agriculture at the Country government levels, WFP supports the expansion of irrigation schemes to support increased production.

Lessons Learned

In Uganda, WFP's HGSF programme has already made significant strides in stimulating economic growth. From 2022 to 2023, WFP registered a fivefold increase in the amount of food procured from smallholders in Karamoja, injecting USD 1.9 million into the local economy. In a region like Karamoja where limited food production is made worse by poor PHM and limited access to markets, this partnership provides a unique opportunity to support the Government of Uganda's priorities. An integrated HGSF model fosters an enabling environment for climate-smart agribusiness, using schools as an entry point to provide a predictable market for farmers.

WFP was able to successfully introduce a new value chain - OFSP - which were adopted in both schools and communities. Schools are now using OFSP in school meals and WFP continues to scale this initiative to new schools. This is an excellent example of how HGSF can drive the adoption of sustainable practices.

WFP trains farmers on improved production practices, collective bulking and PHM. WFP has successfully built the capacity of farmers to improve the quality and quantity of food produced. This has resulted in multiple benefits, enhancing smallholders' ability to sell to schools, WFP and private buyers while also increasing access to quality and safe food in local markets. WFP has learned that to better ensure the sustainability of food production quality and quantities, a market approach must be used to incentivize farmers.

Partnerships

WFP collaborates closely with the Government, UN agencies, private sector, local organizations, and International and National organizations (INGO). WFP continues to establish partnerships, building on its comparative advantage and expertise while leveraging its position as a humanitarian and development partner to engage in cross-cutting themes such as disaster risk reduction, anticipatory action social protection and resilience building in the "changing lives" space.

In 2023, WFP maintained strong collaboration with 21 cooperating partners consisting of eight national and 13 international non-governmental organizations implementing programme activities. Working through long-term (multi-year) partnerships and leveraging on complementarities and synergies from partners, WFP realized increased cost efficiencies as well as more strategic and joint investments.

Focus on UN inter-agency collaboration
In addition to the UN Central Emergency Response Fund (UNCERF) opportunities, WFP established partnership agreements with other UN agencies such as UNHCR, FAO, WHO, UNICEF, and United Nations Capital Development Fund (UNCDF). These partnerships aim to deliver in an integrated and impactful manner key interventions identified in vulnerable populations. This also serves to maximise effective use of limited resources and deliver on a shared mandate for impact. This further galvanized collaboration between these agencies and paved the way for joint fundraising efforts.

The WFP and FAO collaborated on a joint financing program to enhance climate resilience among smallholder farming households in Uganda's Teso sub-region. Their efforts aimed at improving food security, nutrition, and increasing incomes for farmers and agro-pastoralist households.

Rwanda Context Analysis

Context
Rwanda is the most densely populated country on the African mainland, with a population of 13.7 million people on an area of 26 thousand square kilometers. The population has a high proportion of young people 78 percent below 35 years of age. Agriculture is the chief economic activity for Rwandans, employing half of the working age population in Rwanda. Despite the various interventions and strategies to meet the country's aspirations, youth unemployment remains a serious challenge in Rwanda. According to the Rwanda Labour force survey annual report, 2020, the labour force

participation rate is 56.4 percent and the youth unemployment rate stands at 22.4 percent. However, this can be reversed by strategically engaging youth in solving challenges within the food system.

Anthropogenic climate change is contributing to rising temperatures and the increasing frequency of extreme weather events such as floods and droughts. According to a report from the Rwanda Water Board, 45 percent of the total area of the country is at high or very high risk of erosion, creating a substantial loss to agricultural production, economic activity (GDP loss), and soil health.

As highlighted by FAO, CSA is an agricultural approach that strives to transform agricultural systems in order to protect food security and development from climate change. The three objectives of climate-smart agriculture are "sustainably increasing agricultural productivity and incomes, adapting and building resilience to climate change, and reducing and/or removing greenhouse gas emissions."

Development Problems to be Addressed

The climate crisis presents serious challenges for Rwanda's sustainable development. After strong gains in the 2000s, food insecurity, malnutrition and poverty rates have stagnated in recent years. The stagnation is due in part to the dual pressures of erratic weather combined with extensive soil erosion and biodiversity loss that undermine the nature-based livelihoods of the poorest people.

By 2050, Rwanda risks losing 5-7 percent of GDP due to climate disasters. As much as 45 percent of land faces high erosion risk; 27 million tons of topsoil are lost annually, undermining agricultural output and GDP, forcing the poorest farmers to buy more costly fertilizer. At the same time, 15 percent of the population lives in hilly areas susceptible to floods and landslides, and 6.3 percent are exposed to drought.

The Notre Dame Global Adaptation Initiative ranks Rwanda 124th in terms of its vulnerability to climate change in combination with its readiness to improve resilience. Rising temperatures (1.4°C since 1970) and increasingly irregular precipitation are expected to increase the frequency and severity of climate shocks, primarily localized floods, landslides and droughts. Moreover, agriculture accounted for 55 percent of all GHG emissions in 2015. It is estimated that half of Rwanda's farmland suffers moderate to severe erosion while 65 percent of freshwater is used by agriculture.

In Rwanda, a strong enabling environment for climate action and food systems transformation is already in place. The Environment and Climate Change Policy, Green Growth and Climate Resilience Strategy (GGCRS), updated Nationally Determined Contribution (NDC) and the new Strategic Plan for Agriculture Transformation (PSTA5) comprise a clear and structured framework. WFP has made significant contributions to these strategic documents and now is the time to further pilot and support the scale-up of CSA initiatives. WFP will focus on promoting and scaling up conservation agriculture complemented with other good agronomic practices.

Home-grown School Feeding

WFP has, for the past two decades, been the Government's leading school feeding partner. Building on its strong operational experience and school feeding successes in Rwanda, WFP plays a dual role as a provider of technical assistance for the government's National School Feeding Programme (NSFP) and direct implementer of WFP's HGSF Programme. WFP is gradually transitioning its direct school feeding provision to the Government's NSFP. In September 2023, WFP transitioned 89,000 students into the Government's NSFP, scaling down WFP's programme to approximately 30,000 students. WFP also continues to support 38,000 refugee and host-community school children with school meals supported by WFP's refugee operation. WFP's HGSF programme provides an integrated package of support to complement the daily meal provided to students. This includes water, hygiene, and sanitation activities, including deworming and menstrual hygiene management initiatives for girls, nutrition education for students, the establishment of school gardens and building infrastructure (ie. Latrines). WFP also supports SHFs to improve their quality and quantity of production and access the school feeding market (estimated at about 380,000 metric tonnes of food required per year).

Smallholder Agriculture Market Support

In Rwanda, WFP reaches more than 130,000 SHFs through programmes aimed at improving productivity and market access. WFP has worked to strengthen the value chains of key commodities, building access to long-term markets and buyers, supported by access to skills, inputs and services. WFP actively collaborates with the private sector, engaging manufacturers and suppliers of post-harvest technologies and tools. Initiatives include developing business models that support easy and affordable access to PHM technologies and equipment (i.e. tarpaulins, hermetic bags) and knowledge on improved storage, pest control, and quality preservation. WFP is conducting a district mapping exercise, which seeks to map the demand generated by the NSFP to local supply from SHFs thereby encouraging strategic investment in key value chains.

WFP promotes and scales up CSA through the government extension system which is a customized farmer field school model, in order to improve and strengthen existing working mechanisms. Government's support of CA has resulted from a WFP-initiated pilot, which was successful in generating evidence to inform a shift in national policy towards more sustainable and productive agricultural practices.

Lessons Learned

In Rwanda, WFP is not responsible for "feeding" the majority of school children and rather focuses on strengthening the Government of Rwanda's core programmes and capacities essential for food security. The Government's NSFP is universal and WFP's HGSF programme is only present in the most food insecure areas of the country, acting as a platform for testing innovations for subsequent adoption in the NSFP. WFP's programme is gradually being handed over to Government and WFP's role going forward, will focus on providing capacity strengthening and highly nutritious foods towards the NSFP. WFP has supported the Government to develop a national financing strategy with scenarios to ensure sustainable financing of the NSFP through various types of resources. WFP has learned that development partner and donor support will still be required over the next 7-8 years of the NSFP's implementation, before the programme can be sustained entirely through national resources.

Partnerships

In line with WFP's commitment to Sustainable Development Goal (SDG) 17, WFP aims to strengthen its partnerships with the Government, UN agencies, public and private sector entities, international and national cooperating partners, local farmer organizations, and academia to achieve effective results. As part of WFP's commitments under the Grand Bargain to localize initiatives, WFP is working with 24 cooperating partners in Rwanda: ten Government agencies, seven non-governmental organizations (NGOs), three of which are local NGOs, and seven UN agencies. In addition, 425 rural cooperatives benefitted from WFP's support to SHFs. WFP's partners played an important role in delivering food and nutrition assistance to refugees and asylum seekers, in implementing HGSF, resilience and social protection as well as support to SHFs.

Focus on UN inter-agency collaboration

The three RBA agencies, FAO, IFAD and WFP work closely together with the Ministry of Agriculture and Animal Resources to sustainably transform food systems in Rwanda based on the 5th Strategic Plan for Agriculture Transformation. While FAO mainly focuses on the policy level in Rwanda and IFAD on providing financing, WFP is working closely with over 120,000 smallholder farmers, 1,000 farmer service centres and 425 cooperatives across the country through its three field offices and collaboration with cooperating partners. WFP regularly engages and consults FAO, especially at the policy and normative level to guide the direction in these areas. FAO in Rwanda is also limited in terms of capacity to implement- they lack staff and field offices- and rely on WFP for operationalization of the strategies.

In 2023, the inter-agency collaboration with FAO, UNDP and the Government concluded on the cross-border project with the Democratic Republic of the Congo funded by the Peacebuilding Fund. It focused on creating peace dividends for women and youth through increased cross-border trade and strengthened food security, by providing training through Farmer Field Schools on sustainable

production practices. Increased agricultural productivity contributes to sustainable food security and peaceful cohabitation across borders, making it a valuable tool in building and sustaining peace.

In the course of the year, WFP continued implementing the third phase of the joint UN programme on nutrition with FAO, UNICEF and WHO funded by the Swiss Agency for Development and Cooperation and launched the second phase of the joint UN programme on Rural Women's Economic Empowerment with FAO, IFAD and UN Women funded by the Bill and Melinda Gates Foundation and the Government of Sweden. WFP successfully applied for an allocation from the UNCERF for the flood response with FAO and WHO and served as the co-chair of the CERF steering committee as well as the designated lead agency of the response appointed by the Government. Building on Rwanda's successful first national conference on disaster risk reduction and management co-organized with MINEMA and the Ministry of Environment, WFP is partnering with FAO, IFRC, Rwanda Red Cross, UNDRR and others to promote anticipatory action in the face of increasing weather-related shocks.

Following the launch of the UN partner portal in 2022, the country office continued to use the platform to carry out corporate due diligence for potential cooperating partners, posting calls for expressions of interest, and partner selection. The UNPP which experienced significant increase in the number of organizations submitting proposals, helps to harmonize United Nations processes for engaging civil society and non-governmental organizations, and reduce duplicate information.

Annex 2: Partner Assessment

WFP as implementing partner

WFP is the UN agency charged with providing and coordinating food assistance. Its dual humanitarian and development mandate dates back to its origins in 1961. The dual mandate implies that WFP works both in emergency settings and in protracted crises. The dual mandate gives the organisation a potential edge when it comes to operating effectively in the humanitarian-development nexus in protracted crises.

In accordance with "The World We Share", Denmark will contribute to break down silos between urgent humanitarian assistance and long-term development programmes and support cohesion across humanitarian assistance, development and peacebuilding. Denmark will therefore actively support WFP in applying an integrated humanitarian-development-peace (HDP) nexus approach and work for greater food security in fragile countries and regions. WFP has endorsed the Development Assistance Committee (OECD-DAC) Recommendation on the HDP nexus which Denmark is supportive of.

WFP's dual mandate and humanitarian response expertise is critical in addressing the protracted humanitarian crises and enables WFP to integrate a focus on resilience and medium-term and longer-term development objectives into its responses. WFP is also increasingly ensuring that all its humanitarian and development interventions are delivered using risk-informed approaches, which in practice means that they are designed to withstand – or be resilient in the face of – shocks and stresses. WFP works to ensure that all of its programmes are conflict-sensitive, and when appropriate, make an explicit contribution to peacebuilding and strengthening of social cohesion. WFP was awarded the Nobel Peace Prize in 2020 for its efforts to combat hunger, for its contribution to bettering conditions for peace in conflict-affected areas and for acting as a driving force in efforts to prevent the use of hunger as a weapon of war and conflict.

Two thirds of WFP's work takes place in conflict-affected settings, often in protracted crises. It therefore makes sense that WFP rolls out the humanitarian-development-peace nexus approach in its work and applies a conflict-sensitive approach. In practice, this means that WFP addresses both short term urgent food needs in emergencies and works towards long-term and sustainable solutions building food security. Both preparedness and building of resilience are part of this approach. This aligns well with WFP's overall approach to deliver on its dual mandate, including through its focus on integrated programming and collaborative partnerships as reflected in its Strategic Plan. And it aligns with broader efforts of the UN to Deliver as One and strengthen the coherence and complementarity of humanitarian, development and peace efforts. WFP operationalizes the HDP-nexus approach in all its country strategic plans within conflict-affected countries.

Denmark is an important donor to the entire UN system, as well as the International Financial Institutions, and is therefore keen to see a systems approach to food insecurity. At the same time, Denmark expects WFP to work, based on its mandate, closer with partners in order to better realise the humanitarian-development-peace nexus. This is crucial, especially in the fragile and vulnerable countries hit worst by conflict, climate change and COVID-19.

Denmark will in its advocacy support WFP's efforts to focus political attention on the complex linkages between hunger and conflict, and will use relevant platforms to highlight the relevance of UN Security Council resolution 2417 which condemns the starvation of civilians as a method of warfare and those that wilfully block humanitarian access, and call for a shift towards implementation of the resolution. Furthermore, Denmark expects WFP to design programmes that are conflict sensitive.

With outset in WFP's dual mandate, Denmark expects WFP to lead the operationalisation of the HDP-nexus while retaining its focus on food security and nutrition and to document good practices and

approaches for other actors to learn from. Thus, Denmark expects WFP to pursue the nexus-approach as co-lead for the global Food Security cluster, and as co-lead for country-level food security clusters with operational partners. Moreover, Denmark supports WFP's efforts, as member of the multi-stakeholder Global Network against Food Crises, to apply a nexus approach when monitoring food crises and the impact of WFP programmes.

Finally, this project aligns with the Danish priority 2 for the strategic partnership with WFP on advancing climate adaptation and anticipatory action in WFP's food assistance, where Denmark is focused on promoting a more climate oriented development cooperation focused on the implications of climate change and sustainable development.

Climate change puts food production under pressure and is one of the key drivers of rising food insecurity. Climate-induced extreme weather, droughts, storms and floods damage the systems that produce and process food. And climate shocks disturb livelihoods and increase displacement, thereby intensifying hunger. For WFP, climate change therefore represents a growing challenge and underlines the need for a new business model, with more weight on strengthening capacities for preparedness, adaptation and resilience.

Within the field of climate action, Denmark sees WFP core competences and added value in its work on anticipatory and early action before climate-induced disasters strike. WFP's work on anticipatory action and emergency preparedness for droughts has especially been showing good progress in the Eastern Africa and Sahel regions. In its collaboration with WFP, Denmark will advocate for further integration of climate risks and climate resilience into WFP programmes. Moreover, Denmark supports WFP's efforts towards more resilient and sustainable food systems, including innovative and green solutions. Denmark expects WFP to further integrate anticipatory action towards climate shocks in its country strategic plans and design programmes integrating climate resilience.

For this project, RBN will be responsible for management of the partnership and relationships with the funding partners. RBN will also support WFP country offices with programme coordination, specific technical expertise linked to the thematic pillars of the programme (i.e. gender, SAMS, energy), as well as for monitoring and learning generated over the three years of implementation.

General about WFP

WFP's vision focuses on eradicating hunger and malnutrition (SDG 2) and strengthening partnerships (SDG 17). Food and food-related assistance lie at the heart of the struggle to break the cycle of hunger, fragility and poverty.

WFP's mission is to ensure that people are better able to meet their urgent food and nutrition needs, have better nutrition, health and education outcomes and enjoy improved and sustainable livelihoods. In addition, WFP will strengthen national programmes and systems and ensure that humanitarian and development actors are more efficient and effective, working across the humanitarian-development-peace nexus to address food insecurity.

The organisation's work is guided by the Strategic Plan 2022-2025, aimed at the achievement of Agenda 2030, specifically SDGs 2 and 17.

WFP has a workforce of over 20,000 staff across more than 120 countries and territories, and delivers life-saving food assistance to those displaced by conflict and devastated by disasters, while also aiding people and communities in overcoming the multifaceted challenges they encounter in striving for better futures.

In conflict-affected areas, WFP delivers essential relief to weary populations and employs food assistance as a tool to pave pathways to peace and stability. This commitment was internationally recognized when WFP was honored with the Nobel Peace Prize in 2020 for its significant contributions

to combating hunger, enhancing conditions for peace in conflict-ridden regions, and its proactive stance against the use of hunger as a weapon of war and conflict.

Aligned with the 2030 Agenda for Sustainable Development, WFP plays a pivotal role in the United Nations system's efforts to assist countries in addressing the immediate needs of the most vulnerable and achieving the Sustainable Development Goals (SDGs), with a focus on people, the planet, prosperity, peace, and partnerships. The cornerstone of achieving zero hunger lies in improving immediate access to adequate, safe, and nutritious food, while simultaneously ensuring the fulfilment of essential needs over time. Strengthening resilience against an increasing number of shocks is paramount, aiming to reduce both the human and financial costs of crises and responses. WFP's vision of zero hunger encompasses the following key outcomes:

- People are better able to meet their urgent food and nutrition needs;
- People have better nutrition, health and education outcomes;
- People have improved and sustainable livelihoods;
- National programmes and systems are strengthened;
- Humanitarian and development actors are more efficient and effective.

WFP collaborates with a wide range of partners, including governments, non-governmental oranizations (NGO), the private sector, UN agencies, regional and international institutions, clusters, multistakeholder partnerships, academia, and think tanks, along with goodwill ambassadors, advocates, and high-level supporters.

In 2023, WFP extended direct assistance to about 152 million people, including those facing emergency or catastrophe levels of food insecurity, refugees, migrants, and internally displaced persons, through diverse means such as in-kind food delivery, cash-based transfers, commodity vouchers, and individual capacity strengthening. Women and girls comprised 53 percent of the beneficiaries, with children accounting for 56 percent of the total assisted population. Additionally, WFP offered capacity strengthening and supply chain services to governments, local partners, communities, and the private sector in 120 countries and territories.

WFP's approach emphasizes people-centered action, adherence to humanitarian principles, context-sensitive programming, integrated partnerships across the humanitarian-development-peace nexus, risk-based decision-making, and evidence-driven impact.

CSPs and the corporate results framework (CRF) are instrumental in contextualizing WFP's global strategy at the country level, ensuring a coherent approach to achieving outcomes and contributing to global goals. Through strategic planning, partnership development, and technological innovation, WFP is uniquely positioned to address the complex challenges of hunger and malnutrition, and climate change driving progress toward a world of zero hunger.

WFP has six decades of experience supporting school meals in more than 120 countries, including Kenya, Rwanda and Uganda. In 2022, WFP made school meals its flagship area of work, which meant increased investment and support to governments, a vision which is highlighted further in WFP’s global school feeding strategy. As the Secretariat of the Global SMC, WFP supports countries to share experiences, access financing, and improve their approaches, supported by a global network of partner organizations. WFP’s extensive experience in school feeding, its unparalleled country presence and deep knowledge and relationships with governments, combined with the political momentum of the SMC form the backdrop for this – *Improving Local Food Systems in East Africa using Schools as Catalytic Platforms* project.

WFP’s climate and resilience efforts in the region aim to ensure that climatic shocks and stressors do not leave longlasting adverse impacts on communities. WFP works with Governments and partners to strengthen household resilience and enhance livelihoods through a combination of climate actions

and food systems actions which reduce the reliance on humanitarian assistance and are also cost-effective. WFP implements integrated programmes across several sectors including increasing access to adequate, nutritious, and affordable food through functioning food systems; early and anticipatory protection from climate shocks; food and nutrition support during crises; basic social services to build human capital; livelihood support; and community infrastructure and ecosystems restoration.

WFP's resilience programmes are aimed at reducing humanitarian needs, protecting people against the impact of droughts and floods, enabling people to sustain their livelihoods, helping to empower women, promoting water resource management, and regreening landscapes and regenerated soils for improved food security and nutrition.

WFP food systems interventions aim to transform rural livelihoods and local food systems through the implementation of value chain development interventions as part of its resilient food systems programming. These aimed to address value chain inefficiencies, enhance local food production for local consumption and increase farmers' access to markets through local and regional procurement.

WFP's Partnerships

This project will be implemented with a wide variety of partners at national levels. WFP increasingly takes on a convening role based on its thought leadership, research capacity and advocacy efforts. Partnerships are built through an ecosystem-based approach that clusters the value and roles of different stakeholders.

Local and National Governments

The country teams have existing, strong relationships with local and national governments in each country. This engagement is multi-sectoral in nature, involving all relevant sectors, including education, agriculture, environment, finance, gender and health. National governments in each country will bolster the project by facilitating policy support, regulatory mechanisms, and integrating initiatives into local governance structures. WFP's strong relationships with national governments enable access, offer pertinent data and insights, and ensure that project initiatives align with each country's strategic priorities.

Partner Selection for Implementation

WFP partners with civil society and communities to implement its programmes. WFP Cooperating Partners are an essential part of the implementation and achievement of WFP's Country Strategic Plans. In 2023, WFP partnered with 356 partners across East Africa, out of which 199 were national organizations across the nine countries in the region. WFP works to advance the localization agenda, through collaboration with national NGOs and Governments to increase its footprint in hard-to-reach areas, strengthen capacities, and leverage local knowledge, skills, and solutions while fostering stronger coordination amongst various stakeholders for sustainability. Where and if needed, WFP will conduct a stakeholder mapping to identify new partners.

Implementation partners are selected through WFP's rigorous cooperating partner selection process, which includes a competitive due diligence evaluation of technical, financial, and ethical/humanitarian capacities. Additionally, the process ensures that organisations are properly registered in the United Nations Partner Portal, affirming their credibility and legitimacy to participate in United Nations-led initiatives.

All stakeholders, including direct implementing partners and other relevant entities, will be engaged through field-level agreements (FLAs) following WFP's stringent selection criteria. This ensures that all participating organisations not only align with the project's strategic objectives but also adhere to the highest standards of legal and operational integrity. WFP will verify the legal status of all stakeholders to ensure they are authorized to operate within the project's target regions. This verification process includes confirming their legal registration and operational status in accordance with local laws and regulations. The legal status of these organisations may be disclosed to donors and other interested

parties following the selection and engagement process, ensuring transparency and accountability in all project-related activities.

By adhering to these procedures, WFP guarantees that all participating organizations in the project are not only strategically aligned with the project's goals but also legally compliant and operationally capable of contributing to its success. This approach fosters a collaborative and legally sound environment for implementing the project, ensuring effective and efficient achievement of its objectives.

Responsibilities of Partner Organizations

NGOs/ CSOs are instrumental at the community level, providing essential on-ground support, facilitating capacity building, and ensuring that interventions are culturally and contextually aligned. They will play a pivotal role in engaging beneficiaries, gathering feedback, and driving social mobilisation. Tasks will be executed as per the implementation plan, within set timelines and to professional standards. This includes supplying skilled personnel and necessary resources for project activities, adhering to WFP's Gender Policy, ensuring free and secure assistance to beneficiaries, meeting targeted criteria, and maintaining the highest ethical standards.

This coordinated approach leverages each participant's strengths, aiming to ensure the project's success and maximise the impact on the communities it serves. WFP is open to collaborating with a diverse range of partners, including the private sector, academia, and more, to amplify the project's impact.

Annex 3: MFA Results Framework for Programmes

Programme	Improving Local Food Systems in East Africa using Schools as Catalytic Platforms
Programme Objective	Drive the improvement of Rwandan, Kenyan, Ugandan food systems around schools by scaling up climate-smart, sustainable, and inclusive home-grown school feeding programmes to help achieve zero hunger
Impact Indicator	Dietary Diversity for School Children Food Consumption Score SDG 2: Zero Hunger

Outcome 1.		Increased adoption of climate-adaptive practices	
Outcome indicator		Percentage of farmers and other actors adopting one or more climate-adaptive techniques Means of verification: survey	
Baseline	Year 2025	TBD	[Situation prior to project activities]
Target	Year 2027	TBD	[intended situation by the end of project (phase)]

Output 1.1		Smallholder producers trained or received technical assistance	
Output indicator		Number of smallholder farmers supported with trainings, inputs, equipment, and infrastructure Means of verification: training attendance forms, equipment receipts	
Baseline	Year 2025	N/A	[Situation prior to project activity]
Project Target	Year 2027		[Intended situation after three years of implementation]

Output 1.2		Increased awareness of climate-smart production across targeted value chains	
Output indicator		Number of smallholder farmer groups, other value chain actor groups, and government entities reached with information, advocacy messages related to climate-smart production Means of verification: session attendance forms, meeting records, other project records	
Baseline	Year 2025	N/A	[Situation prior to project activity]
Project Target	Year 2027		[Intended situation after three years of implementation]

Annex 4. Risk Management

Overview of Risk management in WFP
In 2018, the Executive Board approved the most recent Enterprise Risk Management Policy with the Risk Appetite Statements as an annex. Under this policy, Country Offices, Regional Bureaux and HQ Divisions are required to conduct a risk assessment at least once a year or when a major change occurs in the risk environment and track assessment results in their respective operational Risk Register (RR). WFP also updates the Corporate Risk Register twice a year, taking into consideration the risks that occur globally and with strong engagement of all Leadership Group corporate risk owners.

The Risk Management Division (RMD) presents a review of the corporate risks and emerging issues to the Oversight and Policy Committee (OPC) along with field risk insights collected through field risk register data analysis. The OPC, which supports the Executive Director's managerial functions, is mandated with oversight of risks across WFP. The Oversight and Policy Committee discusses twice a year any changes or updates to specific risks of a corporate nature as well as forecasts of potential events that may impede the achievement of WFP's Strategic Objectives.

RMD prepares a consolidated update on oversight recommendations to support executive management discussions with the Independent Oversight Advisory Committee on WFP's global risk landscape. The oversight update includes recommendations from internal audit, external audit, and the Joint Inspection Unit of the United Nations System. As part of the Annual Executive Director Assurance Exercise (the Exercise), RMD synthesized significant risk and control issues into the Executive Director's Statement on Internal Control, which is incorporated in the Audited Annual Accounts and detailed in a separate management review document for consideration during the Annual Session of the WFP Executive Board. The Exercise includes questions prepared in collaboration with the Ethics Office on PSEA including addressing any gaps and areas for improvement.

Risk management at Country Office Level
WFP manages a comprehensive risk management and compliance portfolio with the following objectives:

- Improve transparency on high-risk areas and promote shared understanding of risk management principles across functions and offices
- Support operational and managerial decision making through risk informed decision making.
- Promote integrated planning (performance, risk, and budgeting) across offices
- Promote integrity and ethics among staff, partners and contracted third parties; and
- Strengthen assurances through periodic risk and control reviews

Country Offices maintain and regularly update risk register covering the portfolio of activities conducted within each respective country operation. Some cross cutting risks in the region include strategic risks primarily related to access constraints, funding and beneficiary targeting and identity management. Operational include those related to connectivity, partner and vendor capacities, beneficiary protection, supply chain, and limited access which impact WFP and third-party monitoring coverage. Fiduciary risks, specifically those related to suspected fraud and corruption (incorporating incidents of theft and looting), include improper conduct of contracted third parties, the role of gatekeepers and community structure who may improperly influence operations or misappropriate beneficiary entitlements, and security of WFP personnel. These risks are managed through function or office-specific control strengthening actions, including investing in preventive and detective controls, specifically system controls in WFP's beneficiary, and transfer management platforms. WFP also maintains robust security structure complaint with prevailing UNDSS provisions for safety and security of WFP personnel, premises and assets.

Issue management and escalation:

Consistent with WFP's revised Anti-Fraud and Anti-Corruption Policy (AFAC) (updated in 2021), CO reviews all allegations of fraud and corruption. Reasonably suspected cases of prohibited practices (as outlined in the AFAC policy) are referred to the Office of Investigations (OIGI) for further review and investigation. WFP maintains a country and regional level taskforces which are convened to review cases of misappropriation, including the sale of WFP commodities in markets domestically and cross border to ensure appropriate compensatory controls and mitigation actions are introduced. Where possible, local authorities are requested to assist in the recovery of humanitarian commodities. cases where transports or cooperating partners are involved, WFP may recover the value of commodities and/or terminate agreements as necessary.

Complaints received by WFP involving partner misconduct, allegations of ties to sanctioned entities, or other allegations of misappropriation of resources are reviewed by OIGI. Where appropriate, information from complaints is cross-checked among agencies present on the ground to ensure details of the complaint are as complete as possible to take an informed decision. Where required, WFP may move to terminate the partnership agreement, and further escalate the issue to WFP's Office of Investigations for further action.

Conflict sensitivity

Conflict sensitivity risks are identified for each operational area to enable context specific analysis, with accompanying mitigation measures. This enables WFP to make more specific programmatic and operational decisions based on the assessed dynamics of a particular location. Additionally, power dynamics, possible conflicts of interest and other stakeholder assessments included in the conflict sensitivity reviews enable WFP field managers to better direct assistance activities.

WFP oversight

On a broader scale, WFP's vision for oversight is for it to drive continuous improvement, reinforce the highest standards of integrity, ethics and professionalism, and safeguard stakeholder confidence for the benefit of the people it serves. The stakeholders of assurance include WFP governing bodies, donors, host countries, cooperating partners, civil society organisations, beneficiaries, and personnel. Stakeholder confidence in WFP's ability to achieve its objectives for the people it serves, and to continuously improve by addressing identified gaps and weaknesses, is the ultimate deliverable of assurance activities.

Annex 5. Budget Details (indicative budgets)

MFA Budget

Cost Categories	Direct Operating Costs (USD)	Direct Operating Costs (DKK)
Kenya estimated activity budgets, including implementation /staffing costs	$ 1,777,673	12,107,730.80 kr.
Kenya Direct Support Costs	$ 100,261	682,877.67 kr.
Kenya Indirect Support Costs (6.5%)	$ 122,066	831,391.53 kr.
Uganda estimated activity budgets, including implementation / staffing costs	$ 1,553,724	10,582,414.20 kr.
Uganda Direct Support Costs	$ 136,417	929,136.18 kr.
Uganda Indirect Support Costs (6.5%)	$ 109,859	748,249.65 kr.
Rwanda estimated activity budgets, including implementation / staffing costs	$ 1,252,500	8,530,777.50 kr
Rwanda Direct Support Costs	$ 150,000	1,021,650.00 kr
Rwanda Indirect Support Costs (6.5%)	$ 97,500	664,072.50 kr.
RBN coordination, technical expertise (water, agriculture, climate), partnership management, communications, learning support	$ 537,889.90	3,663,568.11
RBN Indirect Support Costs (6.5%)	$ 34,962.84	238,131.90 kr.
TOTAL PROJECT BUDGET	**$ 5,872,852.74**	**40,000,000 DKK**

**UN Exchange Rate (Aug 15, 2024): 1 USD = 6.811 DKK/kr.*

Grundfos Budget

Cost Categories	Total Direct Operating Costs (USD)	DKK
Kenya estimated activity budgets, including implementation/staffing costs	$ 1,244,371	8,475,410.88 kr.
Kenya Direct Support Costs	$ 70,183	478,016.41 kr.
Kenya Indirect Support Costs (6.5%)	$ 85,446	581,972.71 kr
Uganda estimated activity budgets, including implementation/ staffing costs	$ 863,180	5,879,118.98 kr.
Uganda Direct Support Costs	$ 75,787	516,185.26 kr.
Uganda Indirect Support Costs (6.5%)	$ 61,033	415,695.76 kr.
RBN coordination, technical expertise (water), partnership management, communications, learning support	$253,686.73	1,727,860.32 kr
RBN: regional evaluation & learning component	$ 250,000	1,702,750.00 kr.
RBN Indirect Support Costs (6.5%)	$ 32,739.64	222,989.69 kr
TOTAL PROJECT BUDGET	**$ 2,936,426.37**	**20,000,000 DKK**

**UN Exchange Rate (Aug 15, 2024): 1 USD = 6.811 DKK/kr.*

Annex 6. Synergies with other projects and initiatives

School Meals Coalition	The SMC is a government led global coalition that aims for every child to have the opportunity to receive a healthy, nutritious daily meal in schools by 2030. With membership of 98 countries - including Rwanda, Kenya, Uganda, and Denmark – and 83 global partners – including NNF – the SMC acts as a convenor for a global hub focused on research and evidence generation hub for food systems linked to school health and nutrition. WFP serves as the secretariat for the Coalition. Rwanda was among the first countries to join the coalition and develop country commitments. Rwanda also hosted the launch of the Eastern African Regional School Meals Coalition Network in 2023. Through this partnership, RBN will support the sharing and dissemination of learning and evidence from the three countries with the SMC global community. The initiatives of the SMC include: • *Research Consortium for School Health and Nutrition (RCSHN):* Through this partnership, WFP will partner with the RCSHN, which will be responsible for conducting the global research component focused on: 1) estimating the return-on-investment of national planet-friendly school meals programmes and document best practice; 2) co-creating a mechanism to track the improvement of food systems; identifying the most cost-efficient elements of planet-friendly school meals programmes and co-creating and sharing an information package with national-level policy makers. Evidence will be disseminated widely to support country decision making and improve the scale and quality of programmes. • *Sustainable Financing Initiative for School Health and Nutrition*: There is not any planned linkage at this time, between this project and the Sustainable Financing Initiative. • *Monitoring and Data Initiative*: Depending on the timing and progress made by the Monitoring and Data Initiative, WFP may be able to integrate the established core set of indicators into the project.
Big Bet on School Meals	The Improving Local Food Systems in East Africa using Schools as Catalytic Platforms project is a part of the inception phase of The Planet-Friendly School Meals Big Bet (or "Big Bet"). The Big Bet is a new effort led by a consortium of partners to provide strategic technical assistance and catalytic financial support to LMICs eager to expand and improve their school meal programmes. The vision of Big Bet is to expand healthy, home-grown school meals to 100 million more children in a planet-friendly and financially sustainable way by 2030. Core Big Bet partners currently include WFP; Global Partnership for Education; Government of Brazil; Sustainable Financing Initiative for School Health and Nutrition; NNF; Research Consortium for School Health and Nutrition; Rockefeller Foundation; International Development Research Centre; WFP Centre of Excellence Against Hunger.
Alliance for Inclusive Refugee Response	An alliance between the Danish MFA and three major Danish philanthropic foundations – NNF, Lego Foundation and GF has initiated a collaboration with the County Government of Turkana and joined efforts in supporting inclusive refugee responses and promoting more durable

	and longer-term development solutions in refugee hosting areas of Turkana and broader in Kenya. In the "Improving Local Food Systems in East Africa using Schools as Catalytic Platforms" project, WFP Kenya activities will be reaching the same geographic area and beneficiary schools as the Inclusive Refugee Response project, in Turkana, and will continue building on the initial investments that have been made by the MFA, NNF, and other Danish foundations.
Ignite Innovation Hub	The Danish MFA is already investing in innovative solutions across the value chain for climate smart agriculture across East Africa through the WFP IGNITE Innovation Hub for East Africa. The Hub identifies and supports local value chain actors with access to value chain impact investment, including access to finance and relevant technical advisory support. These investments can be linked to home grown school meal programming. See the Lookbook here: IGNITE Innovation Hub for Eastern Africa_Lookbook of Portfolio Snapshots_June 2024_v2 4
WFP's Local Regional Procurement Food Policy	WFP approved its LRFP Policy in November 2019, which aims to empower smallholder farmers and strengthen local food systems. Implementation of the policy has been piloted in 11 countries globally including Uganda. Through the implementation of the LRFPP policy, WFP Uganda is pursuing a two-pronged approach. First, direct food purchases from farmers' organizations aimed at supporting the HGSF programme; and indirect pro-smallholder farmer purchases where traders are mandated to provide traceability evidence for a portion of 20 percent purchased from smallholder farmers. Since the inception of the LRFPP in 2021, over USD 94.3 million has been infused into the local economy in Uganda, including USD 15.1 million for direct purchases from SHFs. Although this pilot is being implemented in only one of the three countries to be supported by this partnership, learnings from Uganda's implementation will be captured and shared regionally.
WFP East Africa's Water for Fragile Food Systems Engagement Strategy	WFP has collaborated with the Boston Consulting Group to prepare a regional engagement strategy around Water Security for Fragile Food Systems. The strategy (1) quantifies the impacts of climate change on water in East Africa and the resulting increase in needs as well as costs; (2) articulates WFP's comparative advantage through comprehensive stakeholder analysis and mapping; and (3) offers key entry points for WFP in the 'water for food systems' space, particularly in fragile contexts. The Strategy is currently being disseminated amongst stakeholders and WFP Regional Bureau Nairobi looks forward to further engaging and convening partners on this important topic for the region.
Fortified Whole Grain Alliance	The FWGA is a coalition of stakeholders (nonprofit and private sector members) committed to increasing the global consumption of fortified whole grains, with founding partners including the Rockefeller Foundation, DSM, Boston Consulting Group. WFP is a consultative partner of the FWGA. The FWGA supports a number of initiatives currently underway in Kenya, Rwanda, Burundi, and Ghana, focused on shifting maize, rice, and wheat value chains to fortified whole grains. NNF is now a funding partner of the FWGA.
Rockefeller Foundation	In 2021, the Rockefeller Foundation (RF) partnered with WFP in Rwanda and Burundi to develop healthy diets by exploring opportunities to improve nutrition through the meals and menus of institutional procurement channels, specifically school feeding. WFP and RF have

	both forged strong partnerships with the SMC and the FWGA. RF continues to support improved institutional procurement linked to school feeding. The learning and progress that have been made under the RF partnership will be leveraged through NNF partnership.
Mastercard Foundation	In 2022, WFP and the Mastercard Foundation (MCF) embarked on a 5-year partnership to strengthen food systems and promote increased job opportunities across agricultural value chains for young people in vulnerable communities, across 8 Sub-Saharan African countries, including Kenya, Uganda and Rwanda. The partnership aims to strengthen local agri-food systems, making them more efficient, sustainable, and inclusive for young people, in particular young women. Capacity of SHFs are built through PHM practices and increased access to markets, with a focus on commercial opportunities that can create value for young men and women. For the youth in work programme, WFP is facilitating income generation by promoting both on and off-farm service provision, enterprise development, and employment opportunities through specialized trainings, business development and coaching, and access to finance. Capacity strengthening activities reached close to 66,00 participants (with 62 percent being youth ages 18-35 years of age, of which 54 percent were young women) in 2023, in Kenya, Rwanda and Uganda. Countries also supported 4,881 youth enterprises, with 34 percent being led by young women. Last year, in Kenya and Uganda, 17,000 youth (over 50 percent women) reported increased income as a result of project participation in 2023. These youth are engaged in a range of activities, including farming, aggregation, Farmer Service Centers, service providers, seasonal workers, retailers, transporters, and village savings agents, among others. WFP is exploring potential complementarity between WFP's partnership with MCF and NNF by linking youth employment opportunities to new school feeding delivery models and supporting communities to build climate-resilient food systems and to strengthen livelihoods.

Annex 7: Plan for Communication of Results

Through the project's visibility and public relations plan (to be defined during inception phase and launched at the project kick-off), WFP's strategy will be to highlight the positive outcomes of the partnership. The plan will aim to ensure that key stakeholders and targeted beneficiaries recognize the role of the funding partners and the impact of their contribution to the communities served. The table below will be detailed further at project inception.

What? (the message)	**When? (the timing)**	**How? (the mechanism)**	**Audience(s)**	**Responsible**
Launching Ceremony	Jan-Feb 2024	Stakeholders and media will be invited to highlight the contribution and initiation of the project.		WFP
Press releases	TBD	Press releases can be issued locally, regionally, and internationally to highlight contributions and key milestones.		WFP
Websites and social media	TBD	TBD		WFP
Visibility Materials and Branding	TBD	TBD		WFP

**Note: All the images and videos should adhere to WFP rules and regulations regarding portrait rights and intellectual property, ensuring the protection of personal information and the integrity of the beneficiaries.*

Annex 8: Process Action Plan (PAP)

Action/product	Deadlines	Responsible/involved Person and unit	Comment/status
Coordination Call		WFP, GF, DK-MFA	
Formulation of joint GF-DK MFA project proposal		WFP	
Submission of proposal into GF SmartSimple platform	August 23, 2024	WFP	
Submisson of joint proposal to MFA	August 23, 2024	WFP	
GF Inception phase	Sept- Dec 2024	WFP, GF	
Appraisal	September 2024	DK-MFA	
Coordination and reaction to Appraisal report findings and recommendations	First week of October	WFP, GF, DK-MFA	
Finalisation of project document	Early October	WFP/DK-MFA	Adjustments made based on appraisal recommendation
Cover Note and Quality Assurance Checklist	Early October	DK-MFA	
Partnership Agreement	October 2024	WFP/DK-MFA	
Presentation to the Undersecretary for Development Cooperation	November 2024	DK-MFA	
Approval by Minister for Foreign Affairs	November 2024	DK-MFA	Minister approval of Cover Note
Signing of Partnership Agreement	December 2024	WFP/DK-MFA	
Disbursement	Ultimo December 2024	DK-MFA	
Project Start	Jan 2025		
Official launch	TBD	WFP, MFA, GF, NNF	

Annex 9. Appraisal recommendation summary and responses

Annex 10. WFP Experience in Water for Food Production Programming

Global: WFP's Contribution to the Water Sector

Kenya: https://www.wfp.org/stories/cop27-solar-pump-helps-green-parched-northeastern-kenya

https://www.wfp.org/stories/how-refugees-burundi-kenya-are-empowered-farm

Uganda: (attached pdf) PROOF OF CONCEPT SOLAR: Solar-powered Opportunities for Livelihoods Activities with Refugees

Annex 11: Full Project Proposal "Improving Local Food Systems in East Africa using Schools as Catalytic Platforms" – attached to proposal as pdf

A group of students enjoy their lunch at the Jubilee secondary school in Karamoja, Uganda. WFP/Arete/ Seigfried Modola

Improving Local Food Systems in East Africa using Schools as Catalytic Platforms

Proposal- Full Application (Final Submission)

by WFP Regional Bureau for Eastern Africa for the *Novo Nordisk Foundation*

July 2024

WFP World Food Programme

novo nordisk fonden

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Executive Summary

In partnership with the Novo Nordisk Foundation, WFP is committed to playing a pivotal role in **improving food systems in East Africa using schools as catalytic platforms** in Kenya, Rwanda, and Uganda. This will be achieved by strengthening existing Home-Grown School Feeding programmes in the three countries, and enhancing children's health and nutrition through the provision and preparation of local nutritious school meals to 321,400 children, made from foods sourced from smallholder producers and other local value chain actors, contributing to the local economy. While acknowledging the environmental impact school meals can have on the local ecosystem, WFP strives to reduce this impact through the adoption of climate friendly food production practices and increased adoption of cleaner cooking technologies and practices. WFP enables access to healthier diets through its own programming as well as through collaboration and technical assistance to governments.

We are currently faced with the reality that food systems in Eastern Africa continue to be battered by multiple shocks, including climatic and environmental, resulting in them becoming increasingly unhealthy, unsustainable and inequitable further eroding the resilience of communities. In addition to supporting education outcomes, HGSF programmes provide an opportunity to strengthen local and regional systems (i.e. health, education, agriculture and social protection) while improving the livelihoods of local farmers and communities. The predictable demand that these programmes represent can create structured and dependable markets for local food production and private sector enterprises. Local procurement can also be a strategy for diversifying school meals with fresh, nutritious, locally fortified/biofortified and/or indigenous food commodities and for promoting healthy eating habits among school children, while boosting women's empowerment through targeting the critical role they play in food production and preparation.

When it comes to gender equality, HGSF programmes have proven to be a game-changing intervention. They give poor families a powerful incentive to send or keep their children in school. For girls, who make up 46% of the students supported by this partnership - a single year of secondary education equates to a 25% increase in wages later in life.[1] The impacts translate further from one generation to the next: educated girls have healthier and more educated children.

Through the proposed partnership with NNF, WFP aims to use schools' purchasing power to promote demand for healthy, locally sourced foods across climate-smart value chains. In total, 40,000 smallholders – responsible for the production of the food eaten by students- will be trained and supported to grow new foods, in larger quantities and of higher quality, while reducing the impact on the environment through the adoption of new climate-smart approaches. WFP will increase the volume of foods sourced locally, purchasing more than 9,000 metric tonnes of food locally including beans, maize, fortified maize meal, vegetables and fruits. Cleaner cooking technologies will be provided to more than 200 schools while critical capacity will be built for more than 2,800 school committee members and cooks, enabling them to procure food locally, manage budgets, prepare food safely using fuel-efficient preparation practices, and reduce waste.

The project will be implemented at global, regional and national level with a combination of direct implementation to scale interventions, technical assistance to governments and national partners, and parallel work towards evidence and knowledge creation and exchange. A robust research component will focus on applied research to fill evidence gaps and strengthen impact of WFP's HGSF operations in East Africa.

Within the 3 year project period, the focus will be on laying the building blocks for more sustainable change and improvements in the food systems in each country in the future. It will build on processes that are already advanced in several countries, taking them to scale or testing and piloting various approaches to inform national ownership and capacity to implement HGSF.

Taking a systems approach, **the partnership will adhere to three impact pathways:**

1. **Transition local smallholder producers to climate-smart production.** Support to smallholder producers and other value chain actors in transitioning to climate smart practices and value chains with forward linkages to school feeding systems, to enhance productivity and diversity, improve livelihoods, and build adaptive capacity and climate preparedness.
2. **Improve quality of school diets and food preparation contributing to cardiometabolic disease prevention.** Provide technical support and assistance to governments and schools in delivering affordable, diverse, nutritious, safe and locally-sourced meals and leveraging the school as a platform for access to health services, nutrition education and climate-smart practices that improve overall health and nutrition of school-going children.
3. **Promotion of cleaner cooking technologies and practices for schools.** Supporting Governments in the adoption of clean, safe, and energy-efficient cooking solutions and practices for food preparation in schools to reduce the need for traditional cooking fuels such as firewood and charcoal, reducing deforestation and environmental degradation around schools as well as increasing health benefits by decreasing harmful emissions.

[1] The World Bank, Measuring the Economic Gain of Investing in Girls, 2011

1. State of the art

1.1 The Context

Food insecurity is at a tipping point in East Africa. As of June 2024, 61 million people were food insecure.[2] The region is exposed to increasingly larger and more frequent shocks caused by climate change, man-made conflict, and socio-economic disruptions, all combined to create record levels of hunger, malnutrition, and a crisis of children out of school.

Food systems in East Africa are deteriorating at an increasing rate and negatively affecting the resilience of communities.[3] **In its simplest definition, the food system consists of everyone and everything involved in producing, distributing, or consuming food.** Addressing the problems of our food system demands the full recognition of the interrelationships among diet, food production, ecosystems public health and human rights. Reexamining food systems, from production to consumption, has never been more important.

The breakdown of food systems puts rural farming communities at an exponential risk. They not only rely on food systems for their livelihoods but are now faced with increased adversities of climate change, causing poor crop and livestock yields along with water scarcity. Inadequate post-harvest management (PHM) systems in addition to the pervasive issue of poor food safety and quality (FSQ), exacerbate leakages and losses in these already limited environments. Food losses also have an impact on economic development. In 2021 alone, Kenya lost the equivalent of USD 160 million and Uganda USD 120 million from post harvest loss of major staple crops like maize and sorghum.[4]

In Sub Saharan Africa, women make up 50% of all agricultural workers in crop, livestock, fisheries and forestry production.[5] **Despite their critical role in food systems and care work, gender inequality drives numerous vulnerabilities for both women and girls** in local food systems. The needs of women as producers and consumers are systemically overlooked in the design of production and market systems, which are compounded by a lack of access to productive resources and agency in decision-making at home. Moreover, women are disproportionately burdened with food shortages and poor diets during a time of food crisis, impacting their overall well-being, nutrition, and maternal health.

Growing populations, the rise of urbanization, and the continued use of unsustainable practices in food systems are also disrupting the environment. Food systems contribute to a third of all human-induced greenhouse gas emissions. In East Africa, high volumes of food produced is wasted throughout the value chain, meaning that significant amounts of resources utilized for food production (i.e. land, water, fertilizers. etc), are also wasted, driving biodiversity loss.

The low uptake of clean and efficient cooking solutions remains a challenge in communities, and heavy reliance on traditional fuels (firewood and charcoal) and inefficient cooking systems compound environmental degradation and have inequitable health impacts on women.[6]

Sub-Saharan Africa is facing a nutrition crisis, as malnutrition continues to affect a significant part of the population, either as hunger, food insecurity, or diet-related diseases.[7] In East Africa, 65-95% of households cannot afford a healthy diet, resulting in 30-40% of children (including adolescent girls) suffering from one or more forms of malnutrition,[8] thereby compromising learning preparedness and health. The unaffordability of a healthy and nutritious diet shapes consumption patterns and drives access to unhealthy foods.

Credits: WFP/Arete/Fredrick Lerneryd

A failed food system affects children the most. The combined effects of conflict, climate, and food systems crises contribute to learning poverty in Sub-Saharan Africa, with one in five children unable to attend school,[9] and 90% of children aged 6 to 14 failing to achieve minimum proficiency in reading and mathematics.[10] Providing children with nutritious school meals and integrating these programmes into comprehensive school health and nutrition approaches, can provide safety nets that fuel and sustain educational opportunities, social protection, gender equality, and economic growth. **The Home-Grown School Feeding (HGSF) model, offers a sustainable, holistic solution to transform local food systems**. Its design ensures that children receive nutritious daily school meals while smallholders can count on steady demand and fair pricing.

2. WFP, Food Security And Nutrition Situation In Eastern Africa Q2 2024
3. Regional Sustainability, Climate change risk, resilience, and adaptation among rural farmers in East Africa: A literature review
4. Financial importance of PHL on the GDPs of some Eastern African countries, https://www.aphlis.net/en/data/tables/financial-impact/ET/all-crops/2021?metric=prcWHO Africa, Deaths from noncommunicable diseases on the rise in Africa
5. FAO. 2023. The status of women in agrifood systems. Rome. UNESCO Institute for Statistics, 6 Out of 10 Children and Adolescents Are Not Learning a Minimum in Reading and Math
6. Research Consortium for School Health and Nutrition, SCHOOL MEALS AND FOOD SYSTEMS: Rethinking the consequences for climate, environment, biodiversity and food sovereignty, 2023
7. Research Consortium for School Health and Nutrition, SCHOOL MEALS AND FOOD SYSTEMS: Rethinking the consequences for climate, environment, biodiversity and food sovereignty, 2023
8. UNESCO; Ready to learn and thrive: School health and nutrition around the world, 2023
9. UNESCO Institute for Statistics, Education in Africa
10. UNESCO, 250 million children out-of-school: What you need to know about UNESCO's latest education data, 2023

1.2 What is Home-Grown School Feeding?

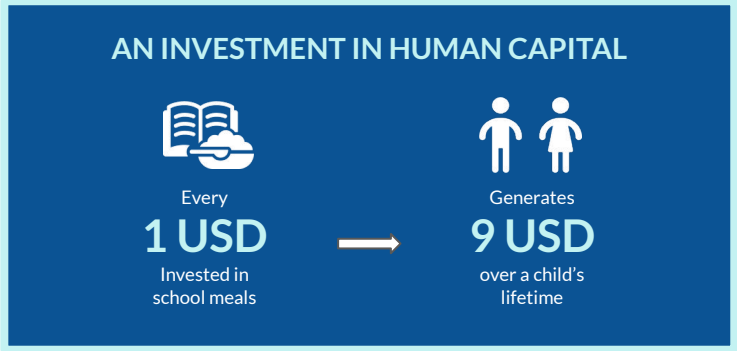
HGSF constitutes a school feeding model that is designed to provide children in schools with safe, diverse and nutritious food, sourced locally from smallholders.[11] The core element of this definition is:

"Sourced locally from smallholders" meaning that HGSF programmes:

- maximize benefits for smallholder farmers (SHF) by linking schools to local food production;
- strengthen the capacities of SHFs and communities to produce food;
- ease the diversification of school menus;
- contribute to rural transformation.

HGSF programmes are not designed from scratch. Especially in Africa, a school feeding programme is oftentimes created for the first time with the support of development partners such as WFP. At first, food may or may not be locally produced and purchased. Over time, HGSF evolves by linking the school feeding programme to structured procurement of food from local smallholders, which in turn creates stable demand for quality safe food, supporting local economies. Additionally, because foods are procured as close to schools as possible, it is possible to include indigenous foods into school menus that could have been 'orphaned' or underutilized over time.

WFP's HGSF programmes are anchored in national frameworks, promoting strong partnerships with governments and alignment with national priorities. WFP's Global School Feeding Strategy (2020) places 'governments in the lead' as a core strategy for achieving sustainable and locally owned school feeding programmes. Since the establishment of the Global School Meals Coalition (SMC) in 2021, government commitments to national school feeding have become even stronger. The SMC promotes a new multilateralism grounded in country-led solutions and evidence for global progress. To date, 98 countries have joined the SMC, including Uganda, Rwanda and Kenya.



1.3 HGSF: A Solution to Improve Food Systems

In the early 2000s, the HGSF model was developed, driven by the recognition of the African Union (AU), WFP and others that large-scale and consistent procurement of food can be organized in a way to support smallholders, overall improving rural livelihoods and the food system more broadly.[12] This is also being acknowledged at the policy/strategy level by bodies such as the AU, which have prioritized 'enhancing the role and influence of public procurement in food purchasing to support diverse and nutritious diets, for example HGSF' in its strategy and action plan.[13]


Credits: WFP/Michael Tewelde

Governments are prioritizing these investments because they have significant social and economic returns. Existing evidence indicates impressive multi-sectoral benefits for school meals; for every USD 1 spent on school meals, there is an estimated economic return of USD 9. This is achieved by improving outcomes related to education, health and nutrition, social protection and local agriculture.[14]

By starting with a nutritious, climate-smart school meal and working in reverse through the supply chain to the smallholder, HGSF programmes can catalyze demand-driven changes within the system. These actions can include the adoption of climate-smart production practices and the diversification of crops grown and consumed as part of local food baskets. However, the affordability and accessibility of nutritious and climate-smart foods is still a challenge.[15]

1.4 Defining 'Local' in HGSF programmes

"Local"- within the context of food production and sourcing for schools- is defined differently across the three project countries. In Rwanda, local means ideally within a district or province, but more generally from within the country. The government's procurement guidance promotes procurement from within a district, when possible. In Kenya, local is defined within the county where a school is located, and food should be sourced from local markets, avoiding imports. In arid and semi-arid counties in Kenya, where food production is limited, food for school feeding is sourced from surrounding counties. For this project, food will be procured both locally in Turkana county and from the surrounding counties of Baringo and West Pokot. In Uganda, local means food that is purchased directly from SHFs in the Karamoja region.

11. WFP, HGSF Resource Framework, 2018
12. World Bank 2012; NEPAD, 2022
13. African Union, African Union Climate Change and Resilient Development Strategy and Action Plan 2022-2032.
14. WFP; State of School Feeding Worldwide, 2023
15. Research Consortium for School Health and Nutrition, SCHOOL MEALS AND FOOD SYSTEMS: Rethinking the consequences for climate, environment, biodiversity and food sovereignty, 2023

Credits: WFP/Arete/Fredrick Lerneryd

Who are smallholder farmers?

The definition of SHF varies from country to country, and there is no one single global definition. Scale – measured in terms of farm size – is the most common method for classifying farmers. SHFs in Rwanda typically own less than 0.5 hectares of farm land while SHFs in Kenya and Uganda most often have less than 2 hectares. However, additional factors - including use of labour, volume sold, use of inputs, and other production practices - are also considered when defining a SHF.

1.5 Smallholder Farmers and Value Chains

SHFs are the backbone of the agricultural sector in most developing countries. 82% of the 570 million farms worldwide are smallholder farms (<2 hectares),[16] and these smallholder farms operate about 12% of the world's agricultural land. They produce some of the major commodities consumed in the world and provide more than 70% of the food calories to people living in Asia and sub-Saharan Africa. Despite their central role, many of these SHFs are not only facing poverty but are also at risk of food insecurity and poor nutrition status.

Value chain development is an approach that has demonstrated its capacity to support SHFs' income and livelihoods. It has been featured prominently in development programmes aimed at stimulating economic growth and increasing the competitiveness of the agricultural sector. Value chain development has also been used by governments and development agencies to support specific actors in the value chain, such as SHFs and other marginalized populations.

Value chain and value chain development

A Value Chain describes a full range of activities which are required to bring a product or service from conception, through the different phases of production, delivery to final consumers and final disposal after use.[17] A value chain development approach looks beyond individual actors, such as SHFs and cooperatives. It puts the connections between actors in the chain at the centre and the rules and regulations that govern the market systems, when considering how to achieve development goals. Interventions focus on bringing changes within the entire system - improving performance at the level of producers, processors and other value chain actors and the (contractual) relationships among them, the flow of knowledge and information and the overall governance and coordination in the chain.[18] WFP typically engages in value chains that involve relatively limited value addition, in particular: quality non-perishable commodities (grains and pulses); locally processed or fortified products that use raw material that can be sourced from SHFs; and fresh products (fruits and vegetables).

WFP's experience in value chain development

While most value chain development approaches initiate from the supply side, focusing primarily on increasing the production of specific products, WFP has designed, piloted and mainstreamed an approach that starts from pre-identified demand for products sourced from targeted SHFs. WFP's demand-led value chain model has been thoroughly reviewed, evaluated and refined for more than a decade.

16. Lowder K., Skoet J., Raney T., The Number, Size and Distribution of Farms, Smallholder Farms and Family Farms Worldwide, World Development 2016; 87: 16-29, https://www.sciencedirect.com/science/article/pii/S0305750X15002703.
17. 3 Kaplinsky R., Morris M. 2001. A Handbook for Value Chain Research. http://www.fao.org/fileadmin/user_upload/fisheries/docs/Value_Chain_Handbool.pdf.
18. Donovan J., Cunha M., Franzel S., Gyau A., Mithofer D. CTA. 2015. Guides for Value Chain Development: A comparative Review, http://www.worldagroforestry.org/sites/default/files/Review%20guides%20VCD%20-%20ICRAF%20CTA%202013.pdf; UNIDO. 2011. Pro-poor Value Chain Development: 25 guiding questions for designing and implementing agroindustry projects. United Nations Industrial Development Organization (UNIDO). Vienna, Austria, https://www.unido.org/sites/default/files/2011-12/Pro-poor_value_chain_development_2011_0.pdf.


Credits: WFP/Badre Bahaji

1.6 Agricultural Market Support

Building on its experience, WFP consolidated its demand-led value chain development approach under the *Smallholder Agricultural Market Support* (SAMS) label. In 2017, with the publication of the SAMS Programme Guidance Manual, a comprehensive conceptual and operational model for smallholder market development was structured around four entry points:

1. Stimulating pro-smallholder demand *(Buyers)*
2. Promoting improved service provision of aggregators (such as farmers organizations) to SHFs *(Aggregators)*
3. Increasing individual farmers' capacity to produce a marketable surplus *(Farmers)*
4. Promoting a conducive enabling environment for SHFs' market engagement *(Market system).*[19]

> ***Market System***
> A Market System is a dynamic space – incorporating resources, roles, relationships, rules and results – in which private and public actors collaborate, coordinate and compete for the production, distribution and consumption of goods and services.[20] As such, the market system framework recognizes markets as a complex adaptive system in which to address the root causes of market failure and systemic constraints affecting multiple value chains.[21] The market system approach expands the value chain model to express the wider context in which value chain operates and is intended to complement the value chain framework.

The four programmatic entry points mirror the main value chain actors at which WFP and partners can target their capacity strengthening interventions. SAMS has become a mainstreamed activity under WFP's current Corporate Strategic Plan (2022-2025), directly contributing to Outcome 3 (People have improved & sustainable livelihoods) and 4 (National programmes and systems are strengthened). WFP is currently implementing smallholder market systems development programmes through value chain approaches in over 40 countries globally - including Kenya, Rwanda and Uganda- to help farmers gain better access to structured markets.

WFP's implementation of SAMS as a mainstreamed activity at country level has generated additional insights which call for the revision of the SAMS model, mainly resulting from the approval of the WFP Local and Regional Food Procurement (LRFP) Policy[22] and also the increased relevance of the concept of resilient food systems, encouraging WFP to adopt a broader systemic lens for its programme design and implementation, in particular in relation to its work with SHFs.

A food system approach considers additional dimensions compared to the value chain one, such as food environments (the physical, economic, political and socio-cultural context in which consumers engage with food) and consumer behaviours (the choices and decisions made by consumers to acquire, store, prepare, cook and eat and how to allocate food within the household).[23]

Local and Regional Food Procurement Policy

The LRFP Policy, approved in November 2019, is a milestone for WFP. WFP's demand for food and food system services can be a direct and indirect driving force towards achieving zero hunger, contributing to inclusive agricultural growth and sustainable social and economic transformation. The LRFP Policy has prompted the Organization to adopt a more integrated value chain development approach, to enable WFP to boost its local, regional and pro-smallholder procurement while maintaining efficient and reliable pipelines. In 2023 in the Eastern Africa region, 22% of the total food sourced by WFP was purchased from SHFs, injecting USD 31 million into the local economies.[24]

SAMS Value proposition

SAMS is considered one of the main avenues by which WFP can influence and reshape how food systems function so that they become more equitable, stable and sustainable. While the operationalization of the SAMS model may initially focus on market linkages with buyers that are directly linked to WFP operations (WFP local and regional food procurement, HGSF, etc.), WFP's ambition is to enable other public and private buyers that are interested or already engaged in pro-smallholder procurement to adopt and implement the model. This would allow the model to be implemented at a much larger scale and avoid dependency on WFP activities.

The provision of a guaranteed market for SHFs, through reliable and predictable formal contracts, is a game-changer that drastically changes the way the whole value chain works.[25] WFP also trains farmers on bulking and price negotiations, in order to help SHFs link directly to bigger markets, and bypass middlemen. The organization is uniquely positioned to be a leader in demand-led value chain development programming, either through direct implementation of SAMS or through strengthening the systems within which other actors operate in parallel to our interventions.

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19. USAID. 2014. A Framework for Inclusive Market System Development, https://www.marketlinks.org/sites/marketlinks.org/files/resource/files/Market_Systems_Framework.pdf.
20. FAO. 2018. Sustainable Food Systems: Concept and framework, http://www.fao.org/3/ca2079en/CA2079EN.pdf.
21. Local and Regional Food Procurement Policy (WFP/EB.2/2019/4-C*) https://docs.wfp.org/api/documents/WFP-0000108552/download/.
22. Local and Regional Food Procurement Policy (WFP/EB.2/2019/4-C*) https://docs.wfp.org/api/documents/WFP-0000108552/download/.
23. 23. 17 HLPE. 2017. Nutrition and food systems. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome. http://www.fao.org/3/a-i7846e.pdf.
24. RBN 2023 WFP Achievements: Impacting Lives in Eastern Africa, docs.wfp.org/api/documents/WFP-0000158697/download/?_ga=2.173979616.2134500925.1716139360-1110839379.1657130553
25. This is demonstrated by a rich literature on contract farming. See Da Silva, C.A. 2005. The Growing Role of Contract Farming in Agri-food Systems Development: Drivers, Theory and Practice. Rome: Agricultural Management, Marketing and Finance Service, FAO, http://www.fao.org/sustainable-food-value-chains/library/details/en/c/266526/; Prowse. 2012. Contract Farming in Developing Countries - A Review. Institute of Development Policy and Management, University of Antwerp. https://www.researchgate.net/publication/321224983_Contract_farming_in_developing_countries_-_a_review.

WFP staff member Pascal talks to a savings group in Nyaruguru district, Rwanda. **Credits**: WFP/Arete/Fredrik Lerneryd

1.7 Why WFP

WFP is the world's largest humanitarian organization - saving and changing lives - and winner of the Nobel Peace Prize in 2020 for its efforts to combat hunger, promote peace, and prevent the use of hunger as a weapon of war and conflict.

WFP has six decades of experience supporting school meals in more than 120 countries, including Kenya, Rwanda and Uganda. In 2022, the organization made school meals its flagship area of work, which meant increased investment and support to governments. WFP lays out its vision in its global school feeding strategy, which describes WFP's approach of working with governments and partners to jointly ensure that all primary schoolchildren have access to quality meals in schools, accompanied by a broader integrated package of health and nutrition services. WFP has three main roles in the global school meals agenda:

First, WFP is the global knowledge holder and coordinator of three public goods:

- The SMC**:** As the Secretariat of the SMC, WFP supports countries of all income levels to share experiences, access financing, and improve their approaches, supported by a global network of partner organizations. WFP helps all partners of the Coalition - which includes Rwanda, Kenya and Uganda - to coordinate actions and connect with the initiatives, which it has helped to incubate and launch.
- The State of School Feeding Worldwide: a publication issued every two years that provides quantitative and qualitative information on the state of this policy area globally. The publication also monitors the progress of the SMC and achievements towards the goals of improving school health and nutrition.
- The Global School Meals Database: WFP is establishing a global database of school meals indicators that will be available to all countries and partners, to track progress.

Second, WFP supports governments to establish, strengthen and consolidate their school meals programmes: WFP provides policy support, technical assistance, evidence,[25] and know-how to help middle, lower middle and low-income governments establish or strengthen the sustainability of their school feeding programmes. WFP's technical and policy support has indirectly influenced the quality of life, access to education and nutritional status of 155 million schoolchildren in 74 countries.

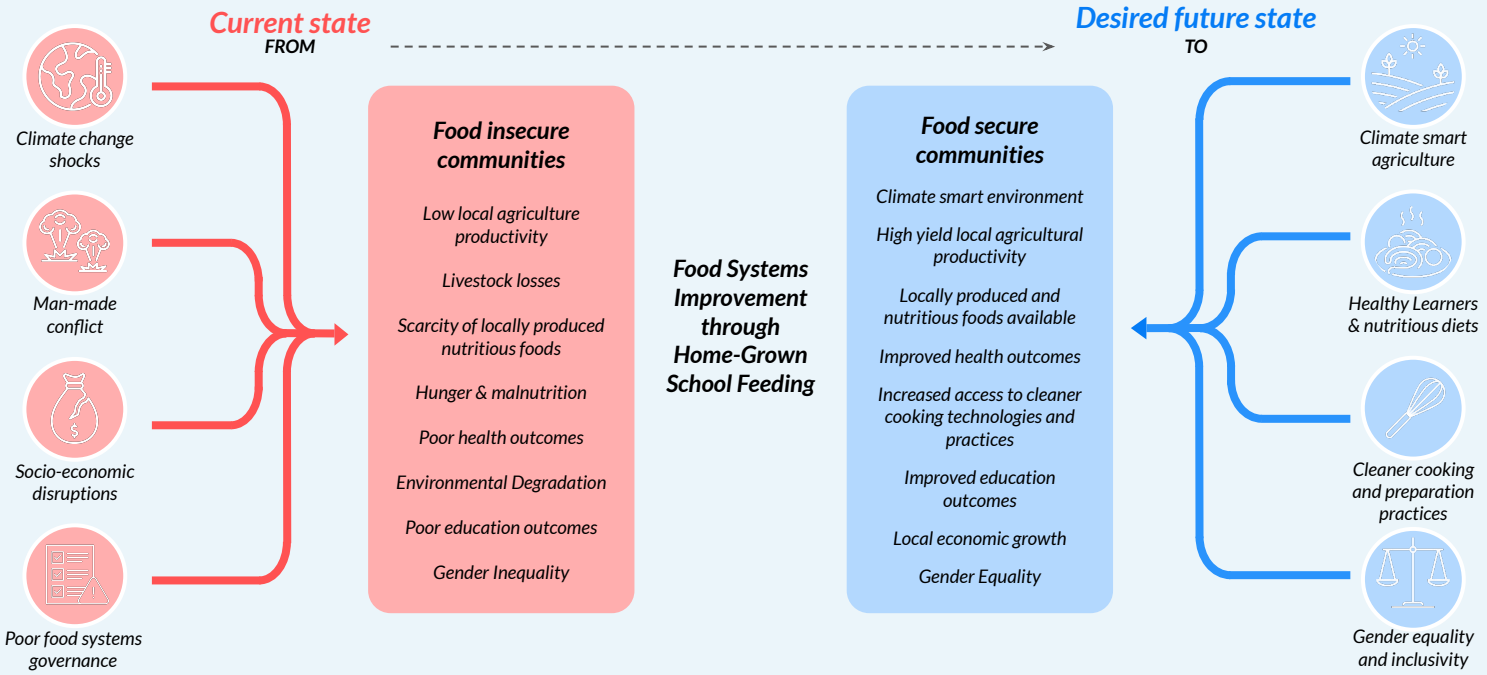
Third, WFP provides operational support to countries: when necessary, and particularly in low-income or fragile contexts, WFP provides school meals to vulnerable children in support of national objectives**. Globally in 2021, WFP provided school meals to 15.5 million children in 57 countries, with about 72% of the coverage in Sub-Saharan Africa and the Middle East.**

WFP's decades of experience in school feeding, its unparalleled country presence and deep knowledge and relationships with governments, combined with the political momentum of the SMC form the backdrop for this new Novo Nordisk Foundation (NNF) - supported project. In 2023, Rwanda hosted the launch of the Eastern African Regional SMC network - attended by both Kenyan and Ugandan Governments. WFP will test approaches in different country settings, while simultaneously leveraging its policy and advocacy capacities to advance the policy discussion of improving food systems through HGSF, in a significant way.[26]

25. World Bank and WFP Report on the State of Cooking in Schools. https://www.esmap.org/State_of_Cooking_in_Schools#:~:text=The%20State%20of%20Cooking%20Energy%20Access%20in%20Schools%3A%20Insights%20from,middle%2Dincome%20countries%2C%20with%20a
26. WFP, A Chance for every Schoolchild - WFP School Feeding Strategy, 2020 – 2030

How WFP aims to improve local food systems in East Africa using schools as catalytic platforms

What would it take to transition food insecure communities in East Africa that are facing multidimensional consequences of climate change, conflict, socio-economic disruptions, and poor food systems governance to be resilient and food secure? WFP believes this improvement is possible through HGSF interventions. While HGSF is not a singular solution, school meals offer a strategic entry point for many of the systemic issues East Africa is currently facing. Improvement of East African food systems around schools can be driven through holistic interventions such as climate smart agriculture, healthy and nutritious diets, cleaner cooking and food preparation, and gender equality and inclusivity.



1.8 WFP's Relevance to the Novo Nordisk Foundation's Sustainability Strategy:

There is an urgent need for humanitarian and development actors such as WFP and the Novo Nordisk Foundation to respond to the unprecedented food systems crisis in East Africa.

Caption: Beatha, a member of a SHF cooperative in Rwanda, is one of hundreds of farmers trained by WFP and partners on conservation agriculture. **Credits**: WFP/Arete/Fredrik Lerneryd

Sustainability and health are two of NNF's three focus areas for the foundation's philanthropic activities up to 2030. NNF is supporting the green transition in society by advancing research and innovation within sustainable agriculture, development of better food systems and climate change mitigation. The Foundation's Sustainability Strategy emphasizes two of the biggest challenges for society today: combating climate change and producing healthy and nutritious food for a growing world population, without exhausting our planet's resources.

WFP is at the forefront of addressing these challenges through our work on enabling access to education through the provision of healthy meals to school children, sustainable livelihoods, developing improved food systems, gender equality, building resilience to the effects of climate change, and influencing the adoption of healthy diets for children and communities. Our supply chain footprint, convening power, and close relationships with national governments and the private sector, uniquely position WFP to address these systemic problems in remote and complex contexts.

WFP supports NNF's vision to improve people's health and the sustainability of society and the planet. **Arguably no other organization in the world is immersed in food systems in such a far-reaching way or is as well-positioned to contribute to their improvement than WFP.**

1.9 Focus Countries: Food System Improvement

Kenya

Kenya, East Africa's largest, most developed economy, remains on the frontline of the climate crisis. Six consecutive failed rainy seasons have led to low livestock yields and poor crop production in addition to scarcity of grazing land and water resources driving localized conflict. The global food crisis has sent food prices soaring, with an estimated 2.8 million people[27] in Kenya's arid and semi-arid lands (ASALs) enduring crisis levels and above of acute food insecurity. School-aged children in Kenya have been bearing the brunt of both the climate and global food crises – leading to a high drop-out rate of 2.5 million children estimated by UNESCO in 2021.

Undernutrition, including micronutrient deficiencies (MNDs), affects mainly women and children, while obesity and diet-related non-communicable diseases affect mainly women of reproductive age and adults. The prevalence of anaemia is highest in pregnant women and girls (41.6%) and children 5–14 years of age (16.5%).[28]

Turkana County is located in northwestern Kenya – bordering West Pokot and Baringo Counties to the South, Samburu County to the Southeast, and Marsabit county to the East. Internationally, Turkana borders the Karamoja sub-region of Uganda to the West. Turkana has a total population of more than 1 million people,[29] 35% of whom were estimated to be in crisis levels and above of acute food insecurity as of September 2023, as a result of climatic and economic shocks.

The main economic activity in Turkana is pastoralism, and other livelihoods include farming of sorghum and maize, fishing, weaving and tourism. Smallholders in farming, agropastoral and pastoral communities have been disproportionately affected by climate change, which is resulting in low productivity and affecting household incomes and access to healthy diets from local markets.

Kakuma refugee camp, located in Turkana County, was established in 1992. It is currently home to more than 250,000 refugees and asylum seekers. Of these, 192,000 live

Caption: Children at the Isiolo School for the Deaf in northern Kenya enjoy a school lunch provided by the Government of Kenya. WFP/Martin Karimi.

Caption:9-year-old Belyse and her classmates eat beans, fortified whole grain maize flour and spinach that served for lunch in Rwanda. **Credits**: WFP/Arete/Fredrick Lerneryd

in camp conditions, with around 60,000 taking part in an extended 'settlement' approach at nearby Kalobeyei: residents here have access to greater self-reliance and food security activities. All refugees have access to health and education facilities and receive food assistance.

Lastly, deforestation is increasing in Kenya, in part due to the expansion of school meals. On average, a school in Kenya is responsible for using 56 acres of forest annually - according to estimates by Nature Kenya- corresponding to more than 1.1 million acres of forest each year. Deforestation has important implications on ecosystems, including negative impacts on watersheds, increased soil erosion, land degradation, loss of biodiversity and diminished local rainfall.[30]

Rwanda

Rwanda is one of Africa's most densely populated countries, and approximately one-fifth of the population is food insecure. While Rwanda ranks 161 out of 193 countries in the 2022 Human Development Index, Rwanda is among the countries that has seen the highest rise in human development since 1994. Despite the steady GDP growth, with real growth rates nearing 10%, poverty reduction has stagnated to an incidence of 38% and an estimated 36% of Rwandans are still undernourished.[30]

The country is seeking to address high levels of stunting that affect 37% of females and 29% of males under the age of five,

27. Integrated Food Security Phase Classification. 2023. Kenya: Acute Food Insecurity Situation July – September 2023 and Projection October 2023– January 2024
28. Ministry of Health, Kenya National Bureau of Statistics and World Health Organization. 2015. Kenya STEPwise survey for non communicable diseases. Risk factors 2015 report
29. 2019 Kenya Population and Housing Census
30. Energising School Feeding, WFP, October 2020, https://docs.wfp.org/api/documents/WFP-0000101538/download/
30 Global Nutrition Report 2022, Rwanda Profile.
31. Rwanda DHS 2019-2020. Prevalence of overweight among children under 5 (5.6%).
32. Rwanda DHS 2019-2020. The proportion of women who are overweight or obese has increased, from 12% in 2005 and 16% in 2010 to 21% in 2014-15 and 26% in 2019-20.

Caption: A student eats their school lunch at Bwama Primary School in Nyamagabe District. Credits: WFP/ Arete/ Fredrik Lerneryd

while simultaneously addressing the rising rates of overweight and obesity in children.[31] The rising rates of overweight and obesity in adults shows a concerning trend, with 26% of women aged 15-49 being overweight or obese, up from 12% in 2005.[32] MNDs, particularly anaemia, are a major concern. The prevalence of anaemia – indicative of MNDs such as iron, folic acid and vitamin B12– is of public health concern, particularly among children under five years (36.5%), pregnant women (24.5%) and adolescent girls aged 15-19 years (14.7%). It is relatively lower among women of reproductive age (13.1%).[33] There is a lack of data on the level of MNDs among school-aged children and adolescents in Rwanda.

Approximately 70% of Rwanda's population relies on agriculture for a living. The Government seeks to actively modernize the sector and boost productivity, which is currently constrained by small landholding, poor-quality soils and climate change. Women play an important role in farming and even own a quarter of the land- but women's work burden is heavy, and they have limited access to better-paying opportunities. While low-income families rely on markets for most of their food consumption, the 2019 Fill the Nutrient Gap Study revealed that 55% of households in Rwanda cannot even afford the cheapest nutritious diet.

The Government of Rwanda has an ambitious climate agenda. A key part of this agenda includes aggressive targets to reduce the use of wood and other biomass fuels with an aim to achieve clean cooking by 2030.

Uganda

The Karamoja region in north-eastern Uganda, borders Turkana County in Kenya. Within this semi-arid region- where WFP has dedicated over forty years of support- the majority of the population lives in rural settings and depends on livestock and crop production. Despite its agricultural potential, Uganda's food insecurity levels are classified as 'serious' by the 2022 Global Hunger Index. In Uganda, 29% of children under the age of five are stunted while 53% are anemic. Chronic undernutrition affects a significant number of children who come to school hungry while micronutrient deficiencies decrease children's ability to reach their potential.

Karamoja has the highest rates of food insecurity (+50%) and malnutrition in the country. WFP's Fill the Nutrient Gap Analysis, showed that 84% of households in Karamoja cannot afford a daily nutritious diet. Karamoja's development trajectory is characterised by significant challenges resulting from high levels of food insecurity, limited access to quality education and healthcare services, inadequate infrastructure (i.e. roads) and a lack of security due to frequent cattle raiding.

These challenges are compounded by climate change impacts, including recurring droughts and environmental degradation. Furthermore, dependency on biomass for cooking, has placed enormous pressure on the environment. In Uganda, 50% - 66% of total emissions are derived from fuelwood[34] resulting in Uganda's forest cover reducing by 57% over the past 25 years.[35]

These hardships often compel parents in Karamoja to pull their children - particularly elder girls - out of school to assist with household responsibilities. In Karamoja, only 5.5% of the total population has fully completed primary school and primary net enrolment (42%) is the lowest in the country, compared to a national average of 80%.

Farmer organisations in Karamoja have inadequate PHM infrastructure including limited storage, and access to appropriate grain drying and or handling equipment which is curtailing WFPs ability to scale local purchase from the region. Karamoja's long history of armed livestock raids has contributed to insecurity, which has had a direct impact on the ability of farmers to produce and aggregate their produce. The Government and WFP launched the Karamoja Feeds Karamoja Phase II project which aims to establish a robust, locally driven school feeding programme that links local agricultural output to educational, health, and nutritional wellbeing for children.

33. National Institute of Statistics of Rwanda, Ministry of Health, ICF-International: Rwanda Demographic and Health Survey 2019-2020. Calverton, Maryland, USA. 2020
34. Clean Cooking Alliance, 2022
35. Uganda, Third National Development Plan (NDP III)

1.10 Justification for the Project

Despite the progress of national governments and WFP in the design of school feeding systems, the region's current state of food systems is adversely impacted by climate change shocks, man-made conflicts, socio-economic disruptions, and poor governance - resulting in food-insecure communities.

WFP brings a deep understanding and breadth of experience in implementing HGSF programmes in East Africa alongside national governments, and a passion for making these programmes more nutrition, gender, and climate-sensitive. An overview of key successes and challenges from WFP's experiences is presented below.

Successes

- Adoption of HGSF policy frameworks in Rwanda and Kenya and significant Government commitments by both countries to the Global SMC to universal school meals coverage, backed by significant budget increases. In Uganda, WFP is supporting the Government to draft a School Feeding Policy and in 2024, Uganda joined the SMC.
- Successful transition in Kenya of WFP's HGSF programme to the Government of Kenya in 2018 and also of 80% of WFP's HGSF programme to the Government of Rwanda in 2023. WFP continues to provide strong school feeding technical support in both countries including on food procurement, designing school menus, and scaling up the Kenya National School Feeding programme (KNSFP) and the Rwanda National School Feeding Programme (NSFP).
- From a rigorous evaluation in Kenya, the WFP-led model and support to the government demonstrated significant improvements in enrolment, completion, literacy, and numeracy for both boys and girls, as well as broader household food security, even after the transition to government. The evaluation concluded it was a strong sign of a successful transition.[36]
- Evaluation evidence has shown that WFP has developed strong partnerships with governments and contributed to strengthening national and local capacities, supporting sustainability. Examples include: national commitments on climate-smart agriculture (CSA), greening school feeding and food standards in Rwanda, and multi-sectoral school feeding policy development in Uganda.
- Increased investments in decentralized procurement models and linkages with smallholders. Examples include Baringo County, Kenya, where Government created a 30% smallholder procurement requirement for public procurement. There is also evidence of the effectiveness of gender programming around building women-focused CSA-based value chains.
- Increased investments and efforts were made to diversify and improve the nutritional quality of school meals. Examples include Rwanda where the Government increased the national school feeding budget from USD 37 million in 2021 to USD 74 million in 2023. The Government also developed menu guidance for schools, together with WFP.

Schoolchildren in Rwanda. WFP/Badre Bahaji

Challenges

- National resource constraints faced by governments in the region, affecting the ability to scale programmes and innovate
- The low production capacity of smallholder producers and their vulnerability to climate change uncertainties, makes implementation challenging and risky
- Post-harvest losses and FSQ issues cause system leakages and dilute health outcomes
- Weak linkages between smallholders and schools - due to complex procurement processes, payment delays, high costs, and quality issues
- Limited innovation, investment, and action on clean cooking infrastructure and practices have impeded the progress toward decreasing the environmental impacts of food preparation
- Lack of a shared understanding of nutrition in addition to evidence gaps around baseline nutrition assessments for children and the multi-sectoral impact of HGSF programmes, limit understanding of its impacts

These successes and challenges present themselves as opportunities for action in each country.

WFP's experience and operational research suggest that linking school feeding programmes to smallholders is not easy. Meanwhile, schools in the region – which often have very limited financial means at their disposal – need to be capable of sourcing, cooking, and serving safe, healthy meals in a way that reduces cooking fuel consumption.

In the absence of robust processes and policies, unaddressed food safety issues undermine current investments to promote fresh food consumption and contribute to an increased risk of malnutrition and acute and chronic food borne diseases. Moreover, without inclusive design for gender, we fail to recognize and empower women as key contributors to food systems and hinder the potential for inclusive and effective solutions.

36. WFP, Comprehensive Food Security and Vulnerability Analysis, 2021

1.11 Home-Grown School Feeding in Priority Countries

WFP is directly implementing and supporting governments to implement HGSF programmes in these countries. These programmes align with national school feeding programmes, and the value add of WFP to national governments extends beyond the delivery of school meals to include research and evidence generation to inform national programmes and policy, build capacities, and extend financing support for implementation.

Caption: A student eats lunch at Bwama Primary School in Rwanda. **Credits**: WFP/Arete/Fredrik Lerneryd

HGSF in Kenya

Kenya has a long history of prioritizing and implementing school feeding since 1979. A critical safety net for many of the most vulnerable Kenyan families- particularly in the ASAL counties – school meals are strongly supported by the President of Kenya. With WFP's support starting in 1980, the KNSFP progressively expanded over time and in 2018, WFP fully transitioned the management and funding of the programme to the Government of Kenya.

Today, the programme covers 2.3 million learners in over 5,800 schools. Following joint advocacy efforts by UNICEF and WFP, in 2023 the Government increased the school meals budget from USD 15 million to USD 40 million. As a champion of the Global SMC, Kenya has committed to scale up school feeding from 2.3 million children to 10 million, and to reach universal school feeding by 2030.

Climate change has heavily impacted Kenya's ability to roll-out and scale-up HGSF, particularly by affecting water and local agricultural production in Kenya's ASALs. The Government is now working jointly with WFP on the introduction of a new climate-smart approach to HGSF, as part of Kenya's school meals strategy. This new approach will be rolled out in Turkana and other ASAL counties, including Baringo and West Pokot.

WFP supports two school feeding programmes in Turkana County: the KNSFP which covers all 418 public primary schools and WFP's refugee school feeding programme which covers 28 schools. For the KNSFP, WFP supports the Government in refining its approach to HGSF. Under refugee school feeding WFP reaches 74,600 learners daily, providing in-kind meals in 22 schools in Kakuma Refugee Camp and cash transfers for the local purchase of daily meals to 6 schools within the Kalobeyei Settlement. The Government plans to gradually absorb the refugee schools into the KNSFP.

WFP has a strong and long-standing partnership with county governments in the ASALs and provides technical assistance to rural farmers to enhance production and commercialization of agricultural production. WFP's experience suggests a need for stronger facilitation of market linkages between farmers and school feeding. In support of the Turkana County government, WFP has provided technical support for the preparation of a Pro-Smallholder Access to Institutional Markets Strategy which aims to promote SHFs' access to public institutional markets. Additionally, through a multi-year partnership with the Mastercard Foundation, WFP supports sustainable and dignified employment for youth through the reduction of post-harvest losses, improved market access, and greater financial inclusion.

In Turkana County, WFP supports the production of drought-tolerant sorghum, maize varieties, and biofortified crops such as iron-rich beans and orange-fleshed sweet potatoes (OFSP) by SHFs. In Baringo and West Poket Counties, SHFs produce maize, beans, sorghum, finger millet, sweet potatoes, select horticultural crops, and dairy. All of these foods can be included in school feeding menus, which WFP supports the government to design in a climate-friendly and healthy way, prioritizing local, healthy and fresh foods.

WFP'S PROGRAMMES

74,600
Learners

USD 36
Annual cost of feeding a child

Maize meal, beans, oil **or** cash transfers for meals

5,000
Smallholders supported

USD 372
Cost of project support to each smallholder farmer

KENYA NATIONAL SCHOOL FEEDING PROGRAMME

2.3M
Learners

USD 40M
National school feeding budget

1.11 Home-Grown School Feeding in Priority Countries (continued)

HGSF in Rwanda

WFP has, for the past two decades, been the Government's leading school feeding partner. Building on its strong operational experience and school feeding successes in Rwanda, WFP plays a dual role as a provider of technical assistance for the government's NSFP and direct implementer of the United States Department of Agriculture -funded McGovern-Dole International Food for Education and Child Nutrition HGSF Programme.

WFP is gradually transitioning its direct school feeding provision activities under the HGSF Programme to the Government's NSFP. Together with the Ministry of Education, WFP oversaw the transition of 108 programme schools with approximately 89,000 students, from the WFP programme into the Government's NSFP in September 2023, scaling down WFP's own HGSF programme to reach approximately 30,500 pre-primary and primary children in 32 schools. WFP also continues to support 38,000 refugee and host- community school children with school meals supported by WFP's refugee operation.

WFP's HGSF programme provides an integrated package of support to complement the daily meal provided to students and increase education outcomes among students. This includes water, hygiene, and sanitation activities, including deworming and menstrual hygiene management initiatives for girls, and nutrition education for students and the establishment of school gardens as educational tools. The package also includes supporting teacher trainings, implementing literacy activities, training school-based procurement and school feeding committees and building infrastructure such as latrines.

WFP also provides support to SHFs to improve their quality and quantity of production and access the school feeding market (estimated demand of about 380,000 metric tonnes of food annually). WFP provides cash transfers to schools for the purchase of fresh fruits, vegetables, and animal-source foods to increase the nutritional value of the meal. In 2023, these local purchases injected over USD 450,000 into the local economy.

Caption: Pre-primary students at Bwama Primary School in Rwanda, line up to wash their hands before eating lunch. In Rwanda, all pre-primary students receive school meals. Credits: WFP/ Arete/ Fredrick Lerneryd

WFP has been providing technical support to the Ministry of Education to inform key design choices in the NSFP, including the development of the National School Feeding Policy (2019), the School Feeding Strategy and Financing Strategy (forthcoming), meal menus, kitchen design, financing strategic operational guidelines, and most recently, a revamped procurement model. Under this revamped model, districts procure long shelf-life commodities and schools procure fresh foods. The model is expected to lead to cost savings and enhanced accountability.

The NSFP, launched by the Government in 2021, is the national flagship initiative for transforming school children's education, nutrition, and health, enabling the country's rise to middle-income status by 2035. At the same time, the NSFP is one of the Government's prioritized game-changers to achieve a sustainable, nutritious, and resilient food system.

The NSFP reaches more than 4 million students daily, and WFP provides technical assistance to make the NSFP more sustainable through evidence generation and piloting of innovations around health and nutrition, and to advance clean cooking solutions.

WFP'S PROGRAMMES

30,500
Learners

USD 110
Annual cost of feeding a child

Meal: fortified whole grain maize meal/fortified rice, beans, oil, salt + cash: veggies, fruit, animal protein

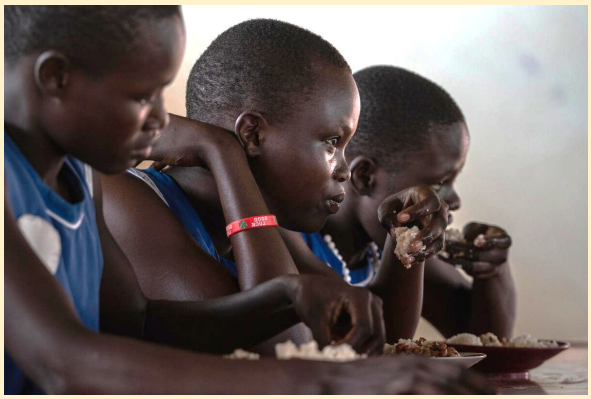
12,000
Smallholders supported

USD 68
Cost of project support to each smallholder farmer

NATIONAL SCHOOL FEEDING PROGRAMME

>4M
Learners

USD 74M
National school feeding budget



Eve, a 16-year-old student (centre) has lunch with her friends at the Kangole Girls Primary School in Uganda. WFP/ Arete/ Siegfried Modola

HGSF in Uganda

WFP has been working with the Government of Uganda to implement school feeding in Karamoja for more than 40 years. Currently, WFP provides a daily hot meal to 216,000 students in 315 schools in Karamoja, reaching 78% of schools in the region.

WFP's HGSF model provides local, diverse and nutritious meals, while providing a market for SHFs. Currently, WFP sources beans and maize locally in Uganda, with 35% sourced directly from smallholders in Karamoja. In 2023, this represented over 2,000 metric tonnes (MT) of food procured from farmers in Karamoja, resulting in USD 1.9 million injected into the local economy. Moving forward, WFP aims to procure most food for school feeding locally from smallholders in Karamoja by working directly with farmer organizations to improve the quality and quantity of nutritious foods produced and the capacity of farmers to be entrepreneurs.

To complement and improve the dietary diversity of the school meal, WFP has introduced the production of OFSP in 83 schools in Karamoja. Schools have established OFSP demonstration gardens and students actively participate in the cultivation process, gaining practical knowledge about agriculture, and the importance of a diversified diet.

WFP has also started to link HGSF with environmental education. Tree planting and the creation of student environmental clubs in select schools has been an important new aspect of the HGSF programme. WFP is also providing energy-saving cook stoves to schools with an aim to reduce schools' demand on natural resources, fuel costs, time spent collecting firewood, and deforestation rates. All of these activities have not yet been scaled up to the full programme due to a number of challenges. However, this project will allow WFP to scale these critical components to all schools in the programme.

The Government of Uganda's National Vision 2040 and the National Development Plan III recognizes school feeding, health, and nutrition and WFP has supported the Government to develop a multi-sectoral School Feeding Policy, which is expected to be released in 2024. Uganda also recently became a member of the Global SMC. Through WFP's support, school feeding data has been digitized, and indicators have been incorporated into the National Education Management Information System

The WFP project in Karamoja has the potential to drive state-of-the-art programming, and its success could be instrumental in shaping the Uganda School Feeding Policy and model programming in Uganda.

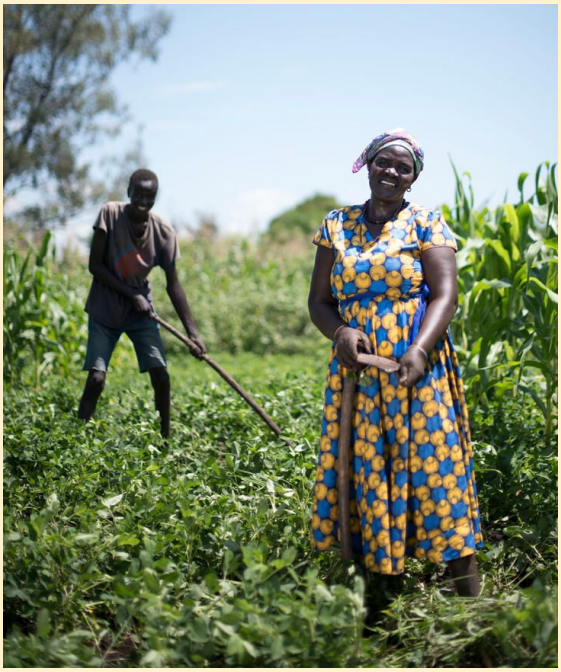


Photo: Rachael Akol, a maize farmer and WFP supplier from Karamoja. Rachael supplies maize to WFP under the HGSF Programme. Photo: WFP/Hugh Rutherford

WFP'S PROGRAMMES

216,000
Learners

315
Schools

USD 39
Annual cost of feeding a child

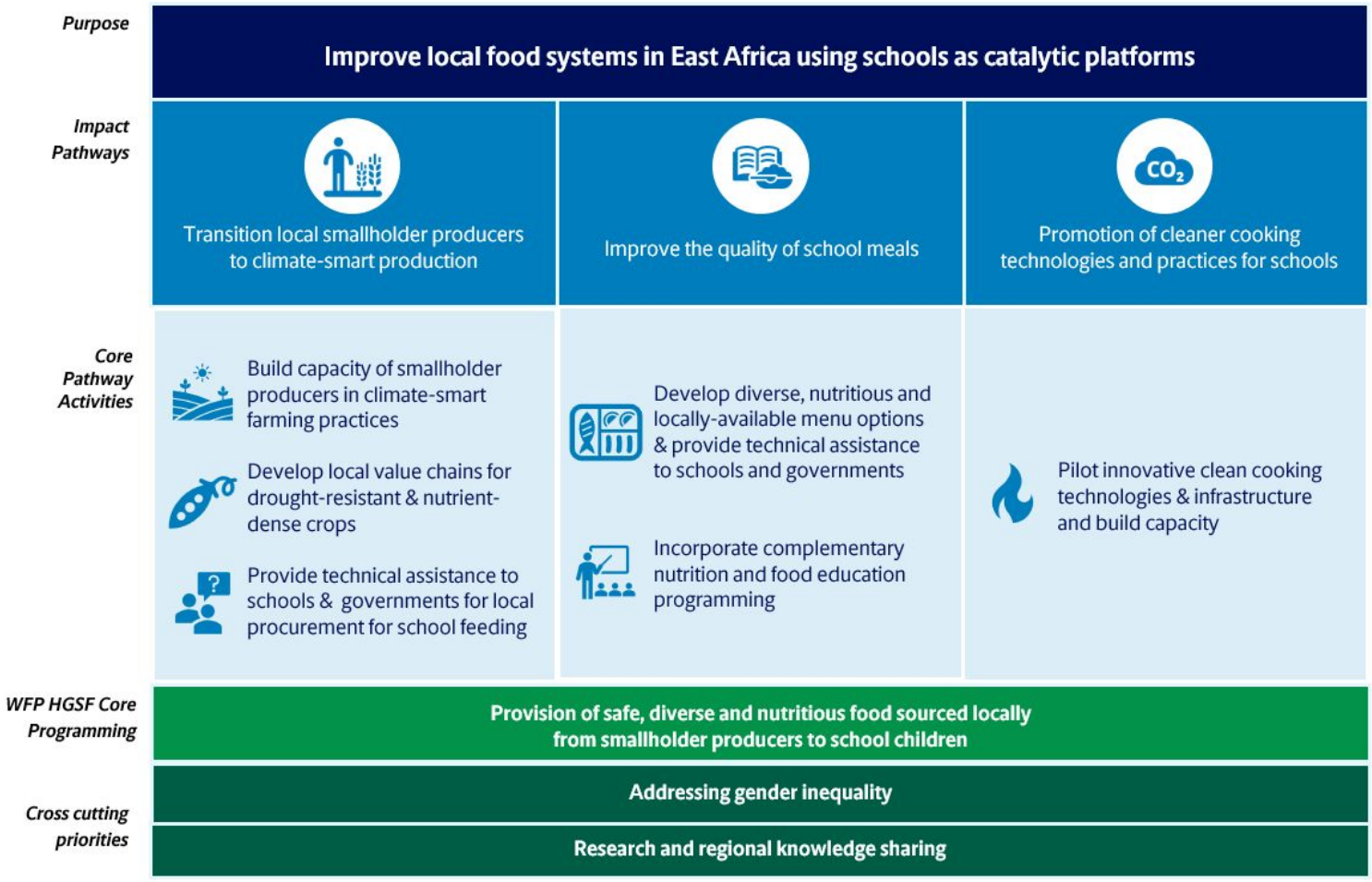
Meal: maize meal, beans, oil

12,000
Smallholders supported

USD 84
Cost of project support to each smallholder farmer

2. Project Description

2.1 Project Visual: ***The following visual summarises the proposed framework for this engagement. This has been co-created with strategic priorities at the intersection of WFP's operations and NNF's 2030 strategy:***



2.2 Project Overview

The *Improving Local Food Systems in East Africa using Schools as Catalytic Platforms* project aims to improve East African food systems around schools by scaling up sustainable and inclusive HGSF programmes. An improved food system around schools includes the enhancement of children's health and nutrition through the provision and preparation of diverse, climate-smart, locally-sourced nutritious school meals, cooked using cleaner cooking technologies and practices and sourced from smallholders and other local value chain actors.

WFP will demonstrate the value of institutional procurement – through schools - to create demand-driven markets for local food production. Smallholders and other value chain actors will transition to climate-smart practices and value chains, incentivised by schools' demand for local production. Local procurement can drive the diversification of school menus to include new fresh, nutritious and indigenous foods while strengthening women's empowerment through the important role they plan in food production and meal preparation. WFP enables access to healthier diets through its own programming as well as through collaboration and technical assistance to governments.

Taking a systems approach, the partnership will adhere to three impact pathways:

1. Transition local smallholder producers to climate-smart production, and value chains with forward linkages to school feeding systems to enhance productivity and diversity, improve production and livelihoods, and build adaptive capacity and climate preparedness.

2. Improve the quality of school meals. Provide technical support and assistance to governments and schools in delivering affordable, diverse, nutritious, safe and locally-sourced meals and leveraging the school as a platform for access to health services, nutrition education and climate-smart practices that improve overall health and nutrition of school-going children.

3. Promotion of cleaner cooking technologies and practices for schools, through support to reduce the need for traditional cooking fuels such as firewood and charcoal, reducing deforestation and environmental degradation around schools as well as increasing health benefits by decreasing harmful emissions.

2.3 Project Overview: Impact in Numbers

321,400
Students supported with home-grown meals in 3 countries

375
Schools supported by WFP with school meals

9
Policy/strategy/ guidance documents developed or updated

8,375mt
food procured locally by WFP

USD 500k
Cash transferred to schools for local purchase of meals

40k
Smallholder farmers trained to grow new climate-smart foods

1.3k
School gardens established

95
Smallholder groups supported to sell food to schools

211
Schools provided with fuel-efficient infrastructure (stoves, kitchens)

12
New school menus developed made up of locally-sourced, diverse and nutritious foods

2.8k
Cooks, school feeding & procurement committee members trained

720
Government staff trained to operationalize school feeding

50
WASH facilities constructed or rehabilitated

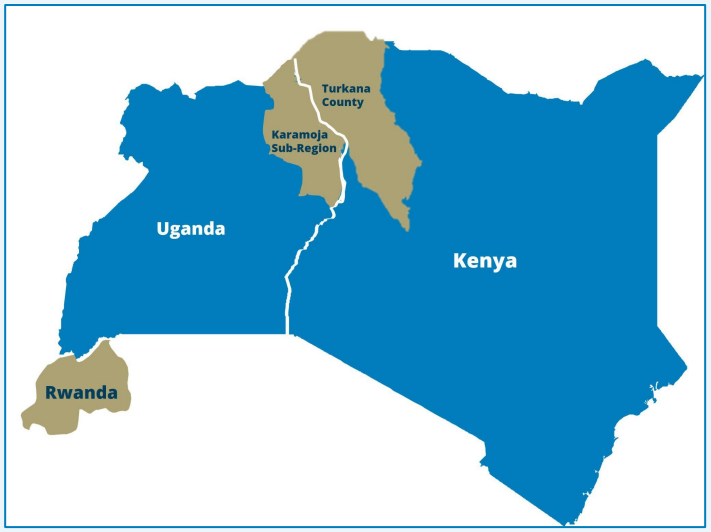
90k
Individuals reached with SBCC activities and messaging in and around schools

2.4 Target stakeholders

The project will work closely with the following stakeholders. In addition to this, WFP will continue to partner with sector experts, governments, local research institutions, and private sector players to ensure state of the art implementation in the programme.

Target stakeholders are based on WFP's existing programming in each of the countries, strong partnerships, understanding of key stakeholders and past experience implementing these types of programmes, built over decades of engagement in school feeding, energy and agriculture. This project will directly engage the following stakeholders:

- **School Children:** School-going children ages 3-18 attend (pre-primary/ primary/ secondary) public schools or schools in refugee camps and settlements, depending on the government's focus on school meals. This partnership will directly reach **321,400 students (46% girls) in three countries with home-grown meals,** in addition to indirectly influencing the school meals of more than 6 million learners benefiting from national school feeding programmes run by Governments in Rwanda and Kenya.
- **School Administration Staff:** Relevant stakeholders in schools who influence and operationalize the school feeding systems, including school leadership, heads of departments, health and hygiene, and administrative staff
- **Parent Teachers' Associations, school feeding and procurement committees, school management committees, cooks, and food storage managers** who preside over the programme at school level. **This project will build the capacity of more than 2,800 school-level school feeding stakeholders.**
- **Parent and communities:** Community awareness campaigns will be held, particularly with parents of school-going children, to promote the need for adopting nutritious diets and clean cooking practices, with a gender transformative approach. This partnership will reach **90,000 parents and community members with social behavior change communication (SBCC) activities and messaging in and around schools**
- **Smallholder producers and other value chain actors, particularly women:** Smallholder producers and other value chain actors - such as food processors and traders - will be supported in value chain development activities, FSQ, etc, and will be directly engaged in the procurement for school meals by schools. Cooperatives are also key stakeholders to facilitate services and aggregation and can act as learning centres to promote climate-smart technologies and practices. **This partnership will support 40,000 smallholder producers across 3 countries.**
- **Local and National Governments:** The country teams have existing, strong relationships with local and national governments in each country. This engagement is **multi-sectoral in nature, involving all relevant sectors, including education, agriculture, environment, finance, gender and health. This partnership will train over 700 government staff to support and operationalize HGSF programmes.**
- **Private sector and financial institutions:** WFP will work in partnership with a broad coalition of private sector actors - at both country-level as well as regionally - to overcome bottlenecks and identify solutions together. These partnerships will be critical in the delivery of the third impact pathway pillar focused on the promotion of cleaner cooking technologies and practices for schools (outlined in the next section). This coalition will also include partnerships with financial institutions to support innovative finance approaches for smallholders and other value-chain actors.
- **Research institutions/organizations:** WFP will partner with recognized international and regional research partners: African Population and Health Research Centre, the International Maize and Wheat Improvement Centre and the Research Consortium for School Health and Nutrition. The research component of the project will address knowledge gaps in Impact Pathways 1 and 2.



Project Map: Kenya, Rwanda and Uganda

Caption: Women overlook a dry farm in Turkana, Kenya. Farmers that rely on rains in northern Kenya are never assured of a harvest. Rains are erratic and droughts frequent. Photo: WFP/Martin Karimi

2.5 Impact Pathway 1
Transition local smallholder producers to climate-smart production

Regional Overview

Across the East African region, WFP supports more than 700,000 SHFs (35% women) and over 400 farmer groups in 6 countries. This project is building upon and expanding existing smallholder market support and post-harvest loss management programmes that WFP has been implementing for years in each of the three project countries. WFP has designed, piloted and mainstreamed a value chain development approach that starts from pre-identified demand for products sourced from targeted SHFs. WFP also supports value chain actors to address inefficiencies across all segments of the value chain, from production, value addition, aggregation, distribution, consumption to waste management.

School meals make up about 70% of a country's publicly procured food[37] and the market impact of school meal programmes globally has been measured at around US$80 billion per year.[38] Public procurement can be used as a catalyst to influence farmers to grow new types of crops (indigenous, drought-tolerant) and to use climate-smart practices that regenerate soil, restore ecosystems and support biodiversity.[39]

School meals sourced from local producers promote agricultural development and expand market opportunities by building direct links between school demand for fresh and local foods and supply from local producers. Climate change uncertainties continue to adversely affect farm productivity and the livelihoods of farmers. Post-harvest losses further limit their potential returns while impacting the quality and safety of food consumed.

Leveraging its extensive network and expertise, WFP is a convener of partners - facilitating strategic partnerships that unite Government, NGOs, private sector entities and local communities. WFP can serve as an important player in helping to develop private sector and local retail networks and supply chains in the hardest-to-reach areas.

Country Overviews

Kenya

In Kenya, WFP supports more than 330,000 smallholders. WFP has a well-established reputation among the SHFs and farmer organisations in providing reliable markets. WFP has created "climate-resilient food systems hubs". These hubs provide an opportunity for SHF communities to be linked to markets and to get access to services, inputs and support to help them boost their production and sell their marketable produce at scale through aggregation. Schools are a predictable market that incentivize SHFs to enhance productivity and, through aggregation, ensure sufficient supply for HGSF.

WFP also works upstream with off-farm value chain actors such as Farmer Service Centers (FSCs), agro-dealers, and aggregators, providing business development training, service provision, access to finance, transportation etc. These FSCs provide inputs and services to farmer groups or SHFs directly. WFP also partners with the National Irrigation Authority and Departments of Agriculture at the Country government levels, to expand climate-smart and sustainable irrigation schemes to support increased production.

Rwanda

In Rwanda, WFP reaches more than 130,000 SHFs through programmes aimed at improving productivity and market access. WFP has worked to strengthen the value chains of key commodities, building access to long-term markets and buyers, supported by access to skills, inputs and services. WFP actively collaborates with the private sector, engaging manufacturers and suppliers of post-harvest technologies and tools. Initiatives include developing business models that support easy and affordable access to PHM technologies and equipment (i.e. tarpaulins, hermetic bags) and knowledge on improved storage, pest control, and quality preservation. WFP is conducting a district mapping exercise, which seeks to map the,demand generated by the NSFP to local supply from smallholders thereby encouraging strategic investment in key value chains.

WFP promotes and scales up CSA (specifically conservation agriculture) through the government extension system which is a customized farmer field school model, in order to improve and strengthen existing working mechanisms. Government's support of conservation agriculture (CA) has resulted from a WFP-initiated pilot, which was successful in generating evidence to inform a shift in national policy towards more sustainable and productive agricultural practices.

Uganda

In Uganda, WFP supports 36,000 SHFs in Karamoja to bulk and collectively sell their farm produce. WFP has a proven track record of supporting large scale agricultural projects including the current agricultural market support (SAMS) programme. WFP is already working with SHFs to ensure they have access to agricultural inputs and extension and financial services to support increased production. In addition, by supporting post harvest management (PHM), WFP helps SHFs reduce losses and increase production and income. WFP also supports CSA through small-scale irrigation provision and regenerative practices.

Private sector engagement is at the core of WFP's implementation for sustainable input chains and market linkages. WFP has already had significant experience in engaging and incentivising agro-input dealers in hard-to-reach areas to ensure supported farmers get access to quality inputs.

37. Research Consortium for School Health and Nutrition, SCHOOL MEALS AND FOOD SYSTEMS: Rethinking the consequences for climate, environment, biodiversity and food sovereignty, 2023
38. WFP, School Based Programmes Fact Sheet, 2023
39. Research Consortium for School Health and Nutrition, SCHOOL MEALS AND FOOD SYSTEMS: Rethinking the consequences for climate, environment, biodiversity and food sovereignty, 2023

2.5 Impact Pathway 1 (continued)

Impact Pathway #1 will support smallholder producers and other value chain actors, in transitioning to climate-smart practices and value chains through demand-driven changes aimed to enhance productivity and diversity, improve livelihoods, and build adaptive capacity and climate preparedness. WFP has strong capacity and experience, to ensure that it delivers on pathway #1 and achieve its intended outcomes.

High level activities for Impact Pathway #1 include:

- *Local value chain development for climate-smart & nutrient-dense crops;*
- *Technical assistance to schools, governments and other stakeholders for local procurement and food safety/quality for school feeding;*
- *Build capacity of smallholder producers and other actors in climate-smart production*

Activities by Country (Country Work Plans in Annex 6)

Kenya will:

- Conduct mapping of value chains which promote the uptake of indigenous, nutrient-dense and climate-smart crops (eg. sorghum, millet, OFSP, cowpeas, high iron beans (HIB), drought-resistant maize, vegetables), for inclusion in school feeding menus.
- Promote the production of climate-smart and nutritious crops across the 3 counties (Turkana, Baringo, West-Pokot) through advocacy for increased investment and the facilitation of linkages to quality inputs and services (including financial) in addition to private sector. Activities will include the organization of 12 advocacy and communication events and 18 business to business meetings, with an aim to influence 5,000 SHFs to produce climate-smart and nutritious crops.
- Build capacity (through training and HGSF learning events) of 550 government officers (members of School Boards of Management and Education Officers) in Turkana County to support implementation of the aggregation model and the climate-smart HGSF programme.
- Support Government and other stakeholders to operationalize Turkana County's pro-smallholder procurement strategy and guidelines, to enable local procurement of 30% of institutional food requirements in Turkana. Support includes technical assistance to Government to procure food locally for the KNSFP and training of 300 SHFs and 45 schools in Turkana, to facilitate procurement of 1500 MTs of food by schools.
- Build capacity of 50 smallholder groups in Turkana, Baringo, and West Pokot through: 1) trainings (climate-smart production[40] & sustainable PHM techniques), 2) the provision/linkage to certified quality inputs (i.e. seed banks) and services to 5,000 smallholders, and 3) the construction, rehabilitation and renovation of agriculture infrastructure (aggregation centres, cold storage, irrigation, and demonstration farms) - with an aim to enable smallholders, to sell food to schools and other markets.

Agnes, 48, stands on her farm in Turkana, Kenya. Agnes is a farmer and mother who has benefited from training and irrigation support from WFP and the Turkana County government. Credits: WFP/ Arete/ Fredrick Lerneryd

- Support implementation of food safety and quality (FSQ) guidelines along major value chains and establish 6 mini-labs (for the rapid testing of mycotoxin and food quality as well as building the capacity of market actors) to ensure marketable surplus is safe and of high quality.
- Promote decarbonization practices and solutions with 3,000 SHFs at farm level through training (waste disposal, reduction of food losses, logistics, PHM solutions and linkages to quality inputs and services, solarization of technologies, etc).

40. In Kenya, WFP in partnership with research institutions and the County Departments of Agriculture, will adapt the existing training curricula to incorporate CSA. The TOT approach to extension services will be adopted. Farmer organisation leaders, FSCs and selected government officers will be trained to cascade knowledge to SHFs.

2.5 Impact Pathway 1 (continued)

Caption: Immaculée is part of a WFP-supported cooperative in Rwanda with over 300 members, and also a savings group. Credits: WFP/Arete/Fredrick Lerneryd

Rwanda will:

- Strengthen systems around the procurement process (district level), to enable local procurement from SHFs and other actors by schools in the NSFP, with an emphasis on youth and women's economic empowerment. Activities include: facilitation of procurement linkages between 50 SHF groups and schools (including adequate production planning), and sensitization sessions conducted with 100 SHF groups on the new procurement model.
- Build capacity of 170 government staff (district procurement officers, tender committee, budget managers, and agriculture and education officers) and 128 school feeding stakeholders (procurement and school feeding committees) in schools supported by WFP, to implement the NSFP procurement model, including improved demand and supply-driven planning, FSQ, and local sourcing from SHFs.
- Build capacity (through trainings, coaching and knowledge exchange visits) of 12,000 SHFs and actors in 3 districts, on the uptake of CA production practices,[41] cognisant of gender dynamics, and generate evidence on costs and benefits.

Uganda will:

- Develop at least 2 indigenous/climate-smart value chains (i.e improved maize, sorghum, milk, HIB) for foods which are nutrient-dense, and climate-smart, for inclusion in school feeding menus. Selection of specific value chains will be informed by the research component to be conducted by a research partner, and focused on CSA.
- Build capacity of SHFs to enable improved quality and quantity of food produced, and strengthen procurement systems to enable WFP to directly procure food from at least 20 SHF cooperatives in Karamoja. WFP aims to source 70% of school feeding food requirements for 216,000 students in the 315 schools supported by WFP, directly from SHFs and cooperative groups in Karamoja.
- Build capacity (through trainings) of at least 20 smallholder producer groups, including 20,000 smallholder producers in Karamoja, to boost the uptake of climate-smart production,[42] and sustainable PHM techniques with the longer-term goal of increasing supply of climate-smart foods for schools and other markets

41. In Rwanda, WFP uses an adult learning curriculum for conservation agriculture (CA), that combines both classroom and field work sessions for ToTs and season-long trainings. WFP aims to continue extension through existing government extension systems which means training government extension agents on different level of the decentralized Rwandan local governance system to ensure sustainable extension services for farmers.
42. In Uganda, WFP will utilize Government-led National sustainable land management curriculum. Under the leadership of the Ministry of Agriculture, a comprehensive CSA training curriculum will be rolled out. Training modules will be developed or adopted to cater to different levels of farmers' knowledge and experience. These modules will be delivered through a combination of theoretical sessions, practical demonstrations, and hands-on activities or peer-to-peer sessions. Government extension workers and district leadership will play a crucial role in the implementation and follow-up of CSA trainings.

Credits: WFP/Fredrick Lernyrd

2.5a Enabling Local Procurement for HGSF

Domestic production is better value for money, supports the local economy, and strengthens national food systems, especially when over-reliance on imports creates food insecurity when global supply chains are disrupted (as with COVID and the Ukraine war). A WFP procurement report shows that **local pro-smallholder farmer procurement costs an average of 13% less than the respective import parity prices.** Overall, local food procurement using pro-smallholder modalities has enabled WFP to achieve savings of more than USD 42 million compared with the costs of purchasing and importing the same commodities, revealing that purchases from SHFs can be cost-efficient and can even result in cost savings compared to importation.

Additionally, local and regional procurement stimulate countries' GDP / production. In particular, **WFP's Lewie study[43] found that across the RBN region, each dollar spent by WFP increases the value of total production by USD 2.30 on average and that real GDP increases by USD 1.42.**

Transport emission data is not yet readily available or reliable because the complexity in calculations stem from multiple modes of transport, each with varied carbon footprints. However, research states that consuming local food can reduce the carbon footprint and improve sustainability. WFP's *Logistics Execution and Support System* enables the organization to have clear visibility of any food movement from the suppliers to the distribution handover. Using this information, WFP logistics developed a comprehensive model and tool for the calculation in real time of the carbon emissions- which has informed the analysis of the comparative advantage of local and regional food procurement versus international procurement in terms of carbon emissions. However, the demand of food in the region is so high that local and regional sourcing alone cannot satisfy the needs. Therefore, WFP is pursuing a dual objective: increasing local and regional procurement and modernising the regional and in-country logistics infrastructures.

Defining 'Local' in HGSF programmes: HGSF is rooted in local sourcing of food from SHFs. As previously referenced, "local" is defined differently across the three countries. In Rwanda, the government's procurement guidance promotes procurement from within a district, when possible, and "local" means from within the borders of the country. In Kenya, "local" is defined within the county where the school is located, and food should be sourced from local markets, avoiding imports. In arid and semi-arid counties in Kenya, food for school feeding is oftentimes sourced from surrounding counties. In Uganda, local means food that is purchased directly from SHFs in the region.

Reliable and sustained sourcing from smallholders: With the end goal in mind (government ownership and management of HGSF programmes), WFP must ensure that local sourcing from smallholders is reliable, paid for at attractive prices, and sustained through systems, strategies and guidelines. In each of the three countries, WFP will take a different but similar approach to procurement of food from smallholders, as described in more detail below.

Kenya

In a county like Turkana with harsh climatic conditions, ensuring that sufficient quantities of food are produced locally is a key priority. Agricultural production is possible in certain parts of the county, and a shift to more CSA and regenerative practices creates potential to increase the production of drought tolerant and nutritious crops. Sustainable business models with strong linkages to the private sector, along with the development of pro-smallholder procurement strategies, are critical to ensure adequate food supply to schools. Lake Turkana offers opportunities to link fisheries to school meals, an area WFP is already engaging in. Promotion of pastoral production, such as dairy, in school meals is another potential area to ensure local procurement of foods for schools.

To ensure sufficient supply of food for HGSF in Turkana, some food for schools is sourced from neighbouring counties Baringo and West Pokot. WFP has a strong and long-standing partnership with county governments in the ASALs and is already working in Baringo and West Pokot on the supply and market side, supporting SHFs and cooperatives with CSA practices and strengthening local farmers' market access. The county government plays an important role on the supply side to the KNSFP, and strong linkages are needed between the national and the county government to ensure the supply and demand sides meet.

43. Corong, E., Kagin, J., Taylor, E., and van der Mensbrugghe, D.(2022) Economic Assessment of World Food Programme Expenditures in East Africa. WFP RBN.

2.5a Enabling Local Procurement for HGSF

In the *aggregator model*, the Government will enter into Framework Agreements with farmers organisations who aggregate the food from registered SHFs. This model is built on existing work by WFP in Kenya, where food is being aggregated from local farmers and capacity is being built. Counties have adopted strategies where they commit to procure a minimum of 30% of their institutional food needs from local SHFs. WFP is also working upstream with off-farm value chain actors such as FSCs, agro-dealers, and aggregators, providing business development training, service provision, access to finance, and transportation.

WFP projects that there will be an increase in the production of climate-smart and nutritious crops by 40% among the 5,000 SHFs supported across the 3 targeted counties. Of this amount, WFP aims that 40% is sold to schools and 60% to open markets for local consumption.

Rwanda

The Government of Rwanda has prioritised school feeding as a programme that can transform the local food system. **The NSFP is the largest market in the country for food procurement, and thus an attractive platform for farmers.** The Government's new procurement model - developed together with WFP - directs schools and districts to source foods for school meals from local markets. WFP is working with the ministries of agriculture, trade and industry and education to ensure that the NSFP procures as directly as possible from local SHFs, and builds capacities of both the buyers (schools and districts) and the SHFs to maximise the linkages. The new local procurement model facilitates long-term planning and security for both districts and farmers.

WFP has informed the design of this model through pilot testing and technical assistance. Data shows that most of the food purchased for the NSFP is indeed produced in Rwanda. The main food where importation continues to bridge a local production gap is fortified food: fortified oil, salt, and maize meal. Occasionally, ingredients for Rwandan-made fortified flours are also imported from the region (particularly maize).

CA is seen as a key strategy to shield and boost agricultural production in the coming years, as data shows that it can considerably increase yields. WFP's operational experience has shown that **CA, combined with other good agronomic practices has demonstrated to increase productivity by 20 to 50%**. These practices have also reduced agriculture inputs and time, overall increasing the farmers' income.

In WFP's HGSF programme, WFP supports local markets through cash transfers to schools, to create a demand for fresh fruits, vegetables and animal protein, to complement the core meal. **In 2023, WFP injected USD 160,000 into local economies in Rwanda, for the purchase of fresh foods from SHFs**. WFP has also created a demand for HIB produced by SHFs, and purchased 50 MT of HIB for schools.

Credits: WFP/Fredrick Lernyrd

Uganda

WFP's HGSF model in Karamoja is based on centralized procurement directly by WFP. HGSF has the potential to transform local food systems, despite the region's agricultural and climatic challenges. Local procurement of staple crops creates a reliable market for SHFs and encourages agricultural diversification. WFP's procurement from SHFs has increased and **in 2023, WFP sourced over 2,000 MT of maize and beans from SHFs in Karamoja, resulting in USD 1.9 million injected into the local economy.**

In Uganda, WFP works with 36,000 SHFs. In order to enhance capacity of SHFs' participation in the market through this project, as well as guarantee adequate supply for schools, contract farming and forward contracting will be used by WFP. Other pro-smallholder procurement modalities will be explored, including vouchers. Price setting will be determined to ensure alignment with market prices.

In Karamoja, WFP works with a network of farmer organizations and medium and small enterprises involved in bulking and collective trading of agriculture food commodities. To guarantee SHFs produce the right quantities and quality of food, capacities in good agronomic practices, entrepreneurial skills, PHM practices, and agribusiness, will be strengthened. SHFs, especially women, are also supported with skills on financial literacy and business management. Lastly, WFP supports CSA through small-scale irrigation provision and regenerative practices.

Farmers have the autonomy to choose their buyers, ensuring they receive competitive prices. While WFP anticipates that most of the production will be sold to schools, while the rest will be available for sale on the open market, enhancing market dynamics and farmers' incomes. By not imposing predetermined obligations, WFP supports a balanced market, which allows farmers to benefit from the best prices. WFP's programme is led by the Government and WFP is building stronger relationships with the ministries of education and agriculture. HGSF can ensure a reliable market for the farmers supported under Government-led agriculture development programmes, such as the Karamoja Feeds Karamoja Initiative.

2.6 Impact Pathway 2
Improve quality of school diets and food preparation

Regional Overview

School meals can help to address both the immediate hunger and nutritional needs of children that lay the foundations for developing human capital. They build up the nutrition and health of children, continuing investments made in the first 1,000 days to the next 7,000 days of a child's life. In East Africa, school meals are often the only regular and nutritious meal a child receives.

School meals provide a social safety net for children and their families, financial incentives to parents, and better and more sustainable diets for children. School meals have also proven to be impactful when it comes to gender equality. They give vulnerable families a powerful incentive to send or keep their daughters in school. Improved nutrition is a key factor to good health. When school meals are combined with complementary interventions, such as deworming, micronutrient fortification, and social behavior change efforts, the effects of that investment are multiplied.

However, lack of diversity in diets, safety, and inadequate quality measures minimize the impact of such interventions. Dietary habits are developed at a young age, therefore demonstrating the long-term impact that healthier and sustainable meals at school can have on a child. By starting with a nutritious, climate-smart school meal and working in reverse through the supply chain to the SHF, HGSF programmes can catalyze demand-driven changes within the system. This approach aims to boost sourcing of nutritious and culturally acceptable food by supporting schools to develop and utilize diverse meal menus based on locally available, nutritious, indigenous and drought-resistant foods (in view of climate and environmental considerations). FSQ is also critical to safeguard and promote the health and nutritional well-being of school children.

Country Overviews

Kenya

The right to nutrition is guaranteed in the Constitution of Kenya (2010). In line with this right, the Government currently provides rice and beans to schools in arid regions of the country in addition to corn soya blend (CSB) porridge in 'Expanded School Meal' regions and urban informal settlements. However, both rice and beans and CSB porridge exhibit limitations in terms of cost, nutritional value, climate resilience, and importation challenges when compared to other menu options.

The Government of Kenya's scale-up strategy - developed with support from WFP and the Rockefeller Foundation - includes the redesign of meal plans, with a nutrition and climate-lens. To select optimal meal menus for expansion, the Government has carefully considered the costs, the nutritional benefits in line with Ministry of Health Menu Guidelines for schools, the impact on local agriculture, emission intensity, and climate resilience.

Rwanda

In Rwanda, WFP's HGSF programme provides a daily meal comprised of: fortified rice (3 days a week), and fortified vegetable oil purchased internationally and provided in-kind; fortified whole grain maize meal (2 days a week), iodized salt, and beans, purchased locally/regionally; and cash to schools to enable the purchase of fresh foods locally to enhance the nutritional quality of the meal, including green leafy vegetables, fruits and animal-source protein, such as dried fish. WFP is moving away from refined fortified products towards wholegrain.

The standard school meal of the NSFP consists of maize meal, beans, oil, and salt and WFP is advocating for more nutrient-dense foods to be included in new menus. WFP has been providing technical support to the Ministry of Education to inform key design choices in the NSFP, including school meal menu design and food safety and storage guidelines. School teachers, storekeepers, cooks and selected teachers were trained by WFP on FSQ, and the quality of food given to children is always checked. Additionally, district procurement officers and district directors of education were trained by WFP on FSQ for procurement of school commodities.

With an aim to further elevate school health and nutrition programming in schools, WFP is supporting the Government to implement the new National Guidelines on School Age Children and Adolescent Nutrition (2023). In partnership with UNICEF, WFP will pilot a model in schools that trains teachers and educates students on key health and nutrition skills and topics.

Uganda

In Uganda, WFP provides a daily hot meal of beans, maize meal, oil, and salt. To further improve the dietary diversity of school meals, WFP has introduced OFSP in schools. Additionally, the establishment of sweet potato gardens has promoted agricultural education and sustainability within the school curriculum. Students actively participate in the cultivation process, gaining practical knowledge about agriculture, environmental stewardship, and the importance of a diversified diet. This hands-on experience imparts valuable life skills and instills a sense of pride and responsibility in contributing to their nutritional well-being.

To reduce food losses and enhance storage in schools, WFP provides food storage silos to schools, significantly increasing schools' storage capacity. WFP also trains school food management committees on how to monitor food safety and nutrition.

Impact Pathway #2 will provide technical support and assistance to governments and schools in delivering affordable, safe, diversified, nutritious, locally-sourced meals in addition to leveraging the school as a platform for access to health services, nutrition education and climate-smart practices that improve overall health and nutrition of school-going children.

High level activities include:

- *Diverse, nutritious and locally-available menu development*
- *Complementary programming linked to food quality and safety and the integration of health & nutrition services*

Activities by Country (Country Work Plans in Annex 6)

Kenya will:

- Development of 5 daily school menus that include meals which are locally-sourced, diverse, nutritious, and inclusive of indigenous, nutrient-dense and climate-smart foods. Activities will include the organization of 3 menu development workshops and 3 demonstration workshops to train schools and relevant stakeholders.
- Development of food preparation guidelines for schools based on ongoing value chain and market assessments
- Implement gender transformative SBCC activities on school health and nutrition – including the establishment of 1000 climate smart household kitchen gardens and the organization of 5 cooking demonstrations and 6 agrinutrition sensitization meetings – to promote the consumption of locally available, climate-friendly foods - in schools and communities.

Rwanda will:

- Revise the Rwanda School Feeding Operational Guidelines and framework (in collaboration with government), including the refinement of standards and school menus to include meals that are locally-sourced, diverse, cost effective and inclusive of indigenous, nutrient-dense and climate-smart foods. This will include the development of 5 new menus and the training of 476 school feeding practitioners at district and sector levels, on the implementation of the revised guidelines.
- Implement gender transformative SBCC activities on school health and nutrition in 32 WFP-supported schools and surrounding communities, with an aim to reach 90,000 individuals. Activities will be identified following the completion of a strategy on good nutrition behaviours in schools, which is currently under development with WFP and the Government.
- Collaborate with the Rwanda Standards Board and Rwanda Food and Drug Authority on food safety and food standards systems and capacities across EAC countries, with a focus on fortification for school feeding. Activities will include the development/adoption of one new or existing legislative instrument, standard or policy for fortified staple foods, through WFP capacity strengthening support, in addition to the sensitization of 100 stakeholders on food safety and food standards.

Caption: Gabriel, a school cook, prepares vegetables from the school garden to add to school lunches at Bwama Primary School in Rwanda. **Credits**: WFP/Arete/Fredrick Lernyrd

2.6 Impact Pathway 2 (continued)

Rwanda will (continued):

- Together with UNICEF, leverage the school as a platform to deliver health and nutrition services for school-aged children that will include anthropometry assessments, education on healthy diets and physical education, hemoglobin monitoring, and trainings of school health and nutrition teachers and community health workers. This will be implemented in 21 schools, reaching 19,000 students through 6 school health and nutrition interventions.

Uganda will:

- Development of 2 new daily school menus that include meals which are locally-sourced, diverse, nutritious, cost-effective and inclusive of indigenous, nutrient-dense and climate-smart foods. Menu dissemination activities will also be organized for schools.
- Scale up the establishment of school gardens in Karamoja to all 315 WFP-supported schools - to be used as an educational tool for students
- Promote behaviour change towards healthy diets in coordination with government health and nutrition services by supporting 2 health (vaccination, etc.) and SBCC campaigns conducted annually in schools, in coordination with key local partners and implementation of routine services by community health workers such as nutrition assessments.

Students eat beans, ugali (maize flour) and spinach served for lunch at Bwama Primary School in Rwanda. Credits: WFP /Arete/ Fredrick Lerneryd

Caption: Students Betty and Angela, harvest orange fleshed sweet potatoes at their school in Uganda, Kapuat Primary School. one of the schools WFP selected to pilot the production of OFSP and vine multiplication. **Credits**: WFP/ Joel Ekstrom

2.7 Impact Pathway 3
Promotion of cleaner cooking in School Feeding Programmes

Regional Overview

More than 80% of WFP-assisted schools in the region are still cooking meals on traditional three stone fires using firewood. Preparation of school meals using traditional methods contributes to environmental degradation by depleting natural resources, such as deforestation for fuel, leading to habitat loss, soil erosion, and inefficient energy use, exacerbating resource constraints in already limited environments. Moreover, they also lead to health risks through indoor air pollution.

Adopting more efficient, cleaner cooking practices is crucial for sustainability and mitigating these adverse impacts. Cleaner cooking includes fuel-efficient cooking technologies which are part of a transition to sustainable cooking methods, moving away from open-fire cooking and reducing the fuel used, regardless of source. Further, the firewood needed for school meals is often collected by children and parents (mostly women), a time consuming, financial and physical burden for schools, with significant environmental impacts. Anecdotally we know that in areas where firewood is scarce, meals are being undercooked, and in the worst case, meals are being skipped due to the lack of firewood.

Complementary ecosystem-related project interventions that reduce the environmental impact of school feeding (woodlots, alien species control, and promotion and sensitisation of the need for fuel-efficient school feeding) are currently ongoing in all three countries, under different programmes. These are detailed further below.

Country Overviews

Kenya

In Kenya, there is a significant need to shift away from cooking school meals with firewood. Clean cooking solutions are needed, including school kitchens and stoves and the adoption of clean, safe, and energy efficient practices for food preparation and storage to reduce indoor and outdoor air pollution and emissions. In collaboration with UNHCR and FAO, WFP is already testing locally produced sawdust briquettes in Dadaab and Kakuma, made from the invasive prosopis plant that is cleared to make room for farms. The use of prosopis is being pushed and mandated by the government as one of the measures taken to manage and eliminate the invasive plant.

In the ASALs, the Government is approaching the shift away from firewood cooking to clean cooking in two ways: i) adoption of fuel-efficient stoves, as a first step to curb tree-cutting and firewood cooking and ii) testing of renewable energies, particularly steam cooking, as alternative clean energy sources for cooking.

The Government's strategy aiming to reach "Zero Carbon Schools" includes the transition to the use of energy-saving Jikos for smaller schools and steam cooking systems for larger schools, to reduce carbon emissions. The use of localized production of briquettes made from trees, will boost local enterprises for both youth and women, and support schools' access to affordable low-carbon energy as they transition to other cooking alternatives. Finally, the production of woodlots and green belts using a non-evasive, naturalized tree, create moisture sinks and offset carbon emissions.

Rwanda

In Rwanda, the Government is prioritising efforts to ensure that the NSFP's contributions to carbon emissions and deforestation is limited and decreases over time, and is aligning the programme with its ambitious climate agenda. In line with this agenda, the Government has set targets to reduce the use of wood and other biomass fuels and with an aim to achieve clean cooking by 2030. Currently 80-90% of all schools in Rwanda still use firewood or biomass cooking fuels. A range of solutions and private sector businesses are beginning to take on this challenge, and more than 40 solar companies, 14 liquefied petroleum gas companies, and nine clean cookstove companies are operational in Rwanda.

In 2022, WFP conducted a study on *Fuel Efficient School Feeding*, in partnership with Loughborough University. The study identified best practices for fuel-saving food choices, storage, and preparation. WFP also supported the Government to define priorities to promote clean cooking for school feeding in the National School Feeding Strategy. WFP aims to leverage its role as a convener to support the Government of Rwanda to implement a phased approach to move to clean cooking in the NSFP.

Uganda

In Uganda, there have been limited approaches used for cleaner infrastructure for schools, particularly for cooking. WFP is in the process of supporting cleaner cooking technologies in schools, starting with a pilot in five schools. The pilot focuses on the exploration of smart cooking technologies and the installation of off-grid solar powered institutional cooking facilities.

WFP has set up school environment clubs and planted trees to raise awareness on the environmental impact of school feeding. Tree planting in schools can be promoted for various purposes, such as for shade, fruit production or even for harvesting of natural pesticides (e.g. neem).

Uganda's dependence on biomass for cooking is significant, with 50% - 66% of the country's total emissions resulting from firewood usage.[44] The Third National Development Plan commits to reducing the share of biomass energy for cooking from 98% in 2018 to 50% by 2025. This is accompanied by a commitment to increase clean energy used for cooking from 15% to 50% over the same period, as the national electricity grid is expanded and energy becomes cheaper.

44. Clean Cooking Alliance, 2022

Impact Pathway #3 will support governments in the adoption of energy-efficient, safe and clean cooking solutions and practices for food preparation in schools to reduce the need for traditional cooking fuels such as firewood and charcoal, reducing deforestation and environmental degradation around schools as well as increasing health benefits by decreasing harmful emissions.

High level activities for Impact Pathway #3 include:

- *Replicating, scaling up and building capacity in using sustainable energy efficient models and practices*
- *Piloting clean cooking and regenerative technologies & infrastructure*

Activities by Country (Country Work Plans in Annex 6)

Kenya will:

- Promote and support scale-up of energy efficient technologies (i.e. biogas) and cooking practices among 400 school managers, with an aim to enable cleaner cooking in government-run schools
- Provide energy-efficient cookstoves to 50 schools in Kakuma and Kalobeyei settlements and train staff and cooks on the use, operation and maintenance of the equipment. The provision of fuel-efficient stoves is part of the Government's national strategy to transition to clean and modern cooking solutions.

Rwanda will:

- Promote and support Government (Ministries of Education, Infrastructure and Environment) to scale-up energy efficient technologies in the NSFP to enable "cleaner" school feeding, with an aim to pilot energy-efficient technologies in 11 WFP-supported schools.
- Convene 60 stakeholders in joint evidence sharing, planning and strategy development for institutional clean cooking in schools in Rwanda, in addition to policy development in consultation with key stakeholders and government
- Build capacity (through creation of training materials and implementation of trainings) of 128 school-level stakeholders (including school cooks and storekeepers)

Uganda will:

- Train 1,800 school feeding stakeholders (including cooks) in 150 WFP-supported schools in energy-efficient and safe food preparation practices.
- Promote and provide innovative energy-efficient cooking infrastructure (stoves, kitchens and firewood storage) in 150 schools in Karamoja.
- In collaboration with local authorities and community-based organizations, WFP enable sustainable production and sourcing of biomass. WFP will leverage existing structures such as the National Agriculture Advisory Services, to train communities on biomass production, thus promoting long-term sustainability and community ownership.

Caption: A school cook in Rwanda arranges the school meal in front of the energy-efficient stoves provided by WFP. **Credits**: WFP/Badre Bahaji

2.8 Cross cutting priority #1
Addressing Gender equality

Caption: School children in Karamoja, Uganda. **Credits**: WFP/Joel Ekstrom

HGSF: A game-changing intervention for gender equality

Food systems improvement cannot be achieved without gender equality. For WFP, the pursuit of gender equality and women's empowerment is central to fulfilling its dual mandate to end hunger and save lives. Discriminatory gender norms and harmful power dynamics play a key role in driving food insecurity and poor nutritional outcomes for women and girls. Backed by a robust body of global evidence on these critical linkages between gender inequality, food security, and nutrition, WFP's current Gender Policy prioritizes in-depth, gender-transformative approaches that address the root causes of gender discrimination and the marginalization of women and girls across all of WFP's intervention areas.

Gender transformative approaches seek to understand and directly address the root causes of such inequalities and discrimination. Gender transformative approaches are increasingly considered the 'gold standard' of gender work in development and require an in-depth, nuanced analysis of the gender norms and power relations within the target community or programme area to develop an intentional and sustainable response to the barriers identified. Gender assessments of school feeding programmes in the regions have shown that significant gender barriers in target communities lead to food insecurity and poor nutritional outcomes for women and girls, as well as women's exclusion from leadership and economic opportunities provided by the HGSF model at the community level.

Gender dynamics in the home and community that reinforce a belief in women's and girls' subordination create immense barriers for them to be able to fully participate in and benefit from different aspects of HGSF. Unequal power dynamics between spouses in the home also negatively affect parents' ability to ensure school feeding contributions are paid in full and on time (in countries where these are required) and without burdening women to provide contributions in-kind through manual labor. In addition, norms around gender, power, and food in the household play a powerful role in perpetuating harmful beliefs and practices related to women's and girls' food security and nutrition despite the positive contributions of school meals themselves. Gender dynamics in the school setting further role model unequal behavior for boys and girls and reinforce a myriad of gender stereotypes, including normalizing gender-based violence and the marginalization of women and girls.

HGSF programmes give poor families a powerful incentive to send or keep their daughters in school. For girls, a single year of secondary education equates to a 25% increase in wages later in life. The impacts translate further from one generation to the next: educated girls have healthier and more educated children.

2.8 Cross cutting priority #1
Addressing gender equality

Adopting a transformative approach to addressing gender barriers offers significantly better 'value for money' to HGSF programmes; if the root causes of such issues are not directly addressed, then the same problems will persist over time, which can have the effect of inhibiting the positive impact of these programmes in the long run. Based on in-depth gender assessments for each country context, the HGSF programme will apply a gender transformative approach cutting across all key activity areas and pillars to address food insecurity and poor nutritional outcomes to foster a ripple effect of intergenerational change for gender equality that can drive food systems improvement at a broader level.

A female smallholder sorghum farmer in Turkana, harvests her crops. WFP/ Alessandro Abbonizi

Gender Transformative Activities to be Implemented in this Project: When it comes to gender equality, HGSF programmes have proven to be a game-changing intervention. Of the 321,400 students to be supported by this project, 46% are girls. Beyond the direct provision of meals, WFP will **conduct qualitative gender assessments, coordinated regionally by RBN, with a transformative, climate-smart lens** for the HGSF programmes in Kenya and Uganda. In Rwanda, where a gender assessment of HGSF exists, this evidence will be complemented by an additional research piece with a climate-smart lens to ensure it provides the insights needed for effective programme adaptation. **Together with local gender partner organizations/firms, WFP will co-design detailed gender transformation[45] road maps** targeting the key findings from the country assessments.

Best practice points of entry and critical activities for gender transformative results may include:

Sensitize key stakeholders including government officials and other leadership figures on the importance and significant 'value for money' of gender transformative approaches for improved food security, nutrition and education outcomes.

Invest in gender transformative community engagement for HGSF communities (programme partners, schools, teachers, parents, students, including the direct engagement of men and boys) to improve understanding of key concepts, emphasize the importance of gender equality and the prevention of discrimination and violence, and ensure that the root causes of women's and girls' exclusion are addressed, with an emphasis on the critical linkages between women's and girls' rights, agriculture, nutrition, food security and unpaid care work.

Engage parents in targeted dialogue and learning sessions around gender roles and power dynamics in the home, including decision making and agency, control over financial resources, power sharing, unpaid care work, equal parenting and feeding practices, and role modeling gender equality for children, with an emphasis on nutrition and food security.

Integration of harmonized, consistent gender transformative SBCC messaging into existing activities and campaigns within schools / communities and across programme activities.

Integration of gender transformative approaches, outcomes and indicators into the impact framework (included in Annex 3), cutting across key programme activity areas and including qualitative data collection for analysis of gender transformative results.

45. The model will depend on the findings of the gender assessments conducted for each country and be developed in collaboration with local organizations that work on gender transformation; the overall methodology is rooted in engaging community members in targeted dialogue on gender norms and behaviours, engaging men and local leaders, building women's agency and leadership, and addressing household dynamics. There are a multitude of different models and tools to be used for this type of change we want to see, including GALS, JOT, CC, etc. and these will be selected based on the best fit for the community.

2.9 Cross cutting priority #2
Approach to evidence & learning

Evidence & Learning

Evidence and learning is at the centre of the programme. To strengthen programme design, implementation, and contribute to global knowledge gaps, WFP will approach evidence and learning from a use perspective. Throughout the project, WFP will focus on 1) Evidence Uptake, 2) Learning, Facilitation & Experience Sharing, and 3) National & Global Engagement. Descriptions of each component are:

1. Evidence Uptake – from design to dissemination, the project will provide platforms and targeted engagements to ensure research and other programme evidence will fill critical global and national knowledge gaps, as well as provide platforms and targeted engagements to discuss, reflect, and make evidence-informed project decisions. Externally, all research and evaluations will be made public. WFP and its research partners will also explore opportunities to publish its evidence and learnings in peer-reviewed journals, and present at relevant global and regional conferences or other public events.
2. Learning Facilitation & Experience Sharing - learning will be intentionally "harvested," synthesized, championed, and shared throughout the project for both internal and external audiences. WFP will foster internal and cross-country learning and experience sharing, develop user-friendly knowledge products, and convene internal and external stakeholders at national and global levels at key points in the project to share and reflect on new developments, insights, and evidence generated through the project.
3. National & Global Engagement – A key to sustainability and wider systems change, country teams will convene and facilitate engagements with national government stakeholders, as well as school and value chain actors to both consult, share evidence and learning generated by the project, and feed into national and school decision-making processes. At the global level, WFP and NNF will engage with the SMC and other key global actors to elevate project evidence and learning, feed into global processes, and share back global innovations to the national level.

Monitoring, Evaluation & Learning Component

Complementing the research component (explained further on pages 30-31) and guided by the WFP Corporate Results Framework, Monitoring Strategy, and Evaluation Policy, WFP will implement a robust monitoring, evaluation, and learning system to regularly measure project performance, assess overall effectiveness and sustainability (among other areas), generate insights and learn from its data, and adapt the project to maximize impact. Monitoring is conducted internally and publicly available details are available by country in WFP's Annual Country Reports and evaluation reports.

At the start of implementation, the project theory of change will also be revisited and further refined based on available evidence and implementation experience, followed by the development of a logical framework to guide the MEL system and support project management.

Monitoring data will help measure project performance at regular intervals, leverage corporate and project specific, sex-disaggregated indicators, and standard WFP process monitoring systems. Country teams will ensure timelines of the outcome (baseline and follow up) data collection and measurement of results in line with the monitoring plan. Monitoring teams will share findings with respective programme technical teams for high/medium and low priority issues accordingly enabling the reviews and reporting on progress of programme implementation. WFP will report on progress, assess quality of interventions, and identify areas for improvements.

A regional ***Evaluation*** focused heavily on learning will also be commissioned and conducted by independent evaluators. The exact evaluation focus, questions, and approach will be designed at the start of implementation through a consultative approach to best focus the evaluation on areas relevant to WFP, NNF, and its key partners, including national government stakeholders. Building on current experience and other ongoing evaluations, an adaptive developmental evaluation approach will be considered.

Under any approach, the evaluation will likely focus on project effectiveness and impact, particularly related to higher level changes envisioned by the project, especially gender transformative elements to understand how change is occurring on the ground and to validate project assumptions. In addition, it will analyze and bring together evidence from research, monitoring, learning insights, and external evidence, as relevant. It will also examine emerging elements of sustainability and systems change to inform project design and implementation.

In line with WFP Evaluation guidelines, each key stakeholder will be consulted and engaged throughout the evaluation process, including in a co-generation of recommendations process to ensure evaluation recommendations are meaningful, actionable, and feasible to implement.

Learning activities and processes will be implemented at global, regional, and national levels from the start of the project to foster a deep learning culture. Activities will include: targeted learning "harvests," cross-country exchange visits, learning and stock-taking events, development of user-friendly knowledge products, as well as targeted external engagements to share knowledge beyond the project.

Research Component (Detailed Concept Notes -Annex 7)

The applied research component of the project will provide credible, formative research, to address key local, national, and global knowledge gaps and needs, and inform the improvement of WFP's operations. Primarily, research will address knowledge gaps in Impact Pathway 1 (transition local smallholder producers to climate-smart production) and Pathway 2 (improve quality of school diets and food preparation). The research component aims to:

- Co-create research work packages that can address complex, systemic and cross-sectoral challenges in Kenya, Rwanda and Uganda and promote knowledge sharing for the improvement of HGSF programming
- Support applied research that increases the efficiency and impact of WFP's operations and HGSF programming in East Africa and to address research questions where WFP does not has in-house research capacity
- Contribute to improved global, regional and national understanding of the potential of HGSF to improve food systems outcomes
- Foster transdisciplinary research (i.e. research that integrates knowledge across academic disciplines and with non-academic stakeholders to address societal challenges) within the context of HGSF
- Transform research findings into policy recommendations for governments in East Africa as well as relevant stakeholders outside the region looking to learn from Kenya, Rwanda and Uganda.

Coordination

The research component will be coordinated by WFP RBN and executed by credible, international and regional research partners: African Population and Health Research Centre (APHRC), and International Maize and Wheat Improvement Centre (CIMMYT) and the Research Coalition for School Health and Nutrition (RCSHN). The research proposals have been co-created and will support knowledge sharing at sub-national, national, regional and global levels (full concept notes included in Annex 7).

African Population and Health Research Centre

For over 20 years, APHRC has been at the forefront of groundbreaking research, tackling Sub-Saharan Africa's most pressing development issues: health, education, population, aging, urbanization, and well-being. Currently, APHRC is implementing over 100 projects in 35 African countries involving global, regional, and national stakeholders. In addition, they engage policy-makers to inform action, influence policy decisions, and collaborate on interventions.

The Nutrition and Food Systems research team of APHRC's Health and Welling thematic area will be responsible for executing nutrition and health-related research in Uganda under the following four work packages (WP):

Esta uses a conservation agricultural demonstration tool to show the difference between safeguarded soil structure with conservation agriculture vs degraded soil structure with conventional agriculture in Kayonza District, Rwanda.© WFP/Arete/Fredrik Lerneryd

- WP1: Comprehensive understanding of the current nutrition status of school children
- WP2: Nutritional composition, diet quality and dietary diversity of school meals, home menus & foods available in the school environment
- WP3: Attitudinal or behavioral barriers or facilitators in the acceptance and consumption of locally available, nutritious food crops at both the household and school levels
- WP4: Recommendations for the design and implementation of sustainable interventions

International Maize and Wheat Improvement Centre

For 50 years, CIMMYT's research has helped tens of millions of farmers grow more nutritious, resilient and productive crops, using methods that nourish the environment and combat climate change. CIMMYT collaborates with hundreds of partners and is part of the global network of CGIAR research centers, delivering science for a food-secure future. CIMMYT and its partners test and promote improved technologies for crop and soil management. These innovations help farmers increase their yields, make production more efficient — regarding the use of land, nutrients, water and energy — and reduce greenhouse gas emissions.

2.9 Cross cutting priorities 2
Approach to evidence & learning

CIMMYT and experts from national agriculture research institutions will be responsible for executing research, promoting an end-to-end agrifood supply chain approach through the following four work packages:

- WP1: Local Food System Characterization
- WP2: Identifying implementable diversification strategies
- WP3: Translating CSA practices into accessible formats for farmers and their frontline advisors
- WP4: Designing a cluster-and-spillover blueprint for HGSF programming - enabling transition pathways to nutrition- and climate-sensitive and profitable local food systems
- WP5: Partnerships, Governance for Gender, Equity and Social Inclusion

Research Coalition for School Health and Nutrition

The RCSHN is the research initiative of the SMC, established at the request of the 95+ member states to provide policymakers with access to independent, robust, compelling, and actionable evidence on school health and nutrition, thus enabling them to develop well-informed national programmes following the COVID-19 pandemic. With a small secretariat based at the London School of Hygiene & Tropical Medicine, the Consortium operates as a global network of networks, guided by a ten-year independent research and provide school health, to promote quality research and provide guidance on effective policy making on school health and nutrition programming.

The RCSHN will be responsible for executing cross-sectoral research under the following three research tracks:

- Research Track 1 (country-level): Estimating the return-on-investment of national school meals programmes and document best practice to inform policy decisions, working with in-country academics and practitioners.
- Research Track 2 (contributing to a sustainable food systems toolkit): Co-creating a mechanism to track the improvement of food systems through planet-friendly national school meals programmes.
- Research Track 3 (creating global goods): Identifying the most cost-efficient elements of school meals programmes and co-creating and sharing an information package with national-level policy makers.

Funding Pool for National Research

A funding pool for research will be facilitated and managed by RBN. Country teams will also have the opportunity to suggest and potentially carry out additional areas of research or specific studies that emerge during implementation.

Caption:. Lydia, a Women's farmer association leader, collects beans from her field in, Karamoja, Uganda. **Credits**: WFP/Arete/Siegfried Modola

2.10 What have we learned?
Lessons Learned in HGSF

Regional: Lessons Learned:

From a local and regional procurement (LRP) perspective and a recent evaluation, there is demonstrable evidence over time that **when local procurement approaches and tools (i.e. direct procurements by WFP) are integrated into programming, it can be an effective mechanism for addressing bottlenecks in value chains, enhancing food systems, and for improving livelihoods and resilience of smallholders.** Evaluation evidence is based on piloting these approaches in Uganda, Ethiopia, and Sudan, and in Uganda, link directly to evidence from Karamoja.

A key recommendation coming from the recent Local and Regional Food Procurement evaluation is **to approach LRP from a continuum perspective to help support smallholders to go from subsistence to sustainability. Evidence from this evaluation highlighted the effectiveness of WFP directly procuring from smallholders both in price transmission and as an incentive to improve productivity and quality grains.** Indirect procurement, where WFP procures through traders on the condition that they buy from local smallholders, was found to be a key opportunity to provide smallholders with wider more sustainable market opportunities, as well as an opportunity to influence wider adoption of the pro-smallholder procurement approach by traders.

Kenya: Lessons Learned

Kenya adopted a HGSF approach in 2009 as part of a gradual transition to national ownership for programme sustainability. From the onset of the transition, a model was adopted where schools received cash to purchase food locally. **A key lesson learned was that while there was adequate food from the localities, schools were not always able to demonstrate that they procured from SHFs.** To address this challenge, WFP and the Government agreed to work on a school meals aggregator model that ensures all food is procured from local smallholders. In areas where counties cannot produce enough safe and quality food to meet school demands, the Government will procure from aggregators located in neighboring counties. In phase 2, this new model will be piloted in Turkana, with additional food sourced from neighboring counties Baringo and West Pokot.

WFP Kenya has learned that a homegrown approach to school feeding is more cost-effective and provides a significant opportunity for smallholders, many of whom do not have access to predictable and stable markets. More recently, WFP is recognizing that **HGSF provides an opportunity to drive the demand of climate-smart and resilient food crops locally, in turn driving positive improvements in the food system in need to adapt to the changing climate.** This shift from carbon-demanding food imports to local procurement, strengthens the sustainability of the programme while reducing the carbon footprint.

Additionally, WFP Kenya has seen that **strong Government commitment is key for the sustainability of HGSF programmes.** President Ruto has declared a scale-up of the KNSFP to reach universal coverage by 2030, and the Government has formally requested WFP to support Kenya's new climate-friendly HGSF approach. Kenya is also exploring opportunities for carbon trading to transition to cleaner cooking methods in schools, where returns from the carbon market are to be reinvested into the KNSFP. **HGSF is key to decarbonize the programme and a main part of Kenya's climate-friendly roadmap, shifting away from carbon-heavy food imports.**

Rwanda: Lessons Learned

In Rwanda, WFP is not responsible for "feeding" the majority of school children and rather focuses on strengthening the Government of Rwanda's core programmes and capacities essential for food security. The Government's NSFP is universal and WFP's HGSF programme is only present in the most food insecure areas of the country, acting as a platform for testing innovations for subsequent adoption in the NSFP. WFP's programme is gradually being handed over to Government and WFP's role going forward, will focus on providing capacity strengthening and highly nutritious foods towards the NSFP. WFP has supported the Government to develop a national financing strategy with scenarios to ensure sustainable financing of the NSFP through various types of resources. WFP has learned that **development partner and donor support will still be required over the next 7-8 years of the NSFP's implementation, before the programme can be sustained entirely through national resources.**

The procurement model has proven to be a key entry point for the sustainability of the NSFP model. WFP Rwanda supported the NSFP's initial home-grown design when the programme was first launched in 2021, as well as its recent procurement model reform. WFP's capacity strengthening and technical assistance support to the Government is focused on procurement (with a focus on maize and beans value chains and now through NNF's partnership, increasingly on procurement from environmentally sustainable sources). Additionally, **WFP's SAMS programmes have granted WFP entry points for designing suitable contracting modalities and developing guidance together with relevant ministries, districts and local authorities.**

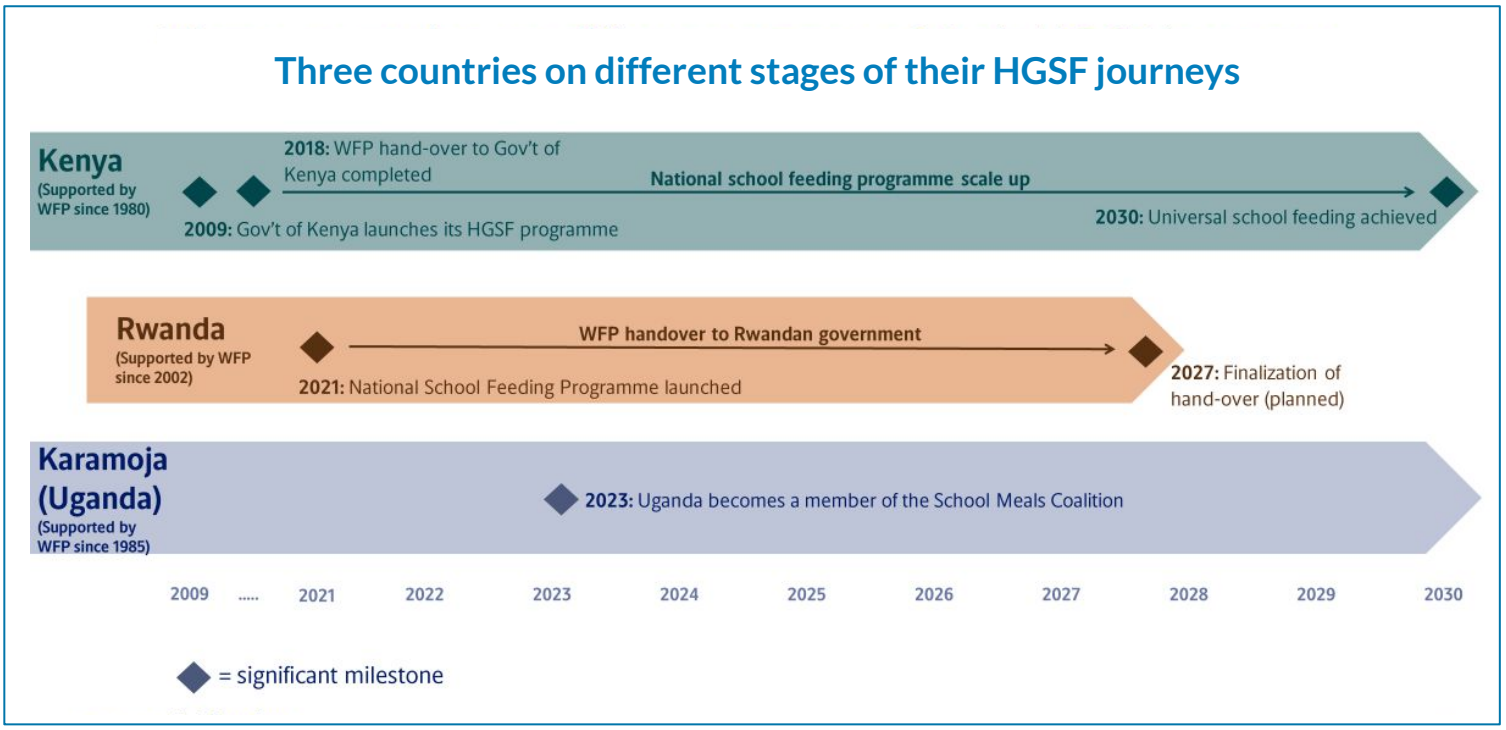
Uganda: Lessons Learned

In Uganda, **WFP's HGSF programme has already made significant strides in stimulating economic growth.** From 2022 to 2023, WFP registered a fivefold increase in the amount of food procured from smallholders in Karamoja, injecting USD 1.9 million into the local economy. In a region like Karamoja where limited food production is made worse by poor PHM and limited access to markets, this partnership provides a unique opportunity to support the Government of Uganda's priorities. **An integrated HGSF model fosters an enabling environment for climate-smart agribusiness, using schools as an entry point to provide a predictable market for farmers.**

Through the phase 1 partnership, **WFP was able to successfully introduce a new value chain - OFSP - which were adopted in both schools and communities.** Schools are now using OFSP in school meals and WFP continues to scale this initiative to new schools. This is an excellent example of how HGSF can drive the adoption of sustainable practices.

WFP trains farmers on improved production practices, collective bulking and PHM. WFP has successfully built the capacity of farmers to improve the quality and quantity of food produced. This has resulted in multiple benefits, enhancing smallholders' ability to sell to schools, WFP and private buyers while also increasing access to quality and safe food in local market. **WFP has learned that to better ensure the sustainability of food production quality and quantities, a market approach must be used to incentivize farmers.**

2.11 Transition to National Ownership



WFP designs its HGSF programmes with the long-term aim that governments will be able to take over ownership and management in the future. For transition to be successful, WFP supports governments to build the systems and capacity needed to implement. WFP contextualizes its approach in each country to ensure success.

Kenya: The government took over the KNSFP in 2018 and currently, WFP provides technical assistance to ensure smooth implementation. A handover to the government is however not a linear process, which is why WFP continues to work closely with the Government to support implementation of the KNSFP. During 2022/23, gaps occurred in the school meals programme due to a drought emergency. A lesson from this was that the flexibility WFP gave the government by stepping in to bridge this gap, had a very positive outcome. In the end, government was able to continue with the expansion of the programme and it strengthened the trust and partnership between the government and WFP.

WFP provides food only in cases of emergency (such as to respond to climate shocks, which are expected to occur regularly in the upcoming years as well) and to refugee schools. The partnership between WFP and the Government of Kenya is longstanding and strong. Continued expansion and implementation of school feeding in Kenya by the Government, requires partners like WFP to come alongside government and build capacity, innovate, re-design and improve programmes.

Rwanda: In 2021, the Government launched universal school feeding and in late 2023, WFP transitioned more than 100 schools directly supported by WFP under its HGSF programme to the NSFP which is now feeding over 4 million children across the country. WFP has a transition agreement in place with the Ministry of Education, outlining how WFP contributes to national capacity strengthening and hands over the schools it supports to the Government. The implementation of this agreement is on track, following the successful transition of the first wave of schools. Even after WFP transitions schools into the Government programme, WFP continues to provide capacity strengthening and technical support to the NSFP.

WFP was involved in the development of the new local procurement model, which is fully owned by the Government. It was only rolled out during the previous school year (2023/2024), and WFP is supporting the Government to gather data on and draft lessons learned of the first year of the model. These will then feed into any shifts or future changes the Government may make to the model.

*Uganda:*Transition to Government ownership will be a gradual process in Uganda, building on lessons from Kenya and Rwanda regionally, and globally through the Global SMC. Supportive policy and regulatory frameworks as well as pro-smallholder procurement facilities (planned under this partnership) will be needed. Moving forward, WFP's role in Uganda will be to use evidence and findings from the HGSF project, to advocate for a policy framework.

Currently, the Government's financial allocations to school meals remain limited and without stable and adequate government funding, a school meals programme cannot be sustained in the long-term. Financing school feeding will therefore be at the core of WFP's work on sustainability, ensuring the government recognizes and appreciates the return on investment (in health and human capital) that school feeding provides. Community ownership will also be essential. WFP is working with engaged parents and teachers, ready and willing to contribute time and resources, assist financially where necessary and take active roles in the management of the school meals activities.

3. Implementation approach

3.1 Project Partnerships

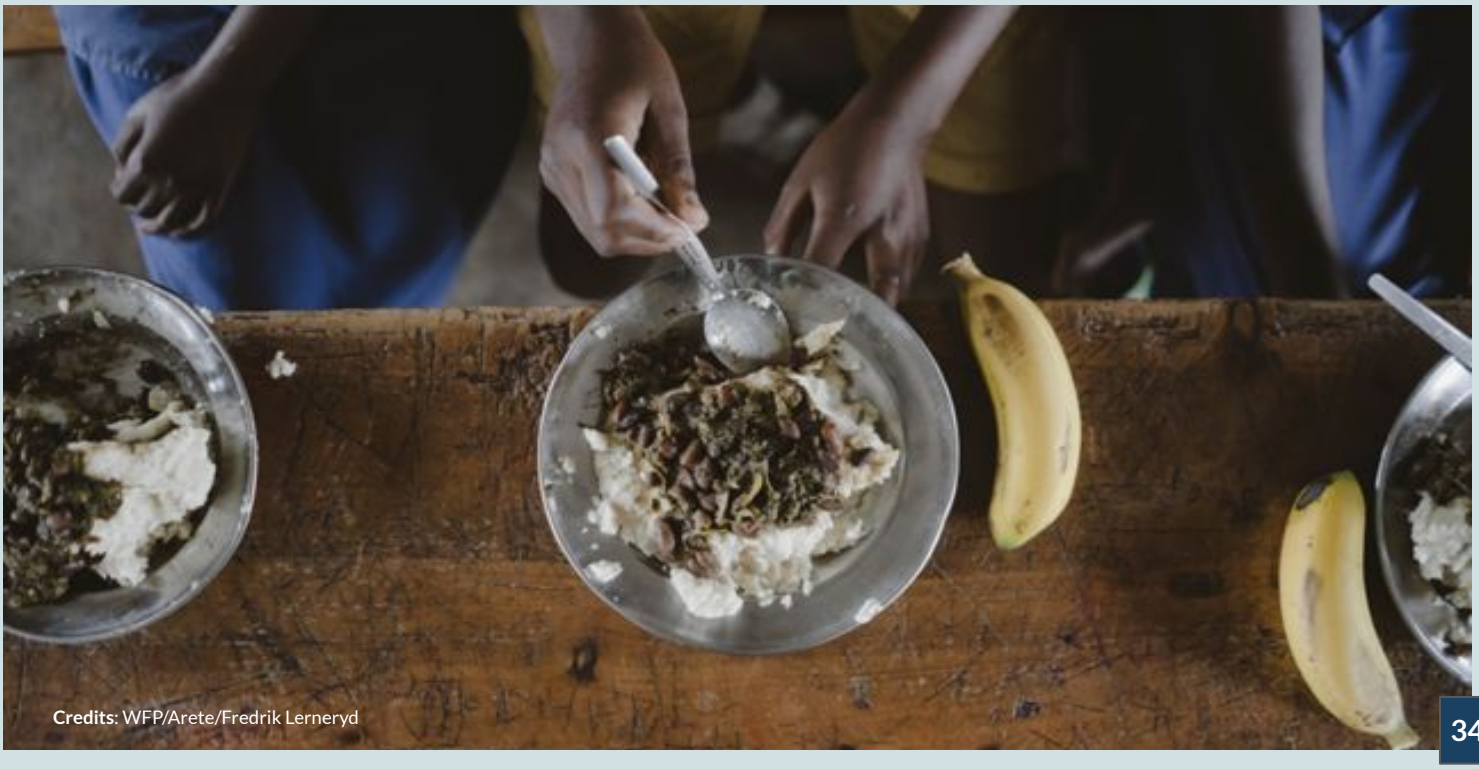
No one individual or organization can improve a food system, and so, partnerships are a critical component of any strategy toward food systems improvement

This project will be implemented with a wide variety of partners at global, regional and national levels (which include all the lead Government Ministries in each country for those involved but not limited to Ministries of Education, Agriculture, Health and Social Protection).

At the global level, WFP will partner with the RCSHN at the London School of Hygiene and Tropical Medicine. WFP increasingly takes on a convening role based on its thought leadership, research capacity and advocacy efforts. Partnerships are built through an ecosystem-based approach that clusters the value and roles of different stakeholders. The knowledge management approach will be set up by RBN to support global and country level action, and the lessons will be shared with other countries throughout the region and globally through the SMC and other platforms, to contribute to wider learning.

For the purpose of this programme, we will be seeking to build and leverage partnerships for the following:

- **Implementation**: WFP partners with civil society such as non-governmental organizations and communities to implement its programmes. WFP Cooperating Partners are an essential part of the implementation and achievement of WFP's Country Strategic Plans. In 2023, WFP partnered with 356 partners across East Africa, out of which 199 were national organizations across the nine countries in the region. WFP works to advance the localization agenda, through collaboration with national Non-Governmental Organizations and Governments to increase its footprint in hard-to-reach areas, strengthen capacities, and leverage local knowledge, skills, and solutions while fostering stronger coordination amongst various stakeholders for sustainability. Where and if needed, WFP will conduct a stakeholder mapping to identify new partners.
- **Private Sector Innovation Partnerships:** WFP will identify and grow technical partnerships with leading private sector partners linked to CSA, clean cooking solutions (local and international), food processing, FSQ, and supply chain industries to work together towards building resilience.
- **Research and Learning Needs**: WFP will partner with research institutions to conduct applied research. Partners will include the RCSHN, APHRC, and CIMMYT with potential for national-level partnerships with local research institutions in each country.
- **Co-investments for accelerated impact**: WFP will leverage our existing relationship with the Mastercard Foundation and the Rockefeller Foundation - at both the corporate, regional and country levels - to drive food systems improvement, youth employment and fortification initiatives.



Credits: WFP/Arete/Fredrik Lerneryd

3.2 Project management & governance

Programme coordination and strategic planning will be enriched by engagement with the NNF at both technical and senior-level levels

The proposed governance and coordination mechanisms outlined below represent an opportunity to work together with NNF and the RCSHN to achieve common goals and collaborate in areas where there may be complementary skills, networks and additional financial resources or expertise. These mechanisms are anchored in the opportunity for joint learning from the Programme successes and failures. This project complements larger programmes and broader initiatives in each of the 3 countries and WFP has based the governance and coordination structure on this fact. WFP's scale, scope and approach in each country is different and specific to the context and needs. The WFP, the RCSHN and NNF are working in many of the same countries and can work in a coordinated manager to support discussions with governments and enhance complementary initiatives. Considerations were also made for Government capacities, existing investments and active stakeholders within the relevant sectors in each country.

On the basis of these considerations, a governance structure has been created that supports the organic evolution of the partnership over the lifetime of the project, and supports dynamic engagement with all partners and countries.

The **Partnership Council (PC):** the joint consultative body for senior-level WFP, RCSHN, and NNF representation, tasked with the strategic orientation and Advisory Role of the Programme, which will periodically review Programme strategy based on existing evidence and forthcoming strategic opportunities. The PC shall meet once a year. Meetings will be virtual but upon request of one of the three members a meeting could be held in person. The Programme Coordination Team (PCT) and the NNF Scientific Manager will serve as the Secretariat to the PC.

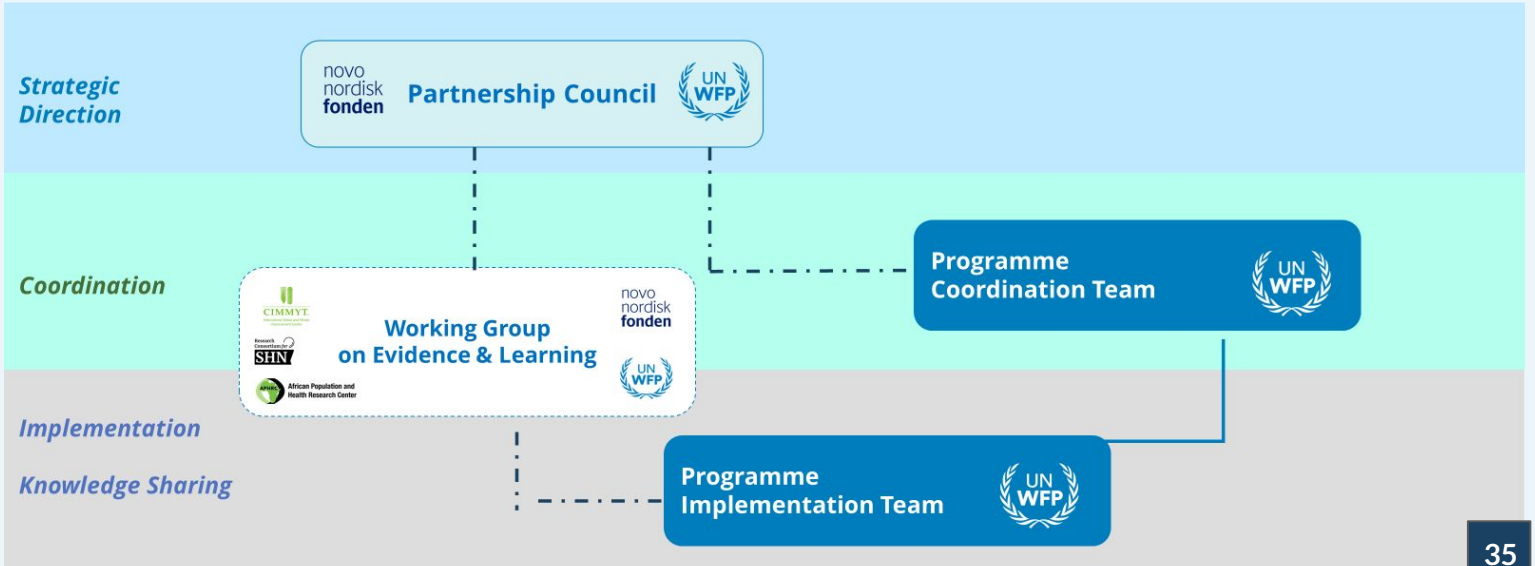
The **Programme Coordination Team (PCT):** constituted by WFP staff in RBN, provides overall oversight and coordination of country office operations and plays a critical role in the implementation of this programme. It is responsible for communications and coordination with NNF, global reporting, knowledge management, information sharing and technical support across the 3 countries. Working hand in hand with the Working Group on Evidence and Learning, the PCT will be responsible for coordinating the evidence and learning component of the project. The PCT will act as Secretariat of the PC and liase with country teams to ensure issues are addressed and support provided. In addition to regular quarterly meetings, the PCT will hold periodic check-in meetings with NNF and/or research partners when necessary, to exchange on the initiative progress and coordinate among all partners in an agile format.

The **Programme Implementation team (PIT):** jointly constituted by technical-level representation from WFP COs, RBN will ensure accountability, quality control, effective and efficient project implementation of the project. The PIT will meet on an annual basis but PCT will coordinate with each CO team to provide monthly updates in email form to the PIT membership. The PCT will work on agenda setting and the preparation of materials, and follow up on the action points discussed and agreed in those meetings.

The **Working Group on Evidence and Learning:** will be constituted by NNF, WFP (RBN and country teams), RCSHN, APHRC, and CIMMYT. The working group will meet quarterly and report directly to the PC. RBN's Evidence and Learning Officer for this project, will act as the secretariat to this working group. A synthesis of the achievements of the evidence and learning components will be key aspects of the annual presentations to the PC. The PCT will be responsible for organizing an initial coordination meeting alongside the grant kick-off meeting that brings together all partners, with regular touch points throughout the life of the grant. An annual meeting will be planned with the PIT and working group members to share knowledge through a 'show and tell' model and take stock of the partnership. These meetings could be hosted in a rotational manner, allowing Kenya, Rwanda, Uganda to each be a host at least once over the life of the partnership.

Governance & Coordination Components	Meeting Frequency
Partnership Council (PC)	Annual
Programme Coordination Team (PCT)	Quarterly
Programme Implementation Team (PIT)	Annual
Thematic Working Group on Evidence & Learning	Quarterly

Image 1: Governance and Coordination Mechanisms



Annex 1. Linkages to existing initiatives

WFP will work closely to leverage investments, footprint, learning of other initiatives in the region to amplify project impact. Initiatives that have been identified are listed below.

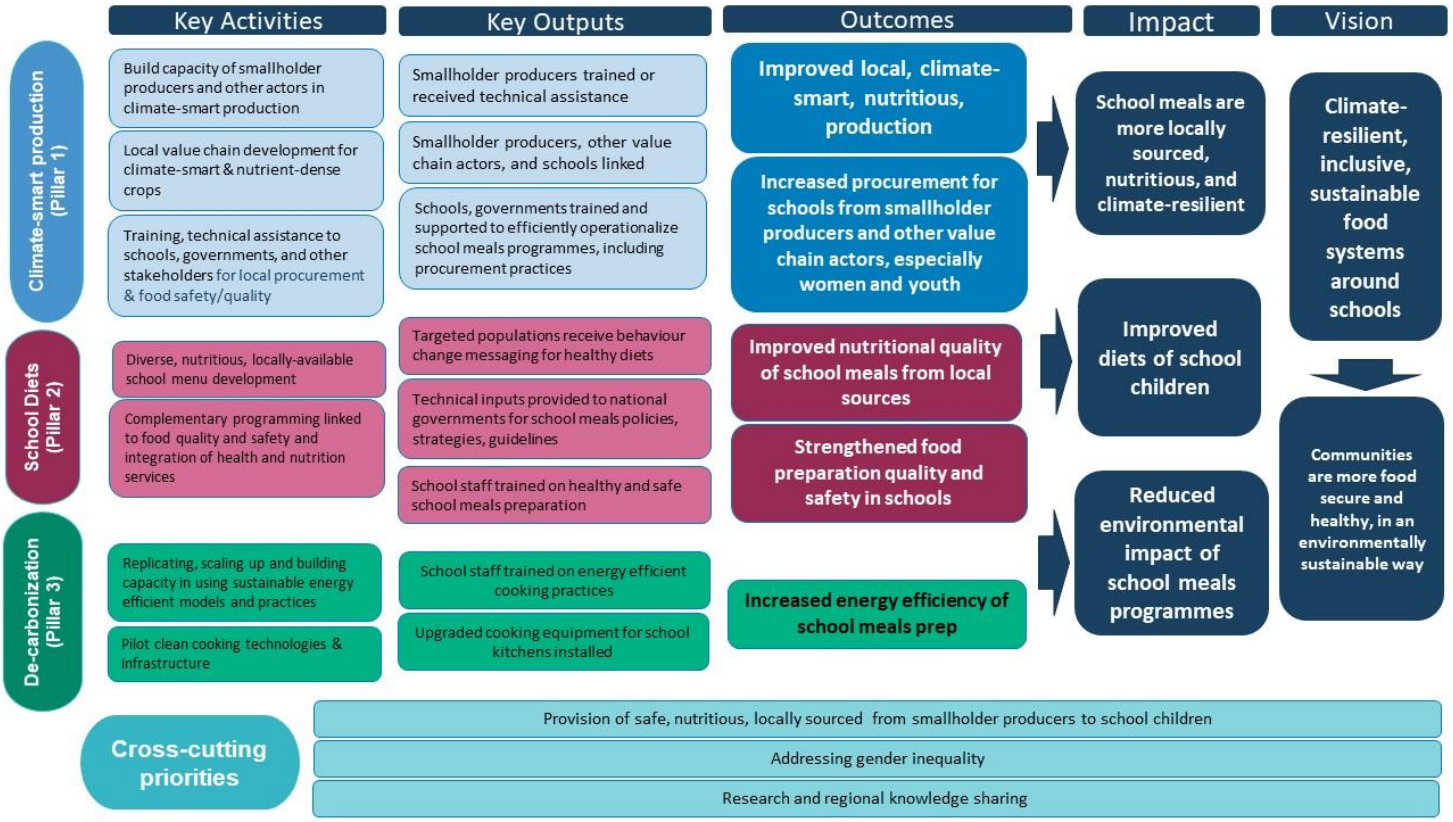
School Meal Coalition (SMC)	The SMC is a government led global coalition that aims for every child to have the opportunity to receive a healthy, nutritious daily meal in schools by 2030. With membership of over 95 countries - including Rwanda, Kenya, and Uganda - and 83 global partners- including NNF - the SMC acts as a convenor for a global hub focused on research and evidence generation hub for food systems linked to school health and nutrition. WFP serves as the secretariat for the Coalition. Rwanda was among the first countries to join the coalition and develop country commitments. Rwanda also hosted the launch of the Eastern African Regional SMC Network in 2023. Through this partnership, RBN will support the sharing and dissemination of learning and evidence from the three countries with the SMC global community. The initiatives of the SMC include: • ***Research Consortium for School Health and Nutrition*** *(RCSHN):* Through this partnership, WFP will partner with the RCSHN, which will be responsible for conducting the global research component focused on: 1) estimating the return-on-investment of national planet-friendly school meals programmes and document best practice; 2) co-creating a mechanism to track the improvement of food systems; identifying the most cost-efficient elements of planet-friendly school meals programmes and co-creating and sharing an information package with national-level policy makers. Evidence will be disseminated widely to support country decision making and improve the scale and quality of programmes. • ***Sustainable Financing Initiative for School Health and Nutrition:*** There is not any planned linkage at this time, between this project and the Sustainable Financing Initiative. • ***Monitoring and Data Initiative:*** Depending on the timing and progress made by the Monitoring and Data Initiative, WFP may be able to integrate the established core set of indicators into the project.
WFP's Local Regional Food Procurement (LRFP) Policy	WFP approved its LRFP Policy in November 2019, which aims to empower smallholder farmers and strengthen local food systems.Implementation of the policy has been piloted in 11 countries globally including Uganda. Through the implementation of the LRFPP policy, WFP Uganda is pursuing a two-pronged approach. First, direct food purchases from farmers' organizations aimed at supporting the HGSF programme; and indirect pro-smallholder farmer purchases where traders are mandated to provide traceability evidence for a portion of 20% purchased from smallholder farmers. Since the inception of the LRFPP in 2021, over USD 94.3 million has been infused into the local economy in Uganda, including USD 15.1 million for direct purchases from smallholder farmers. Although this pilot is being implemented in only one of the three countries to be supported by this partnership, learnings from Uganda's implementation will be captured and shared regionally.
Fortified Whole Grain Alliance (FWGA)	The FWGA is a coalition of stakeholders (nonprofit and private sector members) committed to increasing the global consumption of fortified whole grains, with founding partners including the Rockefeller Foundation, DSM, Boston Consulting Group and formerly, WFP. WFP is exploring membership to the FWGA as a consultative partner. The FWGA supports a number of initiatives currently underway in Kenya, Rwanda, Burundi, and Ghana, focused on shifting maize, rice, and wheat value chains to fortified whole grains. NNF is now a partner of the FWGA.
The Rockefeller Foundation	In 2021, the Rockefeller Foundation (RF) partnered with WFP in Rwanda and Burundi to develop healthy diets by exploring opportunities to improve nutrition through the meals and menus of institutional procurement channels, specifically school feeding. WFP and RF have both forged strong partnerships with the SMC and the FWGA. RF continues to support improved institutional procurement linked to school feeding. The learning and progress that have been made under the RF partnership will be leveraged through NNF partnership.
Mastercard Foundation	In 2022, WFP and the Mastercard Foundation (MCF) embarked on a 5-year partnership to strengthen food systems and promote increased job opportunities across agricultural value chains for young people in vulnerable communities, across 8 Sub-Saharan African countries, including Kenya, Uganda and Rwanda. The partnership aims to strengthen local agri-food systems, making them more efficient, sustainable, and inclusive for young people, in particular young women. Capacity of smallholder farmers are built through PHM practices and increased access to markets, with a focus on commercial opportunities that can create value for young men and women. WFP is exploring potential complementarity between WFP's partnership with MCF and NNF by linking youth employment opportunities to new school feeding delivery models and supporting communities to build climate-resilient food systems and to strengthen livelihoods.
Alliance for Future Refugee Response	An alliance of partners, including the Ministry of Foreign Affairs Kenya, the County Government of Turkana, the Danish Embassy in Nairobi and three major Danish philanthropic foundations, including NNF, joined efforts in supporting inclusive refugee responses and promoting more durable and longer-term development solutions in refugee hosting areas of Turkana and in Kenya. In the phase two NNF partnership, WFP Kenya activities will be reaching the same geographic area and beneficiaries as the Inclusive Refugee Response project, in Turkana, and will continue building on the initial investments that have been made by NNF, and other Danish foundations.

Anex 2. Anticipated risks & mitigation strategies

A comprehensive list of risks for each of the pillars has been identified by the WFP teams. In this section, we summarise the common and high probability risks with proposed mitigation plans.

Anticipated Risks	Mitigation Plan (to be added)
Pathway 1: *Transition local smallholder producers to climate-smart production*	
1. Severe climate shocks create significant risk for smallholder producers and other value chain actors 2. Inability of smallholder producers and other value chain actors to provide nutritious locally produced food year round 3. Some farmers may resist changing their traditional farming practices due to attachment to specific crops or farming methods 4. Smallholder producers and other value chain actors lack the financial resources to make investments in climate-smart infrastructure practices and inputs 5. Smallholder producers and other value chain actors may face market risks due to price volatility and inadequate demand for new products beyond schools 6. Government extension system is not immediately able to adapt and align messaging to support CA 7. Big farmers or other influential players not supportive of CA adoption	1. Provide early action and climate risk insurance for farmers to protect their livelihoods before climate shocks, including resources like animal fodder, veterinary services, and food reserves. Also, build climate infrastructure like low-level dams. 2. Explore alternative crops with comparative nutritional value to standard ones, such as indigenous, orphan, and underutilized crops like OFSP and amaranth. Consider factors like drought tolerance, cultural acceptance, and gender-sensitive value chains. 3. Implement proof of concept for Conservation Agriculture (CA), new value chains, and potential private sector markets. 4. Use SBCC to educate farmers and communities. Engage non-WFP farmers and cooperatives as unbiased advocates. 5. Identify local private sector solutions, prioritizing low-tech approaches for WFP's target beneficiaries. 6. Direct pro-smallholder procurements from WFP, act as a strong incentive to increase production, productivity, and grain quality. Additionally, WFP's SAMS programme creates opportunities for SHF participation in quality-oriented formal markets. 7. Support SHFs with training in financial and business literacy, establish Village Savings and Loan Association, and provide access to finance options like microfinance. 8. Strengthen the capacity of government actors 9. Focus WFP support on smallholder producers, avoiding big producers or influential players for CA assistance.
Pathway 2: *Improve quality of school diets and food preparation*	
1. Slow adoption of nutritious menus due to high food costs, and existing food preferences 2. The cost of direct food procurement from local farmers may be too high for schools 3. Lack of sustainability/sustained funding of Government funding & inputs	1. Promote the use of School Menu Planning tools for diverse food options in schools or districts, and conduct SBCC at schools 2. Support farmers in climate smart practices and post harvest handling to stabilize production and supply 3. WFP will work with governments to find sustainable financing options, including innovative financing methods.
Pathway 3: *Greening School Feeding*	
1. Schools may lack the capacity or resources to sustain the cost of operating and maintaining clean cooking infrastructure 2. Communities may not see the value in altering their food preparation method 3. Involving the local community, including parents, students can be challenging 4. The commitment of stakeholders and policymakers may fluctuate 5. Possible financial constraints for scale up (e.g., inadequacy of Government financing)	1. Feasibility studies can be used to evaluate the cost, sustainability, and practicality of identified infrastructure. 2. Increase community awareness through strategies like using schools as demonstrations to enhance adoption. 3. Utilize evidence, including case studies, to guide advocacy implementation. Feasibility studies will provide recommendations for scalability, feasibility, sustainability, and costing.

Annex 3: Impact Framework



The project Impact Framework will guide programme implementation and inform the monitoring and evaluation framework and overall programme learning. The framework also provides an overview of the targeted activities, social changes (outputs, outcomes, impacts) in the project, aligned with the proposal.

The following assumptions underpin the framework:

- There is an adequate market (including and beyond school markets) to effectively incentivize farmers to grow climate-smart produce effectively
- Farmers/farmer organizations are able to meet production requirements for schools in a timely manner and receive adequate prices for production for/by schools
- There is access to finance, where needed, that enables the adoption of climate-smart practices by farmers and clean cooking solutions in schools in the region
- Governments prioritize and are willing to invest in supporting climate-smart production and clean cooking solutions
- The government exhibits political will and action toward policies and programmes that promote local and nutritious meals in schools
- Key stakeholders (e.g., schools, farmers, and government bodies) are willing to engage with the project at adequate levels

The Staffing Table below provides an overview of the project staff who will be dedicated to this project.

Position/SO	Level of Effort (%)	Key Responsibilities
Programme Policy Officer – School Meals Programme (NOC)	50%	Overall coordination of school meals programme development in liaison with the Government of Kenya at the National and County Level.
Programme Policy Officer – Refugee Humanitarian Operations - (NOC)	5%	Coordination and management of the refugee school meals resource pipeline to ensure that school feeding is implemented on all days
Programme Policy Officer – School Meals Programme (NOB)	50%	Providing capacity building to government and other stakeholders on climate friendly home-grown school meal programmes
Programme Policy Officer – School Meals Programme (NOA)	100%	Providing capacity building to government and other stakeholders on climate-friendly home-grown school meal programmes
Programme Policy Officer (Market Access:) NOB SO2	70%	Lead in integrated market linkages and smallholder capacity strengthening on aggregation, PHLM and advocacy
Programme Policy Officer (Climate-smart Agri Advisor) SC10	50%	Provide capacity strengthening and guidance on integrated climate smart agriculture - production & productivity
Programme Policy Officer (SHP support - Lodwar) NOA	70%	Provide capacity strengthening to government and farmers on climate smart agriculture and linkage to schools
Programme Policy Officer (FSQ & Value Addition) NOA	50%	Provision of guidance and capacity strengthening on Food safety and Quality and milling & fortification of the county officers, farmers and school committees which involve collaboration with academia and National government
Programme Policy Officer (Coordination Field Technical Support) NOC	25%	Coordinate the provision of technical support for field implementation both to farmers, government, academia, research institutions and private sector
Programme Associate – Procurement, Nairobi (G6)	20%	Initiate smallholder food procurement processes
Supply Chain Officer, Kakuma (NOA)	10%	Receive food in WFP warehouses in Kakuma and deliver to schools
Programme Associate, Kakuma (G6)	10%	Coordinate delivery of food to schools and training for teachers
Programme Policy Officer – Gender, Nairobi (NOA)	20%	Supports the programme to design and implement gender transformative

Capacity & Staffing

WFP Kenya has a strong organizational capacity to effectively manage the proposed project, with 455 staff currently working in the country. The programme will be managed and coordinated from the WFP Country Office in Nairobi in close coordination with the Government of Kenya's key ministries as well as partners. Under the supervision of the Country Director of Kenya Country Office, this project will be implemented across the three Strategic Outcomes, specifically the County Capacity Strengthening Unit, Food Systems Transformation Unit and Refugee & Relief Unit.

This project complements larger programmes in Kenya and WFP has based the staffing and capacity needs with this in mind. WFP's scale, scope and approach in each country is different and specific to the context and needs. Considerations were also made for Government capacities and also existing investments and active stakeholders within the relevant sectors in Kenya.

WFP Kenya has a strong and long-standing partnership with the Kenyan Government and the KNSFP, as well as a solid partnership with county governments in the ASALs through climate resilience, food systems and capacity-strengthening programmes. WFP will provide further assistance to the Government of Kenya to support local SHFs to enhance production and adopt climate-smart agriculture practices, and facilitate market linkages between farmers and school feeding.

WFP supports the government to design climate-friendly school feeding menus, which can facilitate the local demand for drought resistant crops. In addition, WFP Kenya will work together with the government to introduce energy-saving cooking methods in schools, and promote decarbonization practices and solutions to be throughout the school feeding value chain from farm to table, including waste disposal, reduction of food losses, logistics, post-harvest loss management solutions and linkages to quality inputs and services, solarization of technologies, among others.

The Staffing Table below provides an overview of the project staff who will be dedicated to this project.

Position/SO	Level of Effort (%)	Key Responsibilities
Novo Nordisk Foundation Project manager NOB (National)	100%	This position will provide overall guidance, supervision, coordination, and implementation of NNF activities at the WFP Rwanda Country Office. They will liaise with the Regional Bureau in Nairobi, ensuring that project requirements are upheld, and the project is implemented to the highest standards.
Nutritionist SC9 (National)	50%	The nutritionist will coordinate operations around SBCC activities, engage with policy revisions and capacity strengthening activities working with key partners. This includes managing the partnership with the National Child Development Agency in charge of nutrition policy and standards in Rwanda to better integrate school health and nutrition.
Social protection NOB (National)	50%	Coordinates school feeding activities with Ministry of Local Government that oversees local government administration and social protection. The ministry also plays an increasing role in school procurement and local government systems and capacities for administering school feeding. The position will also advocate for stronger linkages between nutrition-sensitive social policies and frameworks and school feeding as a major gap in policy coherence.
Climate-smart agriculture NOA (National)	100%	This position will provide coordination of capacity strengthening of smallholder farmers especially around CA linking to the school markets, and policy dialogue of key sector partners. This position is in charge of coordination with government line ministries in the climate realm, particularly Ministry of Environment.
Procurement officer SC9 (National) – 100%	100%	This position will provide overall guidance, supervision, coordination, and implementation of activities around procurement, working closely together with government and key sector partners driving the demand-supply and quality standard markets. This position will work closely with government officials at national and district level and provide key capacity strengthening support on procurement under the new NSFP procurement modality.
School feeding manager LFT P3 (International)	30%	Oversees the WFP Rwanda school feeding team and operations. Management of school feeding project design and implementation, and of capacity strengthening activities with the Government of Rwanda. Coordination and oversight of work and budget planning and execution. Coordination with donors and key in-country partners and sector coordination mechanisms. Leading the learning agenda for school feeding as well as cross-sectoral work with other units.
Outcome manager FT P3 (International)	20%	Management and supervision of school feeding and social protection activities and budget. Mobilization of complementary funding, linkages with other WFP activities with a focus on social protection, management of human resources. Co-chair of the School Feeding Technical Working Group. Leads WFP's capacity strengthening and policy initiatives with the Government for school feeding and social protection.

Capacity & Staffing

In Rwanda, WFP has a strong organizational capacity to effectively manage the proposed project, with 130 staff in the country. The programme will be managed and coordinated from the WFP Country Office in Kigali in close coordination with the Government of Rwanda's key ministries as well as partners. Under the guidance of the Head of Programme, the Strategic Outcome Manager and the School Feeding Manager, the Project Manager will lead the project activities. Eight full-time WFP staff members will dedicate their time to the management of the NNF project activities.

WFP will work to establish and streamline systems for districts and schools to purchase food commodities from local smallholder farmers, by providing training in adopting climate-smart agriculture techniques to improve their yields and resilience to climate change. Together with key partners, the team will also implement educational programmes around social behaviour change that will bring awareness among not only students but to the community at large, as well as introduce energy-efficient cooking methods and training school cooks on energy-efficient food preparation practices that can be transferred to the household level. The team will also coordinate with government and key partners to facilitate research projects around school health and nutrition, to inform future projects on the community health status hence informing policies and development of strategies that will positively impact the Rwandan community.

This project complements larger programmes in Rwanda and WFP has based the staffing and capacity needs with this in mind. WFP's scale, scope and approach in each country is different and specific to the context and needs. Considerations were also made for Government capacities and also existing investments and active stakeholders within the relevant sectors in Rwanda.

Annex 4: WFP Project Staffing

The Staffing Table below provides an overview of the project staff who will be dedicated to this project.

Position/SO	Level of Effort (%)	Key Responsibilities
Head of Food Systems and Nutrition, (Kampala) - P4	22%	Programme direction setting and liaising with key senior stakeholders. Coordinate with High level Government counterparts and other partners.
Main Coordinator - NOB	100%	Overall management, project implementation (including the research component), coordination with Government counterparts and other partners.
Programme Associate, School Meals (Kampala) - G6	30%	Planning, supervision and coordination for NNF project including capacity development of government. Nutrition technical and quality assurance of nutrition component; ensures alignment with national policy.
Programme Policy Officer (School Meals Area Office)	75%	Oversees programme activities in Karamoja, community mobilisation & coordination
Programme Policy Officer (Gender)- NOB	30%	Provides technical support on programme design and implementation of menu development and nutrition related activities
Head of Programme (Karamoja) - NOB	30%	Support activity coordination, conduct monitoring visits and consolidate data from field to country office and build community member capacity.
Programme Policy Officer (Post Harvest Management) -NOB	10%	Support activity coordination related to support to cooperative supplying schools, conduct monitoring visits and consolidate data from field to country office
Programme Policy Officer (Asset Creation) - NOB	10%	Coordinate climate smart activities in Karamoja and facilitate collaboration with other development partners to ensure synergies
Programme Policy Officer (climate)- NOB	10%	Provides technical support to decarbonisation activities (under pillar III) in Karamoja and enables collaboration with other development partners
Monitoring Assistant - G5	20%	Implement monthly monitoring visits to schools, compile monitoring data and reports and build community member capacity.
Finance Assistant - G6	15%	Compile and review financial reports, ensure adequate grant management
Logistics officer - NOB	10%	Overall logistics management and timely delivery of commodities.
Procurement Officer - NOB	10%	Support procurement of food items and ensure local pro-smallholder farmers contracting modalities are promoted
Store Keeper - G3	20%	Oversee storage of food prior to distribution to the field and keeping records of all commodities.

Capacity & Staffing

In Uganda, WFP's extensive operational field presence - including in very remote locations like Karamoja - has resulted in a strong understanding of the political dynamics and practical realities on the ground. WFP prides itself on its frontline presence and actively builds solid partnerships by leveraging its role as a convener of a wide range of stakeholders, including government at national and sub-national levels, civil society, academia, the private sector, NGOs/INGOs, development partners and donors.

This operational presence and experience, coupled with significant institutional knowledge and experience, means that WFP is able to offer practical support and solutions linked to HGSF in Uganda. WFP acts as an enabler for technical assistance to government, with an overall long-term goal of transitioning school feeding implementation and ownership to the national government. Beyond the direct provision of meals, WFP provides technical support to ensure meals are nutritious, safe and locally-sourced.

WFP will seek to form new and/or strengthen existing strategic collaborations with community structures to ensure buy-in amongst the communities, as well as help to guarantee that the tools and approaches are indeed informed by the needs, preferences, and priorities of the local population. WFP will leverage its strong relationship with government to enable successful implementation of this project.

This project complements larger programmes in Rwanda and WFP has based the staffing and capacity needs with this in mind. WFP's scale, scope and approach in each country is different and specific to the context and needs. Considerations were also made for Government capacities and also existing investments and active stakeholders within the relevant sectors in Rwanda.

Annex 4: WFP Project Staffing

Bureau of Nairobi (East Africa)

The Staffing Table below provides an overview of the project staff who will be dedicated to this project.

Position/SO	Level of Effort (%)	Key Responsibilities
Research & Learning Officer	100%	Dedicated Research, Learning and Evaluations Officer who will oversee and drive the implementation of these components at the regional level.
Food Systems Specialist	40%	Support to country offices for project implementation, guidance and research management (specific to Impact Pathways #1 and #3)
Climate & Decarbonisation Specialist	30%	Support to country offices for project implementation, guidance and research management (specific to Impact Pathways #1 and #3)
School Feeding Specialist	10%	Support to country offices for project implementation, guidance and research management (specific to Impact Pathways #2 and #3)
School Feeding Specialist	45%	Support to country offices for project implementation, guidance and research management (specific to Impact Pathways #2 and #3)
Partnerships Foundations Manager	100%	This role will be responsible for leading and providing overall partnership management for the Novo Nordisk Partnership, including coordination across the three country office teams, regional bureau and with HQ teams. The Foundations Manager will also be responsible for partnership management of the complementary projects and investments from the Grundfos Foundation and Danish MFA. Finally, this individually will be responsible for building linkages and complementarity with other relevant investments in the region and globally (i.e. Rockefeller, FWGA, Mastercard Foundation, Big Bets, etc).
Partnerships Private Sector Officer	65%	This role will support the Foundations Manager to deliver the regional bureau's commitments under this partnership including reporting in Foundgood, producing communications products, collecting inputs and in overall support to coordination. A higher level of support will be needed in the first year of the project as systems are being put in place while the project is being launched.
Regional Gender Equality Expert	100% (18 mon.)	Regional support to enhancing gender equality, a key aspect of this partnership, will be provided by RBN. RBN will be responsible for implementing gender assessments in Kenya and Uganda, and also building on and enhancing the existing gender assessment in Rwanda. RBN will also provide guidance and support to each CO team, to deliver activities with a transformative approach, including contracting new gender-specific CPs in each country.

Capacity & Staffing

The WFP RBN oversees operations in ten developing, low- and middle-income countries in the Eastern Africa region: Burundi, Djibouti, Ethiopia, Eritrea, Kenya, Rwanda, Somalia, South Sudan, Sudan and Uganda. The Eastern Africa region is one of the most food-insecure regions in the world. Since 2016, the region has experienced high levels of food insecurity, driven by widespread conflict/ insecurity and related displacement, weather-related shocks and economic crisis. The region contains 23% of the global population facing crisis or worse food insecurity, with an estimated 35 million people across the region food insecure in 2024.

Furthermore, nearly 90% of the global population facing catastrophe famine like conditions are found in East Africa as well. The countries in which RBN operates have diverse institutional contexts with different governance structures that entail different levels and strategic orientation of WFP engagement. Three countries – South Sudan, Sudan and Somalia – have active conflict and/or persistent ethnic tension, as well as inadequate policies, institutional frameworks and capacities for Emergency Preparedness and Response (EPR). Burundi and Eritrea are characterized by an emerging strong central government, but weak institutional capacity to address EPR and food insecurity. Kenya, Uganda, Rwanda, Djibouti and Ethiopia have higher level GDP, generally peaceful country context and government that is able to play its EPR role.

Annex 5: Complementary Investments & Partnerships

WFP's complementary investments/partnerships in Rwanda include:

- *United States Department of Agriculture:* USD $10 million. 2024-2025. Home Grown School Feeding. The project has 6 activities focusing on food distribution, WaSH, nutrition education, literacy, capacity strengthening, and smallholder farmer support. WFP provides daily nutritious meals to 32 schools in 3 districts with 30,000 children and works to support the Government on policy and strategy development and implementation.
- *Rockefeller Foundation*: USD $375,000. 2024. Power of Procurement for Nutrition. Activities focusing on capacity strengthening, school feeding procurement, SBCC, nutritious foods, evidence generation. School feeding officials have been trained from national level down to school level; in 2024 the focus will be on finalizing the SBCC strategy and beginning SBCC activity implementation in 3 districts to promote good nutrition behaviours and healthy diets.
- *United States Agency for International Development*: USD $650,000. 2024. School Feeding Systems Development. Activities focusing on new procurement modality, capacity strengthening. Under this project, the intentional linkage of smallholder farmers to schools will be supported. National and district officials for school feeding will also receive training on procurement and food safety and quality. WFP will support the government to include procurement and stock management in the Government's School Data Management System, thus providing a clear overview of what commodities are needed and when, which will be beneficial to producers including farmers.
- *Mastercard Foundation*: USD $12 million. 2024-27. Strengthening Food Systems to Empower Smallholder Farmers and Young People. Activities focus on creating, improving, or sustaining smallholder farmer livelihoods with a focus on youth and women. Under NNF, these smallholder farmers will be supported to organize themselves and sell to schools and districts under the National School Feeding Programme, which provides a regular market for commodities such as beans, maize, and fresh produce.
- *Government of New Zealand*: USD $800,000. 2024-2025. Farm to Market Alliance project. Activities focusing on enabling sustainable food systems through strengthened markets to empower farmers to increase their yields, incomes, and resilience and to improve food security.
- *Bill and Melinda Gates Foundation*: USD $1.1 million. 2023-2028. Joint UN Programme "Accelerating Progress Towards Rural Women`s Economic Empowerment (JP RWEE)", implemented by WFP (Lead Agency), FAO, IFAD and UN Women. Activities focusing on holistic and integrated interventions to secure rural women`s livelihoods, rights and resilience and address the multiple challenges faced by rural women.
- *Humanitarian Innovation Programme Norway*: approx. USD $250,000. 2024-2025. The SheCan project is a blended finance initiative that address the systemic barriers that prevent smallholder farmers (especially women) from accessing the financing and resources they need to thrive.

WFP's complementary investments/partnerships in Kenya include:

- *Germany - Federal Ministry for Economic Cooperation and Development (BMZ):* USD 8,5 million. 2023. BMZ's collaboration with WFP in Kenya underscores a shared commitment to promoting sustainable development and combating food insecurity. BMZ's contributions support initiatives designed to fortify resilience among vulnerable populations, enhancing agricultural productivity and investing in infrastructure that underpins food security and nutrition programmes. Their support also extends to capacity-building projects that help communities adapt to environmental changes and implement efficient resource management practices.
- *Swedish International Development Cooperation Agency (SIDA)*: USD 260,000. 2022. SIDA's partnership with WFP in Kenya is centered on supporting projects that drive progress towards sustainable development goals, with a particular focus on fostering equitable and inclusive food systems. Swedish funding through SIDA aims to enhance climate-resilient agricultural practices, contribute to social protection programmes, and bolster local capacity to manage natural resources sustainably. Their support is crucial for programmes that empower women and youth within agricultural sectors and promote innovation and technology for food security.
- *Republic of Korea*: USD 14,25 million. 2024. The Republic of Korea has consistently contributed large amounts of rice to WFP in Kenya, providing support to refugees communities including children.
- *European Commission*: USD 1 million. 2023-2024. The EU has supported Kenya's home-grown school feeding programme.
- *Central Emergency Response Fund (CERF)*: USD 2,994,000. 2023. The CERF, under the United Nations, has facilitated timely and efficient humanitarian assistance to WFP Kenya, particularly critical during sudden and escalating emergencies. The fund likely supports WFP's quick response capacity in disaster-stricken regions.
- *Canada*: USD 2,4 million. 2023. Canada's funding for innovative resilience programmes that leverage technology and partnerships to enhance the response to climate change and bolster food systems, along with nutritional interventions targeting the most vulnerable populations.
- *Mastercard Foundation (MCF)*: USD 7,37 million (year 2022-2024). MCF's contribution focuses on bolstering the agricultural market support to enhance the livelihoods of smallholder farmers. This includes strengthening the entire value chain from PHM to facilitating market access, with a particular emphasis on fostering youth and women's economic empowerment.

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Annex 5: Complementary Investments & Partnerships

Continued from Kenya:

- *Rockefeller Foundation:* USD 180,000. 2024. A small grant to support Kenya's National School Meals scale-up strategy, particularly linkages between smallholder farmers and school markets in two pilot counties of Tharaka Nithi and Embu. RF is interested in promoting a value chain aggregator model.
- *China*: WFP received a USD 250,000 2022-2024 contribution contribution to support SSTC activities, especially production of orange-fleshed sweet potatoes in Tana River and Migori counties. The grant provides an opportunity to link OFSPs to schools.
- *France*: USD 1,6 million. 2024. France is supporting capacity building of the school meals programme, especially in the areas of formulation of policies and guidelines and implementation at national and county levels
- *Further Private Sector Contributions*: Small grants have been received from the private sector (Equinor, WPD Stripe & Paypal) to support capacity building of the school meals programme

WFP's complementary investments/partnerships in Uganda include:

- *Iceland:* USD $300,000. 2024. Climate and resilience/ School Feeding. Activities support the improvement of fuel-efficient cookstoves as well as refurbishing kitchen and food storage facilities. In addition, indigenous and climate resilient trees will be planted in and around schools as an environmental conservation effort. These activities are in line with the NNF project and will enable WFP to test out solutions to inform the Phase II and expand our school coverage.
- *EU INTPA*: USD $2.5 million. 2024-2025. Climate and resilience. Activities support communities in Karamoja to strengthen their capacity to reduce, anticipate and rapidly respond to the effects of climate shocks. This is done through dissemination of early warning information (e.g. before a drought or floods) and through asset creation (like water conservation structures) to better manage seasonal variability and reduce risk of shocks. Under NNF, these smallholder farmers will therefore be more resilient to shocks enhancing their capacities to supply schools (same activity focus as part of the Irish Aid investment outlined below)
- *Ireland - Ministry of Foreign Affairs / Irish Aid:*
    a. USD $1.2 million. 2023-2026. Climate and resilience. Activities support communities in Karamoja to strengthen their capacity to reduce, anticipate and rapidly respond to the effects of climate shocks. This is done through dissemination of early warning information (e.g. before a drought or floods) and through asset creation (like water conservation structures) to better manage seasonal variability and reduce risk of shocks. Under NNF, these smallholder farmers will therefore be more resilient to shocks enhancing their capacities to supply schools.
    b. USD $1 million. 2023-2025. School Feeding. Activities will support procurement of food for school feeding as well as activities aligned with NNF impact pathways (e.g. development of school gardens, decarbonisation, etc.).
    c. USD $250,000. 2024. Agriculture Market Support. Activities focuses on improving the livelihoods of smallholder farmers by strengthening capacity in PHM, business planning, record keeping, collective bulking and marketing skills. This also includes facilitating market access opportunities for Farmers Organisations (FOs),strengthen indigenous value chains and create employment opportunities for youth and women. These activities are in line with the NNF project and will enable to test out solutions to inform the Phase II as these same farmers will be supplying schools.
- *China International Development Cooperation Agency:* USD $2 million. 2024-2025. School Feeding. Activities will support procurement of food for school feeding. Under NNF, WFP will enhance local procurement of food through innovative models which will contribute to the impact of co-funded school feeding purchases.
- *Lions Club International Foundation*: USD $900,000. 2024. School Feeding. Activities will support procurement of food for school feeding as well as activities aligned with NNF impact pathways (e.g. development of school gardens, decarbonisation, etc.).
- *Japan*: USD $300,000. 2024. Nutrition. Activities will support for management and prevention of malnutrition and implement SBCC approaches for promotion of health and nutrition behaviours and practices at household level, to reduce and prevent undernutrition. Under NNF, these activities will contribute to inform the reshaping of our malnutrition prevention strategy
- *Mastercard Foundation*: USD $2.5 million. 2024-2026. Agriculture Market Support. Activities focuses on improving the livelihoods of smallholder farmers by strengthening capacity in PHM, business planning, record keeping, collective bulking and marketing skills. This also includes facilitating market access opportunities for Farmers Organisations (FOs),strengthen indigenous value chains and create employment opportunities for youth and women. These activities are in line with the NNF project and will enable to test out solutions to inform the Phase II as these same farmers will be supplying schools.
- *USAID Feed the Future*: USD $3.5 million. 2024. Agriculture Market Support. Activities focuses on improving the livelihoods of smallholder farmers by strengthening capacity in PHM, business planning, record keeping, collective bulking and marketing skills. This also includes facilitating market access opportunities for Farmers Organisations (FOs),strengthen indigenous value chains and create employment opportunities for youth and women. These activities are in line with the NNF project and will enable to test out solutions to inform the Phase II as these same farmers will be supplying schools.

Annex 6: Country Work Plans (Kenya)

Timeline for Improving Local Food Systems in East Africa (2024-2027)													
WFP Kenya		2025				2026				2027			
	Activities	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Core Programming	Support the government in adopting a new "aggregator model" for procurement of food from smallholders locally (national activity). Operationalization of new model and existing county procurement strategies, including facilitating linkages between smallholders and government-run schools.	x	x	x	x	x	x	x	x	x	x	x	x
	Support Gov. to revise and update School Feeding Strategy and HGSF Implementation Guidelines		x	x	x								
	Launch the adoption of Kenya's new scale-up strategy for school feeding	x											
	Advocate and support the Government to ensure sufficient budget allocations to ensure sustainability and scale-up of the programme.	x	x	x	x	x	x	x	x	x	x	x	x
	Construction and/or rehabilitation of WASH facilities (latrines and handwashing stations)				x	x	x	x					
	Training of school feeding stakeholders at school-level (school cooks and members of School Feeding Committees)		x				x				x		
	Support government to procure cereals (maize, etc) locally for gov. schools in Turkana (target 702 MT)	x	x	x	x	x	x	x	x	x	x	x	x
	Support gov. to procure pulses (beans, cowpeas) locally for gov. schools in Turkana (target 550 MT)			x	x	x	x	x	x	x	x	x	x
	Conduct campaigns to sensitize school learners and communities on new foods in school menus			x	x	x	x						
	Conduct cooking demonstrations			x			x	x					
	Train School Boards and cooks to implement climate-smart HGSF initiatives		x				x				x		
	Support to scale-up the KNSFP: equipping national institutions such as the Kenya Education Management Institute to become a sustainable source of trainings for school committees and cooks in the future, construction of kitchens, pro-smallholder strategy formulation, knowledge sharing/learning visits, food safety and quality testing equipment and training etc.				x		x				x		
	Dedicated technical assistance (staffing) to create enabling environment and systems (e.g., food safety and quality including minilabs, seed banks, SBCC) for climate-smart HGSF, promoting both climate adaptation through the adoption of climate-resistant crops through the design of school menus and uptake of climate-friendly agricultural techniques, as well as decarbonization measures such as fuel-efficient stoves and clean cooking, and studies/knowledge management (including M&E, return in investments, story-telling, communications) on the return of investment on HGSF in Kenya.	x	x	x	x	x	x	x	x	x	x	x	x
	Pro-smallholder local food procurement in Kakuma of 789 MT of cereals (maize, sorghum, millet) for schools for 22 schools in Kakuma Refugee Camp.	x											
	Pro-smallholder local food procurement for schools in Kakuma of 200 MT of pulses (beans, cowpeas) for 22 schools in Kakuma Refugee Camp.	x											
	Enable pro-smallholder local food procurement by schools: WFP will provide cash transfers (valued at USD 500,000) to 6 schools in Kalobeyei settlement, for schools to purchase food for school feeding from local markets, smallholders and traders.	x	x										

Annex 6: Country Work Plans (Kenya)

Timeline for Improving Local Food Systems in East Africa (2024-2027)													
WFP Kenya		2025				2026				2027			
	Activities	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Impact Pathway 1: Transition Local Smallholder Producers to Climate-Smart Production	Conduct mapping of promising value chains which promote the uptake of indigenous, nutrient-dense and climate-smart crops (eg. sorghum, cowpeas, iron-rich beans, drought-resistant maize), for inclusion in school feeding menus.	X	X				X	X			X	X	
	Promote the production of climate-smart and nutritious crops (i.e. sorghum, millet, OFSP, HIB, indigenous vegetables) across the 3 counties (Turkana, Baringo, West-Pokot) through advocacy for increased investment and the facilitation of linkages to quality inputs and services (including financial) in addition to private sector. Activities will include the organization of 12 advocacy and communication events and 18 business to business meetings across the 3 counties, with an aim to influence 5000 smallholder farmers to produce climate-smart and nutritious crops.	X	X	X	X	X	X	X	X	X	X	X	X
	Build capacity (through training and HGSF learning events) of 550 government officers (members of School Boards of Management and Education Officers) in Turkana County to support implementation of the aggregation model and the climate-smart HGSF programme.		X	X			X			X			
	Support Government and other stakeholders to operationalize Turkana County's pro-smallholder procurement strategy and respective guidelines, to enable local procurement of 30% of institutional food requirements in Turkana Country. The support includes technical assistance to Government to procure food for KNSFP locally. Activities will include training of 300 smallholder farmers and 45 schools in Turkana with an aim to support facilitation of 1500 metric tonnes of food procured by schools from smallholders.		X	X	X	X				X			
	Build capacity of 50 smallholder producer groups in Turkana, Baringo, and West Pokot. Capacity will be built through: 1) trainings (climate-smart production & sustainable PHM techniques), 2) the provision/linkage to certified quality inputs (i.e. establishment of seed banks) and services to 5,000 smallholders, and 3) the construction, rehabilitation and renovation of agriculture infrastructure (aggregation centres, cold storage, irrigation, and demonstration farms) - with an aim to enable smallholders, to sell food to schools and other markets.	X	X	X		X	X	X		X	X		
	Support implementation of food safety and quality (FSQ) guidelines along the major value chains and increase utilization of mini labs (for the rapid testing of mycotoxin and food quality as well as building the capacity of market actors) to ensure marketable surplus is safe and of high quality. Activities will include the establishment of 6 mini-labs.		X	X		X		X		X	X		
	Promote decarbonization practices and solutions with 3,000 smallholders at farm level through training (waste disposal, reduction of food losses, logistics, PHM solutions and linkages to quality inputs and services, solarization of technologies etc).	X	X	X	X	X	X	X	X	X	X		

Annex 6: Country Work Plans (Kenya)

Timeline for Improving Local Food Systems in East Africa (2024-2027)													
WFP Kenya		2025				2026				2027			
	Activities	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
Impact Pathway 2: Improve quality of school diets and food preparation	Development of 5 daily school menus that include meals which are locally-sourced, diverse, nutritious, cost-effective and inclusive of indigenous, nutrient-dense and climate-smart foods. Activities will include the organization of 3 consultation/ development workshops and 3 demonstration workshops to train schools.			X			X	X					
	Development of food preparation guideline for schools based on ongoing value chain and market assessments		X	X	X								
	Implement gender transformative SBCC activities on school health and nutrition – including the establishment of 1000 climate smart household kitchen gardens and the organization of 5 cooking demonstrations and 6 agrinutrition sensitization meetings – to promote the consumption of locally available, climate-friendly foods - in schools and communities.	X	X	X	X	X	X	X	X	X	X	X	X
Impact Pathway 3: Facilitate the decarbonisation of school feeding systems	Promote and support scale-up of energy efficient technologies (i.e. biogas) and cooking practices among 400 school managers, with an aim to decarbonize school feeding, in government-run schools		X	X	X	X	X	X	X	X	X	X	X
	Provide energy-efficient cook stoves to 50 schools in Kakuma and Kalobeyei settlements and train staff and cooks on the use, operation and maintenance of the equipment.		X	X	X	X	X	X	X	X	X	X	X
Cross-Cutting : Gender Equality	Invest in baseline gender and GBV education for everyone involved in WFP's home grown school feeding programme (partners, schools, teachers, parents, students)												
	Engage parents in targeted dialogue and learning sessions around gender roles and power dynamics in the home, also with a focus on men engagement												

Annex 6: Country Work Plans (Rwanda)

Timeline for Improving Local Food Systems in East Africa (2024-2027)														
WFP Rwanda		2025				2026				2027				
	Activities	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Comments**
Core Programming	Direct Food Procurement by WFP & Provision of Meals: procurement of approx. 949MT of fortified whole grain maizemeal and 528MT of beans (high iron or precooked where possible) to 30,000 pre-primary and primary students in 32 schools	X	X	X	X	X	X	X	X	X	X	X	X	The numbers for this activity take MGD phase 3 into account; 1 year of 30,000 pre-primary and primary students in 32 schools, 2 years of 60,000 pre-primary and primary students in 71 schools.
	Capacity strengthening to government and schools (WFP SF Programme): (complementing other funding) to support 7 districts and 32 WFP-supported schools to implement the NSFP procurement model and nutrition standards to facilitate the sourcing of safe, healthy and nutritious meals from smallholder producers.	X	X	X	X	X	X	X	X	X	X	X	X	The CS support would be to 7 districts and 32 schools in year 1. In years 2 and 3, that would increase to 9 districts and 71 schools.
	School Feeding policy level engagement: contribution (complementing other funding) toward WFP's engagement and initiatives targeting the policy space for school feeding in Rwanda. This will include the revision of guidelines and work on policy and strategy.	X	X	X	X	X								
	School Feeding Activities and operations: contribution (complementing other funding) toward operations-related travel, meetings and workshop costs.	X	X	X	X	X	X	X	X	X	X	X	X	
	Nutrition education, SBCC and kitchen gardening activities	X	X	X	X	X	X	X	X	X	X	X	X	
Impact Pathway 1: Transition Local Smallholder Producers to Climate-Smart Production	Strengthen systems around the procurement process (district level), to enable local procurement from smallholder producers and other actors by schools in the NSFP, with an emphasis on youth and women's economic empowerment. This will be enabled through the facilitation of procurement linkages between 50 smallholder producer groups and schools (including adequate production planning), in addition to sensitization sessions to be conducted with 100 smallholder producer groups on the new procurement model under the NSFP.	X	X	X	X	X	X	X	X	X	X	X	X	Note: This will include a pilot in one district focusing on facilitating smallholder farmer cooperatives to organize (aggregating supply) to sell one crop (beans) to the NSFP, bringing in women and youth (linkage to Mastercard Foundation Project)
	Build capacity of 170 government staff (including district procurement officers, tender committee members, budget managers, and agriculture and education officers) and 128 school feeding stakeholders (procurement and school feeding committees) in schools supported by WFP, to implement the new NSFP procurement model, including improved demand and supply-driven planning, food quality and safety standards, and local sourcing from smallholders	X	X	X	X	X	X	X	X	X	X	X	X	
	Build capacity (through trainings, coaching and knowledge exchange visits) of 18,000 smallholder producers and actors in 3 districts, on the uptake of climate-smart production (conservation agriculture), cognisant of gender dynamics, and generate evidence on costs and benefits	X	X	X	X	X	X	X	X	X	X	X	X	

Annex 6: Country Work Plans (Rwanda)

Timeline for Improving Local Food Systems in East Africa (2024-2027)													
WFP Rwanda		2025				2026				2027			
	Activities	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Comments**
Impact Pathway 2: Improve quality of school diets and food preparation	Revision of the Rwanda School Feeding Operational Guidelines and framework (in collaboration with government), including the refinement of standards and school menus to include meals that are locally-sourced, diverse, nutritious, cost effective and inclusive of indigenous, nutrient-dense and climate-smart foods. This will include the development of 5 new menus and the training of 476 school feeding practitioners at district and sector levels.	X	X	X	X									
	Collaborate with the Rwanda Standards Board and Rwanda Food and Drug Authority on food safety and food standards systems and capacities, with a focus on fortification for school feeding. Activity will include the development/adoption of one new or existing legislative instrument, standard or policy for fortified staple foods, through WFP capacity strengthening support, in addition to the sensitization of 100 stakeholders on food safety and food standards.	X	X	X	X	X	X	X	X	X	X	X	X	
	Implement gender transformative SBCC activities on school health and nutrition in 32 WFP-supported schools and surrounding communities, with an aim to reach 90,000 individuals. Activities will be identified following the completion of a strategy on good nutrition behaviours in schools, which is currently under development with WFP and Government.	X	X	X	X	X	X	X	X	X	X	X	X	Note: strategy development is under the existing WFP-Rockefeller Foundation partnership
	Together with UNICEF, leverage the school as a platform to deliver health and nutrition services for school-aged children that will include anthropometry assessments, education on healthy diets and physical education, hemoglobin monitoring, and trainings of school health and nutrition teachers and community health workers. This will be implemented in 21 schools, reaching 19,000 students through 6 interventions	X	X	X	X	X	X	X	X	X	X	X	X	
Impact Pathway 3: Facilitate the decarbonisation of school feeding systems	Promote and support Government (Ministries of Education, Infrastructure and Environment) to scale-up energy efficient technologies in the NSFP to decarbonize school feeding, with an aim to enable 11 WFP-supported schools to pilot energy efficient technologies.	X	X	X	X	X	X	X	X	X	X	X	X	
	Convene 60 stakeholders in joint evidence sharing, planning, and strategy development for institutional clean cooking in schools in Rwanda.	X	X	X	X	X	X	X	X					
	Build capacity (through creation of training materials and implementation of trainings) of 128 school-level stakeholders (including school cooks and storekeepers) in energy-efficient food preparation practices, in 32 WFP-supported schools	X	X	X	X	X	X	X	X					
Cross-cutting Gender Equality	Invest in baseline gender and GBV education for everyone involved in WFP's home grown school feeding programme (partners, schools, teachers, parents, students)	X	X	X	X	X	X	X	X	X	X	X	X	
	Engage parents in targeted dialogue and learning sessions around gender roles and power dynamics in the home, also with a focus on men engagement	X	X	X	X	X	X	X	X	X	X	X	X	

Annex 6: Country Work Plans (Uganda)

Annex: Timeline for Improving Local Food Systems in East Africa (2024-2027)													
WFP Uganda		2025				2026				2027			
	Activities	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
Core Programming	Food procurement of 1,300 mt of cereals/ annually (3,900 mt in total) and related transport and distribution costs for the commodities required for school feeding. Actual tonnage may change based on food prices during the project.	X	X	X	X	X	X	X	X	X	X	X	X
	Food procurement of 474 mt of pulses/ annually (1,422 mt in total) and related transport and distribution costs for the commodities required for school feeding. Actual tonnage may change based on food prices during the project.	X	X	X	X	X	X	X	X	X	X	X	X
	Food procurement of 250 mt of oil/ annually (750 mt in total) and related transport and distribution costs for the commodities required for school feeding. Actual tonnage may change based on food commodity prices during the project.	X	X	X	X	X	X	X	X	X	X	X	X
	Provision of Meals: Together with other donor funding, the NNF investment will enable WFP Uganda to reach 216,000 children in 315 schools with daily meals.	X	X	X	X	X	X	X	X	X	X	X	X
	Percentage of cereals (purchased using the NNF investment) procured locally from smallholders and farmer organizations in Karamoja for schools	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Percentage of legumes (purchased using the NNF investment) procured locally from smallholders and farmer organizations in Karamoja for schools	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Impact Pathway 1: Transition Local Smallholder Producers to Climate-Smart Production	Develop at least 2 indigenous/ climate-smart value chains (i.e (improved maize, sorghum, milk, HIB beans) for foods which are nutrient-dense, and climate-smart, for inclusion in school feeding menus. Selection of value chains will be informed by the research conducted by APHRC and CIMMYT.		X	X	X	X	X	X	X	X	X	X	X
	Strengthen systems to enable local procurement by WFP directly from 20 smallholder farmer cooperatives in Karamoja, with an aim to enable local sourcing of 70% of food requirements for school feeding for 315 schools.			X	X	X	X	X	X	X	X	X	X
	Build capacity (through trainings) of 20 smallholder producer groups, including 20,000 smallholder producers, in Karamoja to boost the uptake of climate-smart production and sustainable PHM techniques	X	X	X	X	X	X	X	X	X	X		

Annex 6: Country Work Plans (Uganda)

Annex: Timeline for Improving Local Food Systems in East Africa (2024-2027)													
WFP Uganda		2025				2026				2027			
	Activities	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
Impact Pathway 2: Improve quality of school diets and food preparation	Develop 2 new school menus that are locally sourced, diverse, nutritious, cost-effective and inclusive of indigenous, and climate-smart foods and disseminate to schools.			X	X	X							
	Scale up school gardens in Karamoja to all 315 WFP-supported schools and promote behaviour change towards healthy diets in coordination with government health and nutrition services by supporting 2 health (vaccination, etc.) and nutrition campaigns conducted annually in schools, in coordination with key partners	X	X	X	X	X	X	X	X	X	X	X	X
Impact Pathway 3: Facilitate the decarbonisation of school feeding systems	Build capacity (trainings) of 1,800 school feeding stakeholders (including cooks) in 150 WFP-supported schools in energy-efficient and safe food preparation practices.	X	X			X	X			X	X		
	Promote and provide innovative energy-efficient cooking infrastructure (stoves, kitchens and firewood storage) in 150 schools		X	X	X	X	X	X	X				
Cross-cutting Gender Equality	Conduct a mapping of gender actors in the Karamoja region	X											
	Convene a meeting with actors in Karamoja to initiate a campaign to promote girl child education		X										
	Conduct community awareness and media campaigns through drama groups, radio talk shows and spot messages on girl child education			X	X		X			X	X		
	Undertake gender and social norm change sensitization for SMP community leadership structures					X	X	X					
	Convene annual reflection and learning meetings with actors in Karamoja on girl child education								X				X
	Establish and FLA with a male engagement CSO for male engagement activities				X	X	X	X	X				
	Document human interest stories on SMP contribution to gender Equality in Education											X	X

Why a research component?

- Applied research to increase the efficiency and impact of WFP's HGSF operations in East Africa
  - Addressing research questions that WFP does not have the in-house capacity to address
- Contributing to the improved global, regional and national understanding of the potential of HGSF to improve food systems outcomes
- Foster transdisciplinary research (*i.e. research that integrates knowledge across academic disciplines and with non-academic stakeholders to address societal challenges*)

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Geographic level of data collection	Research partner
Global	• Research Consortium for School Health and Nutrition (RCSHN) • World Food Programme (WFP)
Regional	• RCSHN • WFP Regional Bureau for East Africa
National & sub-national	• RCSHN • African population and Health Research Centre (APHRC) • International Maize and Wheat Improvement Centre (CIMMYT) • WFP Country Offices (Kenya, Rwanda & Uganda)

Annex 7: Supplementary Research Overview

Improving Local Food Systems in Uganda Using Schools as Catalytic Platforms (Draft Concept Note)

African Population and Health Research Center

BACKGROUND

Children, particularly those in Sub-Saharan Africa, are disproportionately affected by food and nutrition insecurity and the impacts of climate shocks. With approximately 180 million school-aged children suffering from malnutrition and one billion at high risk of food insecurity, the consequences on their education and health are profound (1). Acknowledging that there are regional disparities, the State of Food Security and Nutrition report estimates that about a quarter (24.9%) of the total population in Uganda have severe food insecurity (2). Data on adolescents is scarce and not well categorized, however, the Global Nutrition Report gives sex disaggregated estimates for the prevalence of thinness (Boys 14%, Girls 8%), overweight (Boys 21.3%, Girls 19%) and obesity (Boys 9%, Girls 6.5%) in children and adolescents aged 5–19 years in Uganda (3). Malnutrition poses a significant challenge in Karamoja, an arid region in the north east of Uganda with prevalence of underweight, stunting, and wasting ranging from 36 to 58% across all ecological zones among children under 5 years, jeopardizing their cognitive and physical development (4). Malnutrition is mainly driven by factors such as poor infrastructure, social cohesion, poverty, and limited access to nutritious food. Gender inequality and the shift from pastoralism to agriculture, coupled with climatic challenges, further complicate efforts to combat malnutrition (5). A recent WFP study classified the nine districts in Karamoja region into low, moderate or high malnutrition zones (WFP Communication).

Homegrown School Feeding (HGSF) programmes represent a promising avenue in the global effort to address the triple burden of malnutrition and enhance food and nutrition security, by serving as crucial social safety nets that support education, health, and agriculture, particularly in low resource settings (6). Investing in school meal programmes, creates an opportunity to drive sustainable food systems and rural transformation and enhance climate resilience. Over the years, the World Food Programme (WFP) has played a pivotal role in supporting governments worldwide in establishing sustainable school meal programmes. Their technical and policy assistance has positively impacted the lives of 155 million school children across 74 countries and facilitated the transition to national ownership in 44 countries, including Kenya and Rwanda (1). The Government of Uganda acknowledges school feeding as an integral component of its National Vision 2040 and National Development Plan III (7). Uganda's school feeding programme architecture is composed of two models, a Government implemented model called the Parent-Led School Feeding model, and the WFP Home Grown School Feeding Programme (HGSFP) model.

Collaborating with the Government of Uganda, WFP is actively involved in implementing school feeding programmes in Karamoja. Presently, WFP supplies hot meals to 216,000 students across 315 schools in Karamoja, encompassing 78% of schools within the region (8). Through WFP's HGSFP approach, students receive locally sourced, diverse, and nutritious meals, simultaneously fostering a market for smallholder farmers. In addition to the regular food provisions, WFP has initiated the cultivation of orange-fleshed sweet potatoes (OFSP) across 80 schools in Karamoja to enhance dietary variety. These schools have set up demonstration gardens for OFSP, where students learn cultivation techniques and are encouraged to share cuttings with their families, promoting wider adoption of this nutritious crop (8). In 2023, educational outcomes in schools supported by WFP showed a notable increase in enrollment, rising by 24% compared to 2022 (20%), with girls' enrollment increasing by 27% and boys by 21%. Attendance rates were recorded at 72%, with equal attendance rates among girls and boys.(9) However, despite this significant impact on education outcome and school attendance, there has been limited focus on assessment of the nutritional status of children attending the WFP supported schools in comparison to those attending unsupported schools.

Further, there is limited understanding of the health implications associated with current dietary practices and school meals such as cardio-metabolic diseases (CMDs) (Obesity and hypertension) among school-going children and adolescents. The General Population Cohort Study in Uganda survey data shows an emerging burden of NCDs with relatively high prevalence of hypertension (22%) and central obesity in women (31.2%) in a young rural population (10). Another study on the epidemiology of hypertension in Uganda shows that the prevalence of hypertension is 26.4% with no significant difference in distribution per geographic location seeing as the eastern region also had a similar prevalence (11). There was however very low percentage of individuals who were aware of their hypertension which indicates high burden of undiagnosed blood pressure plus increased risk of hypertension-related cardiovascular diseases. According to a STEP survey on non-communicable disease risk factors conducted in Uganda in 2023, regardless of gender, the prevalence of overweight and obesity was 20.3% with a relatively high percentage (84%) of 1-2 cardiovascular risk factors (12).

The proposed research is tailored towards achieving a holistic understanding of the nutritional status of school-aged children and adolescents attending the WFP HGSFP supported schools compared to those attending unsupported schools. We will Investigate the health implications including CMD risks and further identify the barriers and enablers in the acceptance and consumption of locally available, nutritious foods in HGSFP. The goal of the research is to generate evidence to optimize the implementation of HGSFP as a strategy to alleviate the risk of malnutrition and CMDs among school-aged children and adolescents.

AIMS AND OBJECTIVES

Program Aim - To improve program design and implementation of the WFP HGSFP and to promote demand for healthy, locally sourced foods[1] across climate-smart and efficient value chains while promoting gender equality and inclusivity.

[1] Foods available from smallholder farmers in the school locality to catalyse local agriculture including adoption of climate smart foods.

BACKGROUND

Children, particularly those in Sub-Saharan Africa, are disproportionately affected by food and nutrition insecurity and the impacts of climate shocks. With approximately 180 million school-aged children suffering from malnutrition and one billion at high risk of food insecurity, the consequences on their education and health are profound (1). Acknowledging that there are regional disparities, the State of Food Security and Nutrition report estimates that about a quarter (24.9%) of the total population in Uganda have severe food insecurity (2). Data on adolescents is scarce and not well categorized, however, the Global Nutrition Report gives sex disaggregated e

OVERARCHING RESEARCH OBJECTIVE

To investigate the nutritional composition of school meals, nutritional status of school children in WFP-HGSFP supported schools compared to non-HGSFP supported schools, and to assess the barriers and facilitators in the acceptance and consumption of locally available, nutritious food crops.

Specific Objectives

1. To provide a comprehensive understanding of the current nutritional status of school children in HGSFP supported schools, and compare to the nutritional status of children of non-HGSFP supported schools in Karamoja (Work package (**WP) 1**).
2. To assess the nutritional composition (micronutrients, salt, sugar, and fat composition), diet quality and dietary diversity of school meals, home menu and foods available in the school environment and their association with the risk of CMDs **(WP 2)**
3. To identify and understand the existing norms, stigma, and social components that act as attitudinal or behavioral barriers or facilitators, (including gender dynamics) in the acceptance and consumption of locally available, nutritious food crops at both the household and school levels **(WP 3)**
4. To propose evidence-based recommendations for the design and implementation of sustainable interventions aimed at promoting the adoption of locally available, nutritious food crops in homegrown school feeding programmes in East Africa. **(WP 4)**

METHODS & APPROACHES

Research Design: We propose to conduct a comparative cross-sectional study using a mixed methods approach to collect data from schools and the community in Karamoja comparing outcomes in HGSFP supported schools and non HGSFP in Karamoja. We will conduct formative research involving qualitative methods to understand the barriers and facilitating factors in the acceptance and consumption of locally available, nutritious food crops at the community and school level. We will then collect data on nutritional status of children, CMD risk using BMI and BP, nutritional composition, diet quality and dietary diversity of school meals from both HGSFP and non HGSFP schools. The methods are detailed in the proposed 4 WPs.

Sampling

Stage 1: Karamoja region will be stratified into 3 zones based on nutritional status – low, moderate and high malnutrition zones. We will randomly select one district from each zone. A sample size of 1311 is calculated per group for the HGSFP supported schools and non-HGSFP supported schools in Karamoja region. It accounts for the prevalence of thinness, overweight and obesity in children and adolescents aged 5–19 years in Uganda and the burden of NCDs (hypertension and obesity) using alpha of 5%, a power of 80 % (1-β) and a non-response rate of 5%. (Appendix 1). We make the assumption that we will interview 50 school children in each school which translates to 27 school (1311/50 = 26.2)

Stage 2: We randomly select 50 school children from the 27 randomly selected schools and ensure that the following selection criteria are met:

- Programme participation - school children should have participated in the HGSFP for at least one year,
- Age - school children ≥12 years,
- School level - primary, secondary and tertiary school,
- Sex - both boys and girls.

The proposed research will be implemented in 4 WPs as presented below:

-**WP1: Comprehensive understanding of the current nutrition status of school children:** Anthropometric measurement will be made using scales and measuring boards. The anthropometric data will be converted into z-scores and used to assess thinness, overweight, and obesity of school children in the HGSFP supported schools and non HGSFP supported schools in Karamoja.

-**WP2**: **Nutritional composition, diet quality and dietary diversity of school meals, home menu and foods available in the school environment and their association with the risk of Cardiometabolic diseases (CMDs).** This WP will be implemented by collecting dietary data through a 24hr recall of the foods consumed at home, observing the school menu (food type and amount per student) and other foods available within the school environment. Dietary diversity will be measured as the variety and number of food groups available in the school menu and the home menu based on their unique contribution to nutrient adequacy. We will measure diet quality using the Global Diet Quality Score (GDQS)-meal tool, including healthiness (nutritional adequacy) and unhealthiness

risk of hypertension as an indicative measure, we will measure BP using appropriate paediatric cuffs and compare mean values between HGSFP and non HGSFP children. The choice of BP is because non-laboratory-based methods are preferred in the identification of individuals at high risk of CMDs in resource limited settings (14). Contextual components of school nutrition that may influence programme implementation and uptake such as food availability, food preparation and cooking methods, food service, procurement, prices, promotion, safety, WASH, school gardening, nutrition education, nutrition and health services will also be assessed (Appendix 2). Statistical analysis will be used to assess the association between dietary practices and the risk of CMD in both HGSFP and non HGSFP schools.

WP3: Attitudinal or behavioral barriers or facilitators in the acceptance and consumption of locally available, nutritious food crops at both the household and school levels

In this WP, formative research will be undertaken to assess acceptability of locally sourced climate smart foods and how each sector can be leveraged for consumption of locally available climate smart nutritious crops and improved nutrition and health outcomes. Data will be collected from the community near the schools selected for the study. Qualitative methods will include key informant interviews, in-depth interviews and focus group discussions. FGDs will be conducted with caregivers of the school children in the HGSFP. KII will be conducted with school teachers, community leaders and community resource people. The formative research will seek to understand the barriers and facilitators in all sectors as follows:

- *Social protection* – barriers and facilitators in the uptake of the social protection instruments targeting improving diets of the vulnerable and increasing household incomes.
- *Education* – understanding the contribution of HGSFP to school enrollment of girls and boys and how the HGSFP can be used to address gender inequality barriers.
- *Agriculture* – understanding the linkages between HGSFP and the existing or improved agricultural and food systems, the infrastructure needs that exist to withstand climate impacts, how can the water system be managed to improve productivity and to reduce the impacts of climate change, and how HGSFP can be leveraged to advance the local economy (small and micro-entrepreneurship).
- *Health & Nutrition* -understanding barriers and facilitators to consumption of locally available, nutritious food, other foods available within the school environment, and how the programme can understand barriers in ensuring dietary diversity.
- *Gender* dynamics will cut across all four sectors - the formative research will seek to create a gender sensitive profile of the beneficiaries and identify gender sensitive indicators and domains that are related to programme access and outcomes e.g. programme uptake, decision making, resource access and control and gender roles, norms and relations.
- We will also seek to understand the community perspective on the risk and burden of CMDs.

WP 4: Recommendations for the design and implementation of sustainable interventions: Recommendations derived from the study results will inform how WFP, the Government of Uganda, and other actors, approach nutrition education and Social and Behavior Change Communication (SBCC) programming at schools and its environs. Recommendations should be programmatically relevant and fit for advocacy purposes for greater adoption of safer and healthier diets. Recommendations based WPs may include:

- WP1 – Understanding the nutritional status of school children may lead to action on primary prevention of child malnutrition including undernutrition and obesity through improved dietary practices, with the school environment as one of the platforms and avenues for promoting and providing healthy diets.
- WP2 - Nutritional composition, diet quality and dietary diversity studies may lead to action on reduction of saturated fats, trans fats, salt, and refined sugars in the foods available in the school menu, home menu and within the school environment; and incentives for production, distribution, and marketing of locally available climate-smart nutritious food crops.
- WP3: Understanding the barriers and facilitators in the acceptance and consumption of locally available, nutritious food crops may lead to recommendations that mitigate the identified barriers in the design of an improved HGSFP and promote demand for healthy, locally sourced foods across climate-smart and efficient value chains.
- Recommendation on gender equality and empowerment will be incorporated in the design of an improved HGSFP to ensure gender inclusivity.

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Supporting Food Systems Transformation through Home-Grown School Feeding in East Africa 2024-2028

(Concept Note)

CIMMYT

Executive Summary

We propose an end-to-end agri-food supply chain approach to WFP-run HGSF programmes in Kenya, Rwanda, and Uganda to support **a)** the revival of hitherto underutilized but locally adapted, nutritious indigenous crops, **b)** promote the production of these crops within diversified cropping portfolios using climate-smart farming practices, and **c)** catalyze the growth and development of nutrition-sensitive, climate-resilient, and lucrative local food systems (and their component value chains). Supported by **CIMMYT's strategic research, with tactical and operational implementation devolving to WFP and partners,** the research will identify how to leverage local food systems, to achieve broader aims beyond HGSF programmes. The **development opportunity** in integrating these components is to achieve short- and medium-term goals of nutritional and educational improvements among the school-age and school-going populations but also to drive long-term societal benefits as well

Rationale

This proposal presents a **unified strategy** (from agronomic practices to nutrition, and value chains development) This unified approach is critical because transforming food systems, although complex, is the only way to achieve lasting impact (Table 1). The focus is to mobilize extant **science-based evidence (supplemented with local field level refinements)** to support the proposed HGSF programming, nutrition, and CSA goals. The key geolocations (Fig. 1) will be in Rwanda (National, districts with active HGSF programming), Uganda (Karamoja sub-region), and Kenya (Baringo, Trans Nzoia, Turkana and West Pokot counties). Leveraging **market-driven linkages between schools and local agribusinesses,** we propose to provide actionable blueprints to stimulate the production of nutrient-rich crops, ensuring a consistent, year-round supply.

Fig. 1: Proposed Research Geolocations in Kenya, Rwanda and Uganda

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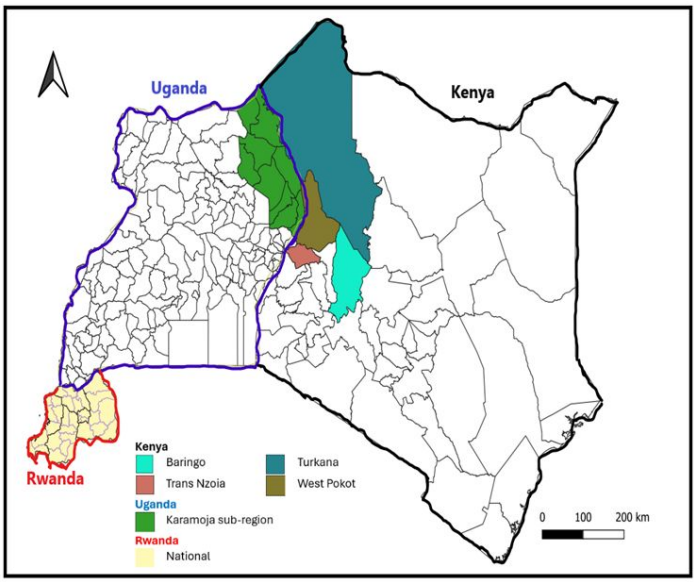

Country Priorities

Even though we take a whole systems framework as a research methodology and operational approach, the need for prioritization is important for the feasibility of any proposals. The whole systems approach also allows for workflow clarity. It facilitates partnerships and division of labor as each actor can clearly see where they will contribute in the system. The following priorities from WFP RBN/NNF briefing note have been identified:

Outcome 1: Strengthened and diversified production and consumption of nutritious and resilient crops (Uganda and Rwanda). **Focus**: Identifying suitable indigenous or underutilized nutritious commodities that could feed into school menus and understanding the opportunities/constraints for promoting these commodities

Outcome 2: Improved adoption of climate-smart agricultural practices among local farmers linked to HGSF programmes (Uganda, Rwanda, Kenya). **Focus for Uganda, Rwanda, Kenya:** Identifying optimal, contextually appropriate climate-smart (conservation agriculture) approaches, understanding, and quantifying the real or potential added-value and cost-benefit analysis of conservation agriculture vis-à-vis conventional farming practices, especially to home-grown school feeding programmes and reducing the environmental and carbon impact of the associated value chain. A priority is to strongly consider gender dynamics and implications related to adoption and imp of climate-smart/conservation agriculture approaches.

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- **Focus for Kenya only:** Understand and identify optimum climate information and decision-support systems for farmers, [beyond in-person community networks]

Table 1: Country priorities and sample responses *(yellow bullet denotes where CIMMYT will lead and prioritise, orange means CIMMYT will participate but not necessarily lead).*

Outcome	Country	Priorities	Work Package Responses *(with verbatim excerpts lifted from WP narratives)*
Outcome 1: Strengthened and Diversified Production and Consumption of Nutritious and Resilient Crops	**Uganda**	Identification of indigenous underutilized nutritious foods with production potential in Karamoja that could be integrated into menus for school feeding	**WP2 i)**: ... Based on field surveys (of currently grown crop species), literature reviews of past reports and studies, and examination of crop and seed catalogues, a comprehensive list of indigenous cereals, vegetables, roots, and tubers, as well as pulses, will be made available....
		Connection with APHRC research on behavioural barriers and facilitators for consumer consumption of such foods	**WP4 ii)**: ... In collaboration with APRHC, this part of WP4 will study why certain foods are favored locally (or not) and how these preferences can lead to competitive advantages for local producers and identify strategies for organizing local markets to enable farmers to benefit the latent demand …
		Development of utilization and promotion strategies to promote the identified foods in agro-pastoral communities	**WP4 ii)** ... Strategies will include creating strong local consumer recognition of new indigenous food crops. This approach will contribute to building a robust local food system that creates business opportunities and local jobs due to increased production and strategic market positioning ...
	Rwanda	Identification of indigenous underutilized nutritious foods with production potential in Rwanda that could be integrated into menus for school feeding	**WP2 i):** ... Based on field surveys (of currently grown varieties), literature reviews of past reports and studies, and examination of crop and seed catalogues, a comprehensive list of indigenous cereals, vegetables, roots, and tubers, as well as pulses, will be made available....
		Connection with existing evidence and research on behavioural barriers and facilitators for consumer consumption of such foods.	**WP4 iii)** ... Strategies will include creating strong local consumer recognition of new indigenous food crops. This approach will contribute to building a robust local food system that creates business opportunities and local jobs due to increased production and strategic market positioning …

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Outcome	Country	Priorities	Work Package Responses *(with verbatim excerpts lifted from WP narratives)*
Outcome 2: Improved Adoption of Climate-Smart Agricultural Practices	**Uganda**	·Assess the knowledge of local farmers and communities to adapt and mitigate the impacts of climate change.	**WP1 i):** ... KASH (Knowledge, Attitudes, Skills, and Habits) assessment methods will be implemented to capture the full range of CSA knowledge and practice and estimate actionable awareness-implementation gaps ...
		·Focus on select and specific climate-smart practices relevant to Karamoja and the targeted commodities relevant to school meals.	**WP1 iv)** ... With a focus on CSA and farm budget analysis, provide a comprehensive assessment of predominant crops, their yields, farm returns, impacts on soil health and other biophysical constraints to productivity (drought, pests, diseases). Adoption rates of CSA and other improved practices will be in this activity set.
	Rwanda	·**Research on optimal intercropping systems** specific to Rwanda's bi-seasonal farming context (i.e. GMCCs or other main crops)	**WP2 ii)** ... From a farm management and economics perspective, diversification should enable the farmer to achieve economies of scope. Using economic and biophysical impact reviews and on-farm assessments of both spatial (intercropping on the same plot or juxtaposition of multiple pure stand plots) and temporal (rotational) crop patterns …
		·Operational research on greening the school feeding value chain to better link conservation agriculture production to the national school feeding market.	We have not proposed specific activities. We understand energy experts will be participate
		Effects of conservation agriculture on **soil fertil**ity within Rwanda's farming system and its **costs and benefit analysis**.	**WP3 i)** ... Combined with on-farm assessments, we will consolidate the most promising CA and CSA practices (including water harvesting and soil loss mitigation practices) into recommendation domains and packages.
		Research on mulch alternatives and intercropping systems specific to Rwanda's bi-seasonal farming context	**WP3 i)** Combined with on-farm assessments... strategies like green manure cover crops (GMCCs) will be recommended if economic analyses confirm they offer additional benefits like food, income, or otherwise come with minimal input costs. … crop residue mulch options … are practical when there's no competition from livestock feed, non-palatable options are affordably accessible, and they don't complicate other farm operations....
	Kenya	Identification of optimal soil management practices for target counties in Kenya to improve soil fertility and mitigate greenhouse gas emissions.	**WP1 iv)** ... With a focus on CSA and farm budget analysis, provide a comprehensive assessment of predominant crops, their yields, farm returns, impacts on soil health and other biophysical constraints to productivity. Adoption rates of CSA and other improved practices will be in this activity set …
		Research on context-relevant Climate Information and Decision Support Systems.	**WP3 iii)** ... we will propose an integrated digital ecosystem comprising of tools for recommending CSA and agronomic practices, weather information, Farm Enterprise Resource Planning (ERP) software. WFP and partners can use these to assist farmers in developing cost-efficient intercropping patterns ...
		Research to support the identification of priority focus **areas for WFP's climate-smart agriculture approach**	**WP4 i -iv) ...** We propose to create a blueprint for scalable models of whole systems approaches to food system transformation.
		Identify the return on investment and benefits of climate smart HGSF in Kenya to inform advocacy efforts.	**WP4 iv) ...** To identify the return on investment and benefits of climate-smart HGSF (ask from Kenya) to inform advocacy efforts, we propose a social impact analysis of the CSA-driven approaches to as a strategic guide to justify (or not) current future programming.

High-Level Objectives

From the above focal outcomes we propose three high level objectives:

1. **Characterize local food systems** to identify constraints and opportunities, informing effective interventions that integrate indigenous crops (cereals, vegetables, roots, and tubers) into HGSF programmes and promote climate-smart agricultural practices.
2. **Develop and promote diversified and climate-resilient cropping systems** among local farmers, focusing on mainstreaming indigenous crops to diversify school and local diets and enhance nutritional outcomes.
3. **Outline transition pathways** towards improved nutrition in schools and communities, enhancing the resilience of food systems and nutritional outcomes.

To achieve these objectives the research will be grouped into five work packages or specific activity areas:

WP1: Local Food System Characterization

To frame, anchor and streamline the research, we propose an initial "guiding work package" in the first few months, employing both existing and newly collected data to deeply understand local food systems. This phase will study crop patterns, yields, economic and biophysical challenges—such as drought, pests, labor, and input costs—and market issues, integrating insights from CIMMYT's extensive datasets on climate-smart agriculture and technology adoption in the ESA region. Through participatory rural appraisals and supply chain analysis, we will collect a set of wide-ranging data on crops, market dynamics, and stakeholder perspectives. The outcomes will be pivotal in shaping the direction of subsequent research, informing **the design principles and operational models** for impactful locally anchored food systems.

The following activities are proposed:

i) Employ **inclusive participatory methods** (Participatory Rural Appraisals - PRAs) to engage communities and supply chain analyses to uncover constraints and opportunities. It will involve gathering data on predominant crops, yields, and economic drivers of crop choices, predominant CSA practices (against recommendations) using well established household and value chain surveys and field data collection.

ii) We will engage the broadest possible spectrum of stakeholders such as farmers, community leaders, and officials—this will be critical for gathering insights and for buy-in (when local communities feel consulted, listened to, and feedback is provided). KASH assessment (Knowledge, Attitudes, Skills, and Habits) methods will be implemented to capture the full range of CSA knowledge and practice and estimate awareness-implementation gaps.

iii) We will engage the broadest possible spectrum of stakeholders such as farmers, community leaders, and officials—this will be critical for gathering insights and for buy-in (when local) communities feel consulted, listened to, and feedback is provided). KASH assessment (Knowledge, Attitudes, Skills, and Habits) methods will be implemented to capture the full range of CSA (Climate-Smart Agriculture) knowledge and practice and estimate awareness-implementation gaps

iv) At this stage, a gender analysis will be conducted to understand the preferences of men and women farmers for all propositions made here. Gender research toolkits, such as those derived from published guidelines from CGIAR's gender platform (https://gender.cgiar.org/), the Women's Empowerment in Agriculture (WEIA) index, UN Women's Sendai Framework, USAID's Gender Equality and Social Inclusion (GESI), Gender-responsive Researchers Equipped for Agricultural Transformation (GREAT), or repurposing tools such as G+ to study CSA characteristics, among others, will be utilized with a focus on CSA and farm budget analysis, provide a comprehensive assessment of predominant crops, their yields, farm returns, impacts on soil health and other biophysical constraints to productivity (drought, pests, diseases). Adoption rates of CSA and other improved practices will be in this activity set. Economic constraints (labor, input costs, output prices) and then market, value chains and finance constraints (poor offtake, weak prices for producer, high prices for consumers) will be part of the analysis

v) Before implementing WP2-WP4, we will provide a Technical Report covering WP1 i) – WP1 iv) detailing the current state of local food systems, with actionable recommendations for integrating indigenous crops and adopting climate-smart practices into HGSF programmes. This document will guide the rest of the research WPs, re-shape ongoing interventions, design new ones and help make the case for new resources to strengthen implementation in line with the whole food systems approach.

WP2: Identify Implementable Diversification Strategies: *to Include Indigenous Crops into Local Farm Plans and HGSF Supply Chains*

Underutilized indigenous crops are so called because they are no longer major cereal, pulse, or vegetable staple foods. Yet, they can offer significant potential to enhance diversity in production, consumption, and diet quality due to their local adaptation and nutrient density. Once a portfolio of crops is well-described, these will be suggested to stakeholders (e.g., WFP, Government, School Jurisdictions and Management) to consider for incorporation into school meal plans. For instance, Rwandan school meal guidelines[1] permit substitutions if the alternative offers equivalent nutritional value, suggesting flexibility for incorporating new foods based on local availability and market conditions. This approach allows for adaptable procurement strategies to accommodate seasonal fluctuation. Table 2 summarizes the key gaps and our analytical methods to address them.

The specific activities proposed for WP2 are as follows:

i) Based on field surveys (of currently grown crop species), literature reviews of past reports and studies, and examination of crop and seed catalogues as well as local knowledge, a comprehensive list of indigenous cereals, vegetables [1] roots, and tubers, as well as pulses, will be made available. An agroecological mapping will be developed (similar to Fig. 2). Those species that are currently being grown to some extent will be seen as most scalable. Others may be recommended based on productivity or consumer appeal potential. Table 2 summarizes key considerations that will guide this aspect of WP2.

ii) From a farm management and economics perspective, diversification should enable the farmer to achieve economies of scope. Using economic and biophysical impact reviews and on-farm assessments of both spatial (intercropping on the same plot or juxtaposition of multiple pure stand plots) and temporal (rotational) crop patterns, and based on economies of scope, we will provide a ranking of best-bet intercropping patterns and sequences suitable for the target communities.

iii) As this was an Ask for Kenya, we will propose an integrated digital ecosystem comprising of tools for recommending CSA and agronomic practices, weather information, and **Farm Enterprise Resource Planning (Farm ERP)** software. WFP and partners can use these to assist farmers in developing cost-efficient intercropping patterns. As part of this we will engage digital experts (from CIMMYT, WFP and partners) to select digital tools and software with **superior human centered design (HCD) characteristics** compatible with, or adaptable to the geographies of operation. We favor off-the-shelf solutions like Agrivi. which offers comprehensive farm management features. Other tools such as iCow and mFarm, particularly available in Kenya, might be customizable for use in Uganda and Rwanda, when proven effective.

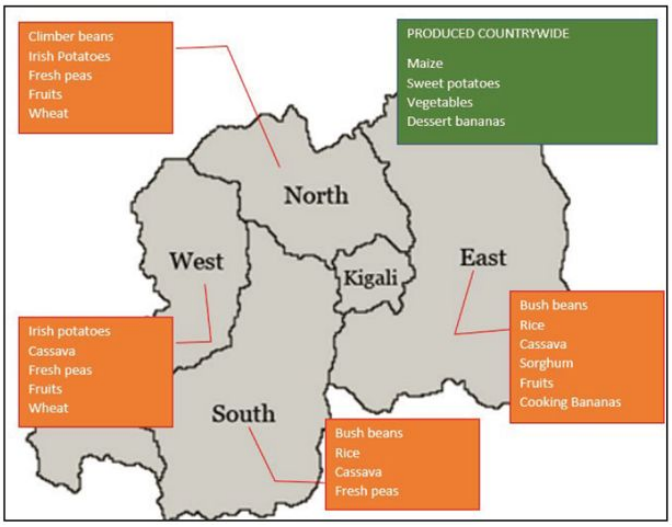


Fig. 2: Food items with good agricultural potential in Rwanda's provinces (based on National Agriculture Survey, 2022). *Coped from* Rwanda ***School Feeding Operational Guidelines 2021***

Table 2: Analyzing diversification opportunities with indigenous crops and other enterprises

Problem	Method	Approach
Limited market demand and awareness of indigenous crops' benefits	Market Analysis	Assess local and national demand, consumption patterns, and potential market gaps
Uncertainty regarding the economic viability and profitability of introducing indigenous crops	Cost-Benefit Analysis	Evaluate production costs, market prices, and potential benefits to stakeholders
Inefficiencies and high costs in production, processing, and distribution of indigenous crops	Agricultural Value Chain Analysis	Analyze the value chain from production to consumption for cost reduction opportunities
Resistance or lack of buy-in from key stakeholders due to unfamiliarity with indigenous crops	Stakeholder Consultation	Engage with farmers, government agencies, and others to understand perspectives and challenges
Skepticism about the nutritional adequacy of indigenous crops in HGSF programmes	Nutritional Value Assessment	Compare nutritional values of indigenous crops with staples to ensure dietary requirements are met
Seasonal variability in the availability of indigenous crops, leading to supply challenges	Seasonal Availability and Storage Solutions	Investigate crop availability and recommend solutions for year-round supply
Uncertainty and risk associated with large-scale implementation without evidence	Pilot Projects	Test feasibility, acceptance, and impact of introducing indigenous crops into supply chains

[1] Potential examples include *Terere* (Amaranth), Managu (African Nightshade), *Sagaa* (Spider Plant), *Mrenda* (Jute Mallow), and Pumpkin Leaves (for northwestern Kenya geolocations). *Nakati* (Ethiopian Eggplant), *Bbugga* (Amaranth), *Doodo* (Pigweed), Malakwang (Hibiscus), *Boo* (Cowpea Leaves), and *Eboo* (Pumpkin Leaves) (for Uganda geolocations) and *Isogi* (Spider Plant), *Dodo* (Amaranth), *Isogo* (African Nightshade), *Imboga* (Cowpea Leaves), *Ibihaza* (Pumpkin Leaves), and *Intoryi* (Ethiopian Eggplant) for Rwanda geolocations. Cowpea, kales, and white cabbages may already be prevalent in the local diets (including school diets). **Note:** ***we do not guarantee the correctness of nomenclature or other terminologies. This awaits final information gathered in this project as proposed in the text.***

WP3: Translating CSA Practices into Accessible Formats: *For Farmers and Their Frontline Advisors.*

In WP3, CIMMYT's core role will be the translation of CSA practices into accessible formats for smallholder farmers in low-literacy environments. This will involve the following research activities:

i) Based on two seasons of on-farm assessments (combined with pre-existing agronomic research), we will produce a dossier of the most promising CA and CSA practices (including water harvesting and soil loss mitigation practices) into recommendation domains and packages (see Text Box 1). For example, given the well-known high discount rates[1] among smallholder producers, strategies. Combined with on-farm assessments, we'll consolidate current conservation agriculture recommendations, particularly mulch management. Strategies like green manure cover crops. Green manure cover crops (GMCCs) will be recommended if economic analyses confirm they offer additional benefits like food, income, or otherwise that they come with minimal input costs. This applies to crop residue mulch options as well, which are practical when there's no competition with livestock feed, non-palatable options are affordably accessible, and they do not complicate other farm operations. The success of minimum tillage depends on availability of direct planting implements accompanied by machinery availability and effective weed management.

Text Box 1: What will the recommendation domains look like?

The **CSA recommendation domains** will be defined by agro-ecological zones, soil types and conditions, climate and weather patterns, farming systems and crop types, prevailing moisture conditions, and socio-economic conditions. This approach ensures that the recommended practices are tailored to the unique ecological, social and gender roles, and economic conditions of different farming systems. Each recommendation package will include detailed practice guidelines, implementation timelines, resource requirements, expected outcomes, and case studies or success stories to support successful adoption. This approach is meant to produce locally relevant recommendations across diverse farming contexts. Further farmer-specific configurations will be made by local last-mile advisors.

ii) Break down CSA practices into units of information that can easily be communicated and applied by farmers with some guidance from local agricultural advisors.

iii) A third area of research (and **where gaps warrant it – see WP1**), will be to make available **global best practices on effective formation of local community networks (with conflict mitigation as a component)**.

iv) Fourth, project economists will use behavior change methods and network analysis to determine how to integrate innovations into local social systems for each specific area. These networks will also support digital advisories and facilitate farmer knowledge exchange, when these become available.

Next, WFP and its partners will use social networks to spread the recommended CSA packages, building upon the foundational work of WP1 and WP2 to develop a **feedback-informed workflow for integrating CSA innovations into community scaling efforts**. This approach we believe, will encourage multi-directional learning between farmers, extensionists, researchers, and implementers to streamline knowledge transfer. CIMMYT will enhance this process by offering data collection and impact evaluation tools (both *ex ante* and *ex post*) to identify the most effective scaling approaches for various contexts.

WP4: Design a Cluster-and-Spillover Blueprint for HGSF Programming – *Enabling Transition Pathways to Nutrition- and Climate-Sensitive and Profitable Local Food Systems*

In this WFP, we propose to study how to integrate the outcomes from this activity into WFP hub models that can be scaled to wider communities through intentional spillover management (as a major development spillover from this model). CIMMYT proposes to analyze strategies for such spillover creation. Spillover management- this approach can facilitate an organic spread of knowledge and best practices across geographies. The following are proposed in this WP:

i) Implement a multi-enterprise and full-picture analysis of the feasible set of opportunities available in local food and broader agricultural value chains. In reality, HGSF programmes will only succeed if they represent the most profitable enterprises in the local economy. The use of agrifood supply chain network analysis (AFSCN) is meant to facilitate this end-to-end evaluation of local economic opportunities and how HGSF programmes fit in to improve these opportunities (see also Table 2 for a list of approaches).

ii) WP1 and WP2's food system analytics will play a significant role here, using insights from AFSCN analysis to study how successful WFP hub models[1] can be scaled to wider communities through the intentional spillover management (as a major development spillover from this model). CIMMYT proposes to analyze strategies for such spillover creation.

iii) To identify the return on investment and benefits of climate-smart HGSF (ask from Kenya) to inform advocacy efforts, we propose a social impact analysis of the CSA-driven approaches to as a strategic guide to justify (or not) current and future programming.

[1] Members of the project team (including the CIMMYT team lead) are presently leading an on-going analysis on this issue within the Dryland Crops Program at CIMMYT focusing on impact pathways for dryland food systems transformation end-to-end interventions. The notion of agribusiness micro-ecosystems is being studied. **We will port those lessons into this project.**

WP5: Partnerships, Governance for Gender, Equity, and Social Inclusion

Partnerships

The integrated food systems approach requires partnerships with actors possessing complementary resources, research methods, and networks. The project design aligns with WFP-defined priorities, leveraging WFP's role in food systems repair, strengthening, and recovery amidst crises. WFP aims to strengthen local food systems for recovery, growth, and resilience. CIMMYT, a key CGIAR member, contributes extensive knowledge of farming systems in ESA, backed by decades of research in mixed cropping systems of the ESA region, climate-smart agronomy, and soil and climate science. The sub-award budget will support collaborations with crop scientists and agronomists from KALRO in Kenya, NARO in Uganda, and RAB in Rwanda. Beyond anchor crops like maize, sorghum, and cassava, the project will include underutilized crops with consumer, agronomic, and economic potential, such as other cereals, roots, tubers, bananas, vegetables, and pulses. We will engage multiple scientists and agronomists working across these crop categories. Finally, we will tap into ongoing efforts with the US State Department's programme on Vision for Adapted Crops and Soils - VACS[1] (currently being implemented by CIMMYT and others). VACS focuses on reviving underutilized crops in Africa (including amaranth, finger millet, sesame, taro, among others).

GESI

WP5 is cross-cutting and will ensure that issues of gender, equity and social inclusion are embedded throughout project implementation. The project management team will be tasked to form a gender governance framework to guide the project with frequent gender audits of project research. A CIMMYT Gender Expert at the Senior Scientist level has agreed to participate in this project and provide the GESI analytics.

Proposed CIMMYT Staffing

Proposed Collaborators

Name	Seniority	Institution	Role
Drake Mubiru	Senior Principal Research Officer	National Agricultural Research Laboratories/ National Agricultural Research Organization (NARO)	CSA options in Karamoja
Pascal Rushemuka	Senior Agronomist	Regional Center for Integrated Development (RCID) and RAB	Rural food systems and agronomy
Charles Bett	Senior Economist	Kenya Agricultural and Livestock Research Organization (KALRO), Kiboko, Kenya	Digital Enablers, dryland food systems analysis

Budget Estimates

Item	Year 1	Year 2	Year 3	Total
Personnel (scientists, research associates, technicians and field staff)	169,342	176,115	183,160	528,617
Operating Expenses and Field Costs (Equipment and Research Supplies)	163,632	173,644	115,089	452,365
Dissemination, training, education	33,727	35,076	36,480	105,283
Administration (Direct + Indirect Costs)	165,015	173,176	150,628	488,819
Sub-awarding total	135,825	141,818	147,273	424,916
TOTAL	**667,542**	**699,830**	**632,629**	**2,000,000**

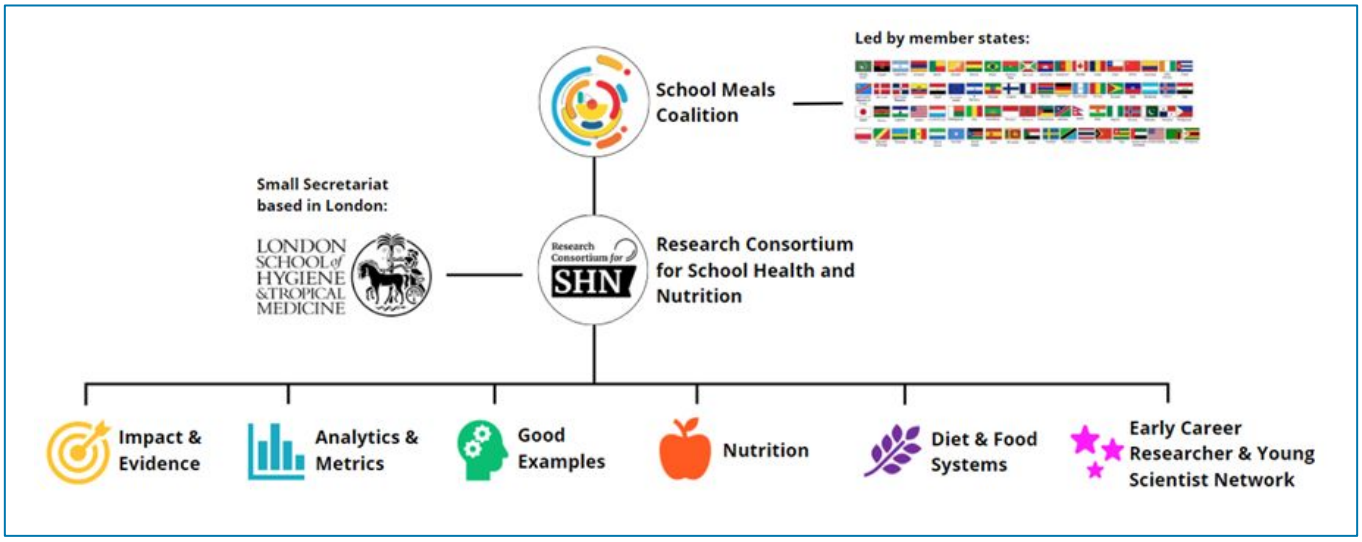
[1] CIMMYT is coordinating two important components of VACS (breeding, market opportunities and capacity building. The CIMMYT team lead is leading one of the sub-work-packages in the market opportunities analytis focusing on muntiple impact pathways for VACS crops.

I. Introduction

The Research Consortium for School Health and Nutrition is a global, independent research network, established in 2021 to support the (now) 97 countries of the School Meals Coalition in strengthening their national school meals programmes following COVID-19 school closures. With a small Secretariat based at the London School of Hygiene & Tropical Medicine, the Research Consortium works through global academic Communities of Practice (COPs) to curate and generate independent evidence which can provide policy insights into the design, cost, implementation, and impact of school meals and complementary school health programmes.

The current six COPs focus on the following research areas: (i) Impact & Evidence: assessing the impact of school-based health interventions on key development outcomes, using systematic reviews; (ii) Analytics & Metrics: estimating the value-for-money of school health interventions and their impact on education outcomes; (iii) Good Examples: documenting good practices from national school meal programmes across all the member countries of the SMC; (iv) Nutrition: creating and curating evidence on the nutrition of school children and adolescents, and identifying key nutrition indicators for these age-groups; (v) Diet & Food Systems: identifying the relationships across school meals, diet and food systems, and how these relate to climate, biodiversity, the environment and food sovereignty; and (vi) Early Career Researcher & Young Scientist Network: establishing a platform for early career researchers and youth who have an interest in school health and nutrition.

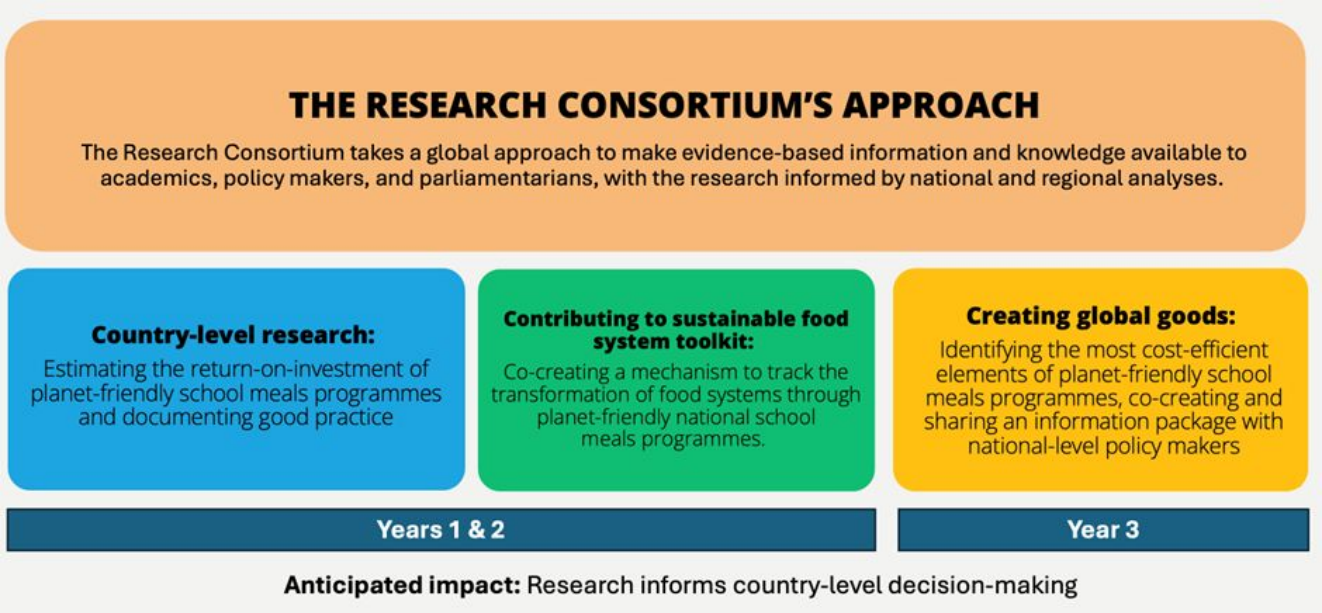
Image 1. Structure of the Research Consortium



The Research Consortium benefits from the goodwill and guidance of the School Meals Coalition Member States and the support of philanthropic foundations and other development partners, including BMZ, Dubai Cares, IDRC, NORAD, NNF, Rockefeller Foundation, and WFP. As part of our commitment to equitable partnerships, most of our funding supports academic institutions around the world to lead on the research. We also maintain a small Secretariat to coordinate the activities, secure support for global action and global public goods, convene global and regional workshops, and help assure the quality of outputs. In addition, the Research Consortium leads on the translation of research findings into policy insights to support decision making in this area.

II. Proposed research activities

In all of its work, the Research Consortium takes a global approach to make evidence-based information and knowledge available to academics, policy makers, and parliamentarians, with the research informed by country-based analyses and meta-analyses. In this proposal, the Research Consortium proposes three areas of focus or 'research tracks': to document and analyze the value-for-money and key components of national school meals programmes through country-level research; to strengthen programmatic insights by increasing the uptake of planet-friendly school meals policies; and to distil these insights into global goods to inform good practice.



RESEARCH TRACK 1

Country level research: Estimate the return-on-investment of national school meals programmes and document best practice to inform policy decisions, working with in-country academics and practitioners.

Context: The Analytics & Metrics Community of Practice supports countries to estimate the return-on-investment of their national programmes, quantifying the benefits that accrue to the agriculture, education, health and nutrition, and social protection sectors per child per year. To date, this COP has supported analyses in eight countries across Africa and this country-specific work will be the subject of a regional, cross-country analysis at the end of 2024.[1] An additional value-for-money study is expected to start in July 2024 in Cambodia.[2] In response to the high volume of requests from SMC member states the Analytics & Metrics COP is introducing a new operational model, whereby the COP provides oversight to in-country academics who complete their own analysis using a common methodology. This approach will be piloted in Brazil, India, and Nigeria in 2024.

The Good Examples Community of Practice is similarly working with in-country academics and practitioners using a common template to document the current design and implementation fidelity of national school meals programmes. The Good Examples Community of Practice is currently engaged with national teams in 39 high-, middle- and low-income countries, and has already published 11 comparable case studies [3]. The COP aims to document programmatic approaches across all SMC member states, with the objective of using these case studies to identify innovative practices and 'good practices' to inform future programmatic planning.

These two work streams are distinct from each other and provide countries with different insights. However, there is overlap with regards to the data they collect. These COPs collaborate closely and often work in tandem, sharing relevant data. This reduces the burden on countries and maximises efficiency.

Research Track 1 is envisaged to be led by the Analytics & Metrics and the Good Examples Communities of Practice and will consist of two components:

Component 1 (led by the Analytics and Metrics COP): Support one SMC country [4] to conduct a value-for-money analysis of their school feeding programme(s). The Analytics & Metrics COP will guide one additional country with developing a value-for-money analysis to estimate the return on investment of their current programme across four sectors: social protection, health and nutrition, education and agriculture. In addition, this analysis will also include a secondary analysis to estimate the return on investment if one or more of the planet-friendly policy approaches described in the White Paper were introduced.

[1] NORAD has supported this work in Burundi, Ethiopia, Malawi, Mozambique, Namibia, Niger, and Sierra Leone and the USDA/McGovern Dole supported work in Cote d'Ivoire. The WFP Country Office is supporting a VfM study in Cambodia, which is due to start in June 2024.
[2] This will be supported by the WFP Cambodia Country Office.
[3] Research Consortium for School Health and Nutrition | LSHTM
[4] This country could be Kenya, Rwanda or Uganda, or another country, depending on national interest in the value for money work. Country selection will be agreed by Governments, NNF and WFP.

These two work streams are distinct from each other and provide countries with different insights. However, there is overlap with regards to the data they collect. These COPs collaborate closely and often work in tandem, sharing relevant data. This reduces the burden on countries and maximises efficiency.

The proposed outputs include:

- The value for money methodology expanded to include planet-friendly approaches and policies.
- One country supported to develop a value for money analysis, with country selection agreed with Governments, NNF and WFP HQ and COs.
- Technical working group convened with academics and researchers from the selected country to support the development of a national value-for-money analysis, with academics from CIMMYT and APHRC invited to participate as appropriate.

Component 2 (led by the Good Examples Community of Practice): Support countries in the East Africa region to develop and publish case studies on their national school feeding programmes.

To accelerate the development of case studies, the Good Examples COP has developed, and successfully tested in West Africa, a model based on multi-country networking around a series of multi-country training workshops. With support from Novo Nordisk Foundation, the COP will host an East Africa workshop[1] with the aim of 1) convening teams of academics from a number of countries in the region to develop their respective national case studies; 2) identify and strengthen existing national and regional networks of researchers working on school feeding and; 3) encourage interest from other countries in developing case studies. In addition, through this agreement with NNF, dedicated support will be available for up to four countries as they develop their case studies.[2] Furthermore, support from NNF would enable this COP to update its template to include considerations highlighted by the planet-friendly white paper, and where there is appetite from country teams, to update published case studies with those details.

The proposed outputs include:

- Case study template updated to capture country-specific learnings from the implementation of planet-friendly school meals policies
- Regional case study writing workshop organized in East Africa.[3]
- At least four national teams of academics supported to produce case studies on their country's school meals programmes, with academics from CIMMYT and APHRC invited to participate as appropriate.

RESEARCH TRACK 2
Contributing to a sustainable food systems toolkit: Co-creating a mechanism to track the transformation of food systems through planet-friendly national school meals programmes.

This Research Track is envisaged to be led by the Diet & Food Systems Community of Practice.

Context: SMC member states identified a clear need for a community of practice to focus on nutrition supply elements: diet, diversity, climate, and the agricultural processes used to grow, harvest and supply food, especially in the context of home-grown school feeding. In response, the Research Consortium established the Diet & Food Systems Community of Practice, which aims to advance understanding of how institutional procurement of local goods can influence climate resilience, agrobiodiversity, food sovereignty and gender equity among small-holder farmers.

In 2023, the Research Consortium's Diet & Food Systems Community of Practice led a seminal white paper: *School meals and food systems: Rethinking the consequences for climate, environment, biodiversity, and food sovereignt [4]y.* This paper focused on how school meals can support the transformation of food systems with contributions from 164 experts and 87 organizations globally, reflecting both a broad consensus of support and the need for a strongly

[1] This model was tested in January in Benin, who hosted Senegal and Togo, with three case studies resulting from this meeting. This meeting was funded by the French Ministère de l'Agriculture et de la Souveraineté alimentaire (MASA). The Rockefeller Foundation are funding two additional regional workshops in 2024: one is Asia and one in Latin America.
[2] NNF is already supporting the development of a Good Examples case study in Kenya and Rwanda through its existing grant to the Consortium. This new agreement would enable a modest level of support to be provided to teams of academics in up to four countries, which could include Uganda.
[3] This regional meeting can be further leveraged for other knowledge sharing opportunities in East Africa
[4] White paper covers (lshtm.ac.uk)

multi-sectoral approach to this very broad topic. Because school meals represent a significant proportion of all publicly managed food systems, policy changes to school meals programmes can immediately strengthen the community response to environment and climate. The four policy areas that can achieve immediate impact include: menu changes which encourage dietary shifts which promote planetary and population health; clean and energy efficient cooking methods; prevention of food loss and waste, and reduction of single-use plastics; and action-oriented and holistic food education to help establish life-long healthier and more sustainable dietary preferences and practices. Through the power of procurement, these policies can transform food systems and agricultural practices in the long term by creating demand from the agricultural sector for school foods from ecologically sustainable local farm systems.

During 2023, this white paper was presented at the UN Food Systems Summit +2 in Rome, SMC Global Summit in Paris, as well as at COP28 in Dubai. Through these global moments, countries expressed an interest in adopting some insights from the White Paper in their current national programmes. Via agreements with the Novo Nordisk Foundation and BMZ, the Research Consortium is currently supporting Kenya, Rwanda, and Sierra Leone, "early-adopters", to introduce policy changes that align with the insights of the white paper This includes modelling the benefit to the learner, the food systems and to the planet of introducing one or more of the four policy areas put forward in the white paper (and described above). BMZ is also supporting the Consortium to agree the appropriate indicators to track the uptake of planet-friendly policy approaches. This dialogue will take place at the technical level and engage, for example, academics and technicians.

Additional and complementary support from NNF would enable the Consortium, through a consultative process, to identify the appropriate mechanism(s) for tracking these changes and to clarify what changes, if any, are needed to make the preferred tool(s) fit-for-purpose. Potential tools to track this transformation include: the World Bank SABER school meals policy tool, the PCD/WFP SMP Plus Menu Planning Tool, the WFP Data and Monitoring Initiative indicators, among others.[1] This dialogue will take place at the institutional level and will engage, for example, relevant UN agencies and the World Bank.

The proposed outputs include:

- Mapping of existing tools and their methodologies from across sectors that can be used to track changes in food systems and related policies.
- One in-person consultative policy-oriented meeting(s) with strategic partners in East Africa, representatives from early-adopter countries, and representatives from WFP COs in those countries.
- Proposed tool(s) to track food system transformation shared with SMC member states for consideration through existing SMC channels.

RESEARCH TRACK 3
Creating Global Goods: Identify the most cost-efficient elements of school meals programmes and co-create and share an information package with national-level policy makers

Context: This final activity is focused around disseminating the policy and programmatic insights gleaned from the first two activities through strategic networks, platforms, and high-impact publications. Whereas research tracks one and two are focused on collecting the key evidence for effective programmes, this track is central to the other goal or the Research Consortium: to ensure that the research developed by the Communities of Practice can be understood and applied by decision makers across the relevant sectors, including for agriculture, education, health and nutrition, and social protection. These global goods will be based upon the knowledge and understanding gleaned from research conducted at the regional and sub-regional levels.

This activity has three components, and will be led by the Research Consortium Secretariat with support from all Communities of Practice:

[1] The intention is to pilot the uptake of these tools, once validated, should future funding be made available.

Component 1: Develop a global estimate of the return on investment of national school meals programmes for individual and aggregated sectoral outcomes using secondary data. This global analysis will supersede the 2020 desk-based review by including data from novel sources including:

- the Cochrane Systematic Review which is assessing the findings from 80 school feeding impact evaluations.
- the on-going and completed country-based value-for-money analyses, which including the regional cross-country analysis funded by NORAD.
- Best practices and innovative approaches in the design of national programmes, as gleaned through the 'Good Examples' country case studies.
- Information on costs and targeting approaches identified through the published literature.

This analysis of secondary data will help identify the circumstances in which school feeding is effective and cost-effective, and will therefore be the foundation of the Consortium's policy guidance to SMC member states. The Consortium secured funding through the Foreign, Commonwealth and Development Office of the Government of the UK (FCDO)[1] to undertake a limited analysis of this type on a subset of countries identified by FCDO, and support from NNF would allow the Research Consortium to expand the analysis to a more representative group of LMICs and, importantly, allow comparisons across all income groups to help highlight good practice. This larger analysis will be of particular relevance to low- and lower-middle income countries about to start or expand their own national programmes, and also of relevance to the growing number of middle- and high-income countries currently considering initiating or expanding their investments in national programmes, such as Canada, Denmark, Nigeria, and Norway.

The proposed outputs include:

- A publishable analysis of the global economic value of school feeding programmes submitted to reputable journal for peer-review[1].
- Policy brief developed for policymakers and parliamentarians and disseminated through national, regional and global networks.
- A slide deck explaining the above content and presented at strategic high-level convenings.[2]

Component 2: Hold up to two in-person consultative regional and global meetings with national level stakeholders and academics from SMC member states to agree a package of policy guidance to support the uptake of evidence-based and cost-beneficial planet-friendly national school meals programmes. These events will be complemented by virtual meetings throughout the project period. Building on the evidence gleaned from the first two research tracks, along with the evidence generated through the Research Consortium's global Communities of Practice, the process of holding a series of consultative discussions will support consensus generation around what is included in the package of policy guidance as well as buy-in from national-level decisionmakers.[3] Past experience (in 2023) indicates that such Consortium "showcase" events about school meals could attract over 600 academics and practitioners scholars from more than 70 countries.

The proposed outputs include:

- Hold up to two in-person consultative meetings that convene national level stakeholders and academics, with at least one regional event specifically engaging stakeholders from East Africa and researchers from the region, including from the International Maize and Wheat Improvement Center (CIMMYT) and the African Population and Health Research Center (APHRC), as appropriate.
- Co-creation and dissemination of a package of policy guidance to support the uptake of evidence-based and cost-beneficial planet-friendly school meals programmes.

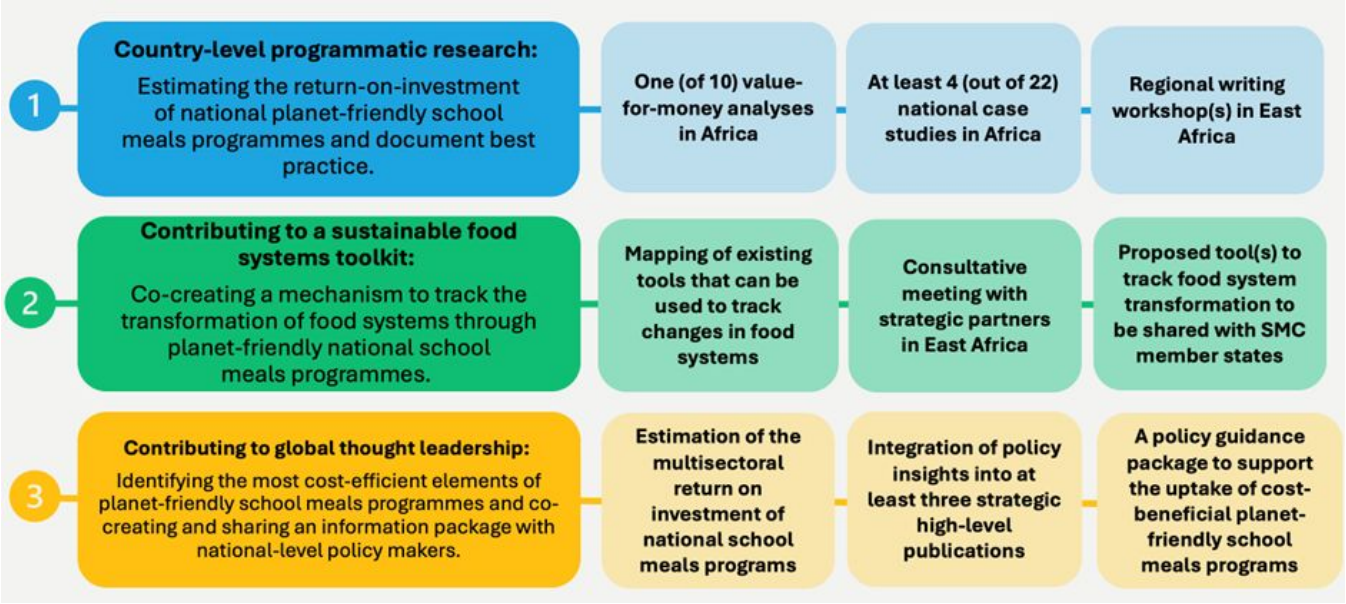
[1] The FCDO proposal is focused on Botswana, Burkina Faso, Cameroon, Congo (Republic of), Congo (Democratic Republic), Gabon, Ghana, India, Kenya, Malawi, Mauritius, Namibia, Nigeria, Senegal, South Africa, Tanzania, Uganda, Zambia, Zimbabwe..
[2] Provision has been made in the budget to ensure this paper can be published open access.
[3] Potential high-level convenings in the Africa region include the Africa Day of School Feeding annual event, events organized by the African Union, the SMC Ministerial Meeting in Nairobi, among others
[4] Note that the Research Consortium is presently in discussion with two French research agencies around developing an 18-month research exploration to inform policy guidance around planet-friendly school meals, and is also part of the Steering and Technical Committees of the Rockefeller Foundation potential "Big Bet" on school meals. Support from NNF would support the time of Consortium members to engage in these and related processes.

Component 3: Contribute to global thought-leadership on school health and school meals by sharing policy-relevant insights in influential publications and institutions. Members of the Research Consortium Secretariat and its Communities of Practice include Commissioners and Editors of globally influential commissions and publications targeted at decision-makers across many sectors as well as government ministries of finance and planning. These opportunities include: the World Bank Disease Control Priorities, Fourth Edition (DCP4); The Lancet Commission on Investing in Health; The EAT Lancet Commission; the PMNCH Investment Case for Adolescent Health; and the UNESCO Global Education Monitoring (GEM) Report on the SDGs for nutrition and education. Policy insights gleaned from the first two research tracks will inform these high-impact global goods, contributing to the global dialogue on the importance of investing in the wellbeing of the learner as well as key policy approaches that can support the planetary health, sustainable and resilient food systems, and child and adolescent health and development.

The proposed outputs include:

- Integrate policy insights from this research into at least three strategic high-level publications[1] that are read by decision makers across sectors.
- Engage focal points at normative UN agencies, including WFP, to contribute to knowledge and understanding of best practices in the development and dissemination of policy insights, as evidenced by notes for the record.

The key activities and outputs from these three research tracks are summarized in the graphic below.



III. How the Research Consortium anticipates working with WFP

At the initiation of this research grant, the Consortium will participate in a kick-off workshop in East Africa with other partners that are under the larger umbrella grant, including WFP, to ensure cohesion of approaches over the three years. At the country level, the Research Consortium will seek to align its work with WFP Country Offices to ensure effective partnership and coordination with relevant government and programmatic stakeholders (including with the country offices (COs) in the countries where WFP supports the delivery of school meals), particularly in relation to the development and validation of the proposed value-for-money analyses. As has become established practice in WFP-supported countries, the Consortium will support and encourage the national programme research team to fully engage with the WFP country teams throughout the co-creation of outputs, especially the 'Good Examples' country

[1] Open access publication will be sought via pre-existing agreements in place with journals via LSHTM. Additional costs to publish open access are not covered under this grant.

case studies. Additionally, as part of Component 2, the Research Consortium will keep the COs informed of discussions around the indicators and tools, and in particular planet-friendly approaches to school meals.

The Research Consortium will also seek to align with the WFP Regional Bureaus and Country Offices to disseminate country-specific research findings, and to identify relevant regional and country actors to participate in regional and country workshops. The Research Consortium will work with the WFP Regional and Country teams to seek to introduce a regular cadence of calls with regional and national focal points to ensure open and timely communications.

At the global level, the Consortium will also seek the support of the SMC Secretariat with sharing global knowledge products to decision makers and to all Country Offices through their existing channels. The Research Consortium already has bi-weekly calls with the research focal point in Rome to discuss research underway in select WFP-supported countries, and we would seek to include updates about this work programme as part of those calls going forward.

Annex 8. Alignment with Government

National governments are key, if not the most, important partner for WFP in implementing school feeding programmes. Within each country context, WFP interventions stem from requests and are in line with national government priorities. Furthermore, during implementation to strengthen sustainability, all actions are done in collaboration and alignment with national and sub-national government counterparts responsible for school feeding programmes.

Rwanda: The activities envisioned for Rwanda are firmly embedded in Government systems, programmes and policy priorities. School feeding in Rwanda is a Government flagship initiative, with the Government funding daily meals for over 4 million children in all public schools. WFP is the Government's main partner and technical advisor on school feeding and we have a Memorandum of Understanding and a handover plan in place. The NNF project helps accelerate innovations that are top priority for the Government to enhance the efficiency, effectiveness, evidence base and environmental sustainability of their flagship programme. Climate-sensitive agriculture, at the same time, is a major priority of the Ministry of Agriculture and upcoming Food Systems Strategy of the Government, and WFP is supporting in the operational expansion and evidence generations, as well as market linkages to school feeding, of CSA. All the CSA work is embedded in the national agricultural extension system.

Uganda: The project is designed to align closely with existing government initiatives to ensure its effectiveness and sustainability. WFP is involved in close implementation partnerships with the Ministry of Education and Sports, the Ministry of Agriculture, Animal Industry and Fisheries, and the Ministry of Health with activities being closely integrated with national policies and programmes. This collaboration facilitates the sharing of resources, knowledge, and best practices, enhancing the impact on education, nutrition and local agriculture/economy. Regular coordination meetings and joint monitoring visits will be conducted to ensure smooth integration and address any challenges promptly.

Kenya: All smallholder farmers activities are aligned to County government County Integrated development plans (CIDP) and WFP has MOUs with County governments as implementing partners. WFP Kenya's entire support on climate-friendly school feeding is fully aligned with Government's vision, scale-up plan to reach 10 million children by 2030 in the country, and tailored to government's requests for support on technical assistance. WFP Kenya has a very strong partnership with the Government and delivers support in line with government priorities and work plans at both national and county level.

Regional Overview: In each country, WFP has existing, strong relationships with local and national governments. This engagement is multi-sectoral in nature, involving all relevant sectors, including education, agriculture, environment, finance, gender and health. Specifically through this partnership, will build capacity of more than 700 government staff to support/facilitate/operationalize HGSF/local procurement for school feeding.

In addition, WFP Cooperating Partners remain an essential part of the implementation and achievement of WFP's Country Strategic Plans (CSP). In 2023, WFP partnered with 356 partners across East Africa, out of which 199 were national organizations across the nine countries. WFP also continued to advance the localization agenda, through collaboration with National Non-Governmental Organizations and Governments to increase its footprint in hard-to-reach areas, strengthen capacities, and leverage local knowledge, skills, and solutions while fostering stronger coordination amongst various stakeholders for sustainability. In 2023, 33% of WFP Cooperating Partners' expenditure went to national partners. These partnerships have been instrumental in promoting sustainability and self-reliance within the communities WFP serves.

Rwanda: School feeding in Rwanda is a Government flagship initiative, with the Government funding daily meals for over 4 million children in all public schools. WFP is the Government's main partner and technical advisor on school feeding and we have a Memorandum of Understanding and a gradual handover plan in place. The vision of the Government is for Government and parents to be able to jointly fund this national flagship programme in the next 7-8 year's time. Partner support is called upon to enable the Government to reach this vision.

Sustainability of the HGSF programme in Rwanda is very high and will continue beyond 3 years. The bolstering and expansion of school feeding across the country has come at the heels of both significant steps taken by the Government of Rwanda (GoR) in socio-economic transformation and poverty reduction on the one hand, and proactive ownership of and contributions to school feeding by the people of Rwanda on the other. The process towards achieving the National School Feeding Programme (NSFP) has included a series of national and international commitments made by the GoR; progressive elaborations of sectoral and school-feeding related policies and strategies; two decades of diverse successful iterations of school feeding across the country, implemented both by the Government and development partners; the GoR and the people's financial investment in and support of the Programme; and supportive contributions and advocacy by WFP and other development actors. Nonetheless, not only has this journey been demanding with many opportunities and challenges, but also many key decisions taken along the way have shaped unique characteristics into the programme.

Uganda: WFP acknowledges the critical role of government commitment in ensuring the sustainability of the Home-Grown School Feeding programme in line with Uganda's School Meals Coalition commitments. The Ugandan government has pledged to allocate a dedicated budget line for school feeding by 2025, reflecting a strong commitment to gradually sustaining the programme beyond the project's timeline. On top of this, the finalization of the national school feeding policy and the development of a contextualized national school feeding programme are underway thus ensuring a structured and sustainable approach. WFP is actively engaging with government officials at multiple levels through capacity building and policy advocacy. Within these three years, WFP aims to build pathways to a sustainable model. HGSF is already integrated in Uganda's Third National Development Plan (NDP III), creating an opportunity to advocate for an increased budget commitment.

The HGSF programme in Karamoja is designed with sustainability in mind, recognizing the need for stable financing mechanisms. Over the initial 3-year period of this project, WFP will intensify advocacy efforts with the Ugandan Government to secure increased budget allocations for the school feeding programme to ensure long-term financial support. By demonstrating the programme's positive impacts on education, nutrition, and community well-being, WFP aims to strengthen the government's commitment and ownership especially with the policy in place. WFP will actively engage with other development partners, showcasing the success and scalability of the HGSF model to attract diversified funding sources. Furthermore, WFP will expand school gardens, particularly in the green belts of Karamoja, which have high production potential to increase local food production and self-sufficiency. These gardens are already in place and serve as a demonstration tool and provide supplementary diversified food for school meals, thereby reducing costs and fostering community involvement.

Kenya: In the case of Kenya, WFP already transitioned the programme to the government which is now fully responsible for provision of food to schools, with WFP support going to systems strengthening. Consequently, the Government plans to scale-up the national school meals programme from the current 2.6 million learners to universal coverage of 10 million learners by 2030. WFP supports the government in this process, and the activities proposed here are meant to support and complement the efforts of the government.

In Kenya, the County Government is the key implementing partner and WFP has already included and will continue to include them in the planning phase. Schools are not intended to take on the financial burden of producing food long term. Food production at school level is to supplement the meals provided by the national government. Through this project, WFP will be able to support government to pilot the Aggregator model, focusing on local food procurement and support to smallholder farmers. Schools are supported in terms of establishment of kitchen gardens to supplement the meals, transitioning to cleaner cooking methods and other infrastructure needs to deliver school feeding.

Annex 10. Responses to NNF Chairman's Questions for WFP in Kenya

The Challenge: Kenya

WFP is the leading partner on school meals in Kenya, contributing with technical and strategic support to Government and direct implementation when necessary. Investing in climate-smart school feeding is a strategic way to address malnutrition, promote school retention, attendance, and transition, catalyse the transformation of food systems, and enforce climate-smart policies and solutions. Kenya faces severe droughts and aridity, and the climate-smart homegrown approach will be critical in the years to come and a key consideration in the scale-up process.

In a county like Turkana with harsh climatic conditions, ensuring that sufficient quantities of food are produced locally, is a key priority. Agricultural production is possible in certain parts of the county, and a shift to more climate-smart and regenerative agricultural practices creates potential to increase the production of drought tolerant and nutritious crops in Turkana. Sustainable business models with strong linkage to the private sector, along with the development of pro-smallholder procurement strategies, are critical to ensure adequate food supply to schools. Lake Turkana offers opportunities to link fisheries to school meals, an area WFP is already engaging in. Promotion of pastoral production, such as dairy, in school meals is another potential area to ensure local procurement of foods for school.

In Kenya, WFP has created "climate-resilient food systems hubs". These hubs provide an opportunity for smallholder farmer communities to be linked to markets and to get access to services, inputs and support to help them boost their production and sell their marketable produce at scale through aggregation. Schools are a predictable market that incentivize smallholders to enhance productivity and, through aggregation, ensure sufficient supply for HGSF on selected value chains. The "climate-resilient food systems hub model" has the potential to enhance spill-over effects to neighbouring areas in terms of alternative livelihood options, climate-smart agro-pastoral and pastoral practices, value chain and market opportunities, knowledge exchange and private sector collaboration.

To ensure sufficient supply of food for HGSF in Turkana, some food for schools is sourced from neighbouring counties Baringo and West Pokot. WFP has a strong and long-standing partnership with Turkana and other county governments in the ASALs through its climate resilience, food systems and capacity-strengthening programmes. Through these programmes, WFP is already working in Baringo and West Pokot on the supply and market side, working with smallholder farmers and cooperatives promoting climate-smart agricultural practices and strengthening local farmers' market access. The county government plays an important role on the supply side to the KNSFP, and strong linkages are needed between the national and the county government to ensure the supply and demand sides meet.

Wherever supply is short, WFP – through its deep field networks and market creation support role – can link the demand from schools in Turkana to the produce from neighbouring counties, including West Pokot and Baringo. In counties like Baringo, there are key opportunities, as the county has already adopted a commitment to procure 30 percent of food at minimum from smallholder farmers, as captured in the Baringo County

Smallholder Farmers Access to Public Institutional Markets Strategy. Integrating smallholder farmers into public institutional markets is an important catalyst to boosting agriculture productivity and commercialization; enhancing their capacity to participate in private sector and other markets; and increasing food and nutrition security.

Lastly, there is a significant need to shift away from cooking school meals with firewood. **Clean cooking solutions are needed, including school kitchens and stoves and the adoption of clean, safe, and energy efficient practices for food preparation and storage to reduce indoor and outdoor air pollution and emissions.** In collaboration with UNHCR and FAO, WFP is already testing locally produced briquettes in Dadaab and Kakuma, made from the invasive prosopis plant that is cleared to make room for farms to thrive. This approach also provides livelihood options and the shift away from firewood cooking reduces the risks women and girls face when collecting firewood.

In the ASALs, which includes Turkana, the Government is approaching the shift away from firewood cooking to clean cooking in two ways: i) adoption of fuel-efficient stoves, as a first step to curb tree-cutting and firewood cooking and ii) testing of renewable energies, particularly steam cooking, as alternative clean energy sources for cooking. While Kenya plans to reach 5.5 million children in urban concentration and non-ASAL areas (9 cities) through centralized kitchens, reaching 30,000 children each, and powered by steam and pressurized cookers, it's approach is slightly different for the ASAL counties: first adopting fuel-efficient stoves, and then – learning from the centralized kitchen model and use of different renewable energy solutions (e.g. steam, solar) to shift to a renewable clean cooking approach that fits the more sparsely populated rural areas and schools there. The KNSFP has identified that part of its strategy toward climate-smart HGSF, is establishing the production and value chain of low-carbon energy to reduce tree-cutting, charcoal production and the excessive use of firewood while assisting community adoption of greener energy solutions for cooking.

The Government's strategy aiming to reach "Zero Carbon Schools" includes the transition to the use of energy-saving Jikos for smaller schools and steam cooking systems for larger schools to reduce carbon emissions as well as provide schools with cleaner kitchens. The use of localized production of briquettes made by the trees planted boosts local enterprises of both youth and women, supporting schools' access to affordable low-carbon energy as they transition into other alternatives to cooking. The use of organic liquid bio-stimulant, locally produced, using a formula of seaweed to increase benefits including increased stress resistance from drought, salinity and other factors, increased maturity rates, promotes rapid growth, improved resistance to some pests, increased biomass, improved soil health and many more values. Finally, the production of woodlots and green belts using a non-evasive, naturalized tree, can create moisture sinks and offset carbon emissions.

Oftentimes, WFP faces the challenge that imported grains (e.g. from Russia) may flood the market making it more challenging to develop value chains that can compete at the low prices.

Kenya: Food importation is limited in Kenya. Wheat is not widely consumed, however, it has been donated from Russia in the past and in these instances, WFP has opted to swap the wheat with more suitable grains from the government. Most meals served in the KNSFP, are made up of maize and beans.

Using the Aggregator Model for local food procurement, a requirement is that the Supplier can document and trace the produce to smallholders in the county or neighbouring counties of the schools receiving the food. This requirement is set in place to mitigate the risk of procuring food from traders that tend to import foods, flood the market, and buy produce from local farmers where the farmer is at a financial loss. The homegrown approach seeks to ensure that foods procured for schools are not only bought locally, but also produced locally, to positively impact local economies. In WFP's experience, this also improves local ownership and engagement by parents and communities who are benefiting from the programme.

Rwanda: Wheat is not featured prominently in school meals menus and Rwanda is not among the countries prioritized by Russia to receive grain shipments. The Government views agriculture as key to social transformation and is very protective of its local markets. However, domestically produced food products have reached unprecedented inflation levels in 2022 and 2023 due to a number of factors, including COVID-19, the Ukraine crisis, and climate change related events. Developing national value chains for school feeding is a primary objective for Rwanda's National Strategies for Transformation.

Notwithstanding the impressive food sector performance, local production for the key staples maize and beans is still below full potential and prone to extreme weather events. Rwanda remains a net importer of main staples, including maize grain and maize flour (from Uganda, Tanzania and United Arab Emirates) and rice (from Pakistan, Tanzania and India).

Uganda: Food is only imported in Uganda in cases where net production is less than net consumption for commodities such as wheat and rice. WFP does not view this as a risk in Karamoja where diets are predominately based on sorghum, which is produced locally in Uganda. The government has stringent requirements to restrict importation of grain (e.g. maize), which is produced abundantly in the country. Strong justification on inadequate local production would be required before issuance of any importation permit.

Uganda has two harvest seasons annually, with production capacity in excess of local demand, making it difficult to import large quantities of grain (except for wheat which is mostly imported from Argentina, Australia and Ukraine). Lastly, the strict stand of government against GMO traces imposes an obligation for testing all imported grain which also deters importation.

Annex 12. Impact in Numbers

In phase 2, WFP will **scale up the number of children targeted from 272,000 in two countries to 321,400 students (46% girls) in three countries.** As a result of the Government's strengthening and expansion of Rwanda's NSFP, WFP scaled down its direct support of school feeding in 2023, transitioning the support of more than 70,000 students to the Government's NSFP.[35] In contrast, WFP has increased the number of students supported in Uganda from 165,000 to 216,000. In Kenya, WFP fully transitioned the management and funding of the school feeding programme to the Government of Kenya in 2018. Today, the KNSFP covers 2.3 million learners across the country. WFP continues to support refugee school feeding operations in Turkana County, providing school feeding to 74,600 students in Kakuma Refugee Camp and the Kalobeyei settlement.

Successful HGSF programmes require Government commitment and planning, effective systems and adequate capacity to manage. Strong coordination across all levels of stakeholders (farmers, traders, parents, schools, cooks, management committees, and students) is required, along with sustained, multi-year funding. In Uganda, WFP's annual programme cost is USD 9.4 million (USD 28.2 million over 3 years), while in Rwanda it is USD 3.3 million (USD 9.9 million over 3 years). This **partnership with NNF will cover approximately 20-30% of total food costs for the HGSF programmes in Rwanda, Uganda and Kenya over the 3-year project period** (complementary funding is detailed in Annex 5). The total annual cost of feeding one child over the 180-day academic year varies across the three countries based on the cost, availability and diversity of food served to children. In Rwanda, this cost is about USD 110, in Uganda USD 39 and in Kenya USD 36.

In contrast to traditional school feeding programmes, HGSF places emphasis on where and how food is sourced. This model improves rural livelihoods and the food system more broadly, resulting in significant social and economic returns. Beyond students, this phase 2 partnership will provide critical capacity building support to stakeholders who play critical roles in the implementation of HGSF programmes. This includes **training of 2,800 school-level stakeholders (cooks, school feeding and procurement committee members), to ensure food is procured locally, budgets are managed and that food is prepared in a safe and nutritious way. WFP will also construct fuel-efficient infrastructure (kitchens, stoves) in more than 200 schools.**

Additionally, **40,000 smallholders – responsible for the production of the food eaten by students- will be trained and supported to grow new foods, in larger quantities and of higher quality, while using climate-smart approaches** (reducing the impact on the environment).

This partnership will also increase the percentage of locally sourced food within the three HGSF programmes, funding the purchase of more than 9,000 metric tonnes of food procured locally. Currently in Rwanda, WFP procures 100% of beans and fortified maize meal locally in Rwanda. This will continue for the entirety of the project. Starting in 2024, WFP in Rwanda will begin purchasing beans directly from smallholder farmers (10% of the overall bean requirement), with the aim to increase this percentage to 40% by the end of the project. Within the Rwandan context, it's important to note that Rwanda is not yet food self-sufficient, ie. national production is not consistently able to satisfy all national demand, particularly for some processed and specialized food, such as fortified foods.

For the KNSFP, approximately 30% of food is procured locally by schools (cash transfers from Government), with school Boards of Management managing food procurement at the school level. The remaining 70% of food is procured centrally by the Government and delivered to schools. For school feeding in Kakuma and Kalobeyei refugee operations, approximately 20% of schools procure food locally, enabled by the cash transfers provided by WFP. WFP would like to scale up this cash model to at least 50% of refugee schools.

In Uganda, WFP has made significant progress in shifting food procurement to local sourcing within Karamoja. From 2018 to 2023, WFP transitioned from purchasing only 2% of its annual food requirements within Karamoja to 35% today; WFP purchases the remaining 65% of food locally within Uganda. **WFP plans to increase this percentage to 40-45% in 2024 and to continue scaling up local procurement within Karamoja** as WFP expands its support to more smallholder farmer groups and associations through the support of this partnership, while simultaneously streamlining its purchasing modalities.

35. There is a possibility that WFP will scale up the programme in 2025 to 30,000 additional students in two highly vulnerable districts of the country (requested by the Government) if WFP Rwanda is awarded another round of funding from USDA McGovern-Dole