Annex 1. Summary of Terms of Reference

Below is a summary of the Terms of Reference. Full TOR are available here.

Subject and focus of the evaluation

The evaluation covers a portfolio of projects implemented by WFP in partnership with the Rockefeller Foundation (RF) from November 2021 to April 2025. This includes the global project, "Catalyzing good food through school feeding programs" implemented in Benin, Ghana, Honduras, and India and the grional project, "Scaling up fortified whole meal in school feeding programs in Rwanda and Burundi and supporting an innovation hub in Kenya" for which the evaluation covers activities in Rwanda and Burundi.

The overarching goal of this partnership is to improve the nutritional quality of diets, food-based safety net sustainability, equity of national food systems, and positive economic impact for local communities in Rwanda, Burundi, Benin, Ghana, Honduras, and India. Projects develop and test approaches to shift towards more nutritious options for school meals which boost local economic opportunity and increase environmental sustainability. Both the global and regional projects involve a combination of direct implementation to scale action and parallel work to build knowledge and evidence, test metrics, and advocate for change in healthier diets.

Objectives and stakeholders of the evaluation

The evaluation will follow a developmental approach, assessing strategic learning questions co-designed by the evaluators and a community of stakeholders who are the evaluation's primary users, known as the "Strategic Learning Community."

The primary objective of this evaluation is learning. It was commissioned to help country offices in particular to test assumptions and adapt project strategies to this dynamic environment. The primary target users of this evaluation include the World Food Programme (WFP), including country offices and regional bureaus, as well as the Division of School Based Programmes (HQ), the Rockefeller Foundation, and the School Meals Coalition.

Strategic Learning Questions

The evaluation will address the following key questions, which were developed at a Strategic Learning Community workshop in September 2023 and further refined in November 2023. Questions were used to guide data collection and discussion in each country office, but specific information gathered and shared in the report was tailored to each country's interests and learning needs:

Local economies: To what extent and how are innovations in the food supply/value chain, including local/institutional procurement, improving local economic development and for whom?

Sustainability: How might WFP adapt and operate differently so that the RF-WFP project innovations can be implemented on a larger scale and in a sustainable manner?

Social behaviour change communication: How can the programme effectively use SBCC for different groups (geographic, gender, etc.) given the short implementation period and limited funding?

Partnerships: To what extent and in what ways is the current approach/strategy with respect to government and other key stakeholders appropriate to ensure the scale-up and sustainability of the system that we are putting in place?

Advocacy: Which specific advocacy approaches are working well for systems change and which do not? And why?

Gender equality: To what extent and how is the programme integrating gender-responsive and gender-transformative measures/elements?

Methodology and ethical considerations

this evaluation will follow a developmental approach. A developmental evaluation was chosen because of the goals and main features of the programme and objectives of the evaluation. In order for a developmental evaluation to be appropriate, the eight essential principles must be met:

- **Developmental purpose:** The approaches and partnerships that are the subject of this evaluation are new and still being developed. Therefore, a developmental evaluation is appropriate.
- **Evaluation rigor:** the methodological framework for evaluation includes these elements: Methods that fit the learning questions, questioning assumptions, and engaging evaluatively. The elements of evaluation rigour will continue to be developed throughout the evaluation. The use of external evaluators, the combination of primary and secondary data collection, and the use of an evaluative lens will distinguish this exercise from a review, process monitoring, or operational research
- **Utilization focus:** The focus on intended users was applied during the scoping phase of the evaluation prior to the development of this ToR. The evaluation team consulted with all country offices - the primary intended users - to get their views and expectations for the evaluation. During the strategic learning workshop in Nairobi, project implementers were asked to consider how they would use answers to the strategic learning questions in order to prioritize which questions would be included in the evaluation. Opinions and information needs of Country Office stakeholders, they key project implementers, were prioritized in question selection
- **Innovation niche:** The subject of the evaluation is the approaches and innovations that are being tested and developed within the RF-WFP partnership's portfolio. The partnership itself is an innovation
- **Complexity perspective:** The evaluation has begun to address complexity by committing to an adaptive framework of inquiry that allows new insights to emerge. The evaluation also employs sense-making methods and tools to analyse complex systems. The programmes are implemented in a dynamic and complex environment. Evaluators will take into account different perspectives when defining the scope of the evaluation questions and answering them.
- **Systems thinking:** Many factors influence food systems, gender equality, and nutrition, and relationships the project intends to influence are not linear. The evaluation will need to consider elements of systems thinking including boundary critique and emergence in their analysis.
- **Co-creation:** The evaluation terms of reference include consultations with primary intended users and learning questions are co-developed by the evaluators and evaluation users. The strategic learning community and feedback loops allow for users to co-create changes to the evaluation as lessons emerge.
- **Timely feedback:** The evaluation design includes a sequence of feedback loops through learning workshops, a strategic learning community and in-country visits.

The evaluation conforms to WFP and 2020 UNEG ethical guidelines. This includes, but is not limited to, ensuring informed consent, protecting privacy, confidentiality and anonymity of participants, ensuring cultural sensitivity, respecting the autonomy of participants, ensuring fair recruitment of participants (including women and socially excluded groups) and ensuring that the evaluation results in no harm to participants or their communities.

Roles and responsibilities

EVALUATION TEAM: The evaluation team was composed of two developmental evaluators. A third evaluator was brought on to the team for the drafting of the final report. The evaluators are responsible for:

- Co-developing the strategic learning questions, adaptive inquiry framework, and other planning documents including the Terms of Reference and Scoping document,
- Elaborating the methodology based on the strategic learning questions,
- Gathering and analysing data following the methodology outlined in section 4 and further defined in the scoping document,
- Developing learning products as described in Section 5.1,
- Facilitating continuous engagement of stakeholders in the learning process, with support from the evaluation managers, and
- Writing the final report

EVALUATION CHAIR: the evaluation will be chaired by the director of the School Meals and Social

Protection Service (PPGS), Carmen Burbano, who nominates the evaluation manager, approves all evaluation deliverables, ensure the independence and impartiality of the evaluation at all stages, participates in discussions with the evaluation team, oversee the dissemination and follow up process, including the management response.

EVALUATION MANAGER: The evaluation will be managed by Anna Hamilton and Niamh O'Grady. They will be the main interlocutors between the evaluation team, represented by the team leader, and WFP counterparts, to ensure a smooth implementation process and compliance with quality standards for process and content. Support will be provided by the Regional Evaluation Unit throughout the evaluation process.

STRATEGIC LEARNING COMMUNITY: The SLC will be made up of key stakeholders at the WFP country office, regional bureau, and headquarters levels in addition to members from Rockefeller and the embedded evaluators. The SLC is the main community for providing ongoing, timely feedback on findings and decisions. They embody the collective sense-making process that enables learning. They are responsible for validating findings through discussion and implementing learning in the decision-making process. The SLC includes WFP country offices in Benin, Burundi, Ghana, Honduras, India, and Rwanda, relevant WFP regional bureaux, and HQ team members leading the programme components.

STAKEHOLDERS: WFP key stakeholders are expected to engage throughout the evaluation process to ensure a high degree of utility and transparency. External stakeholders, such as beneficiaries, government, donors, implementing partners and other UN agencies will be consulted during the evaluation process.

Timing and key milestones

Inception: Due to the developmental nature of the evaluation, the inception phase is ongoing throughout the evaluation and includes developing and refining the strategic learning questions, planning country missions, identifying and reviewing relevant secondary sources, and adapting data collection and analysis methods to address learning needs. The scoping document will outline the inception process in greater detail. Following each country mission, the scoping document will be updated to include the key informants and methods used during each country mission.

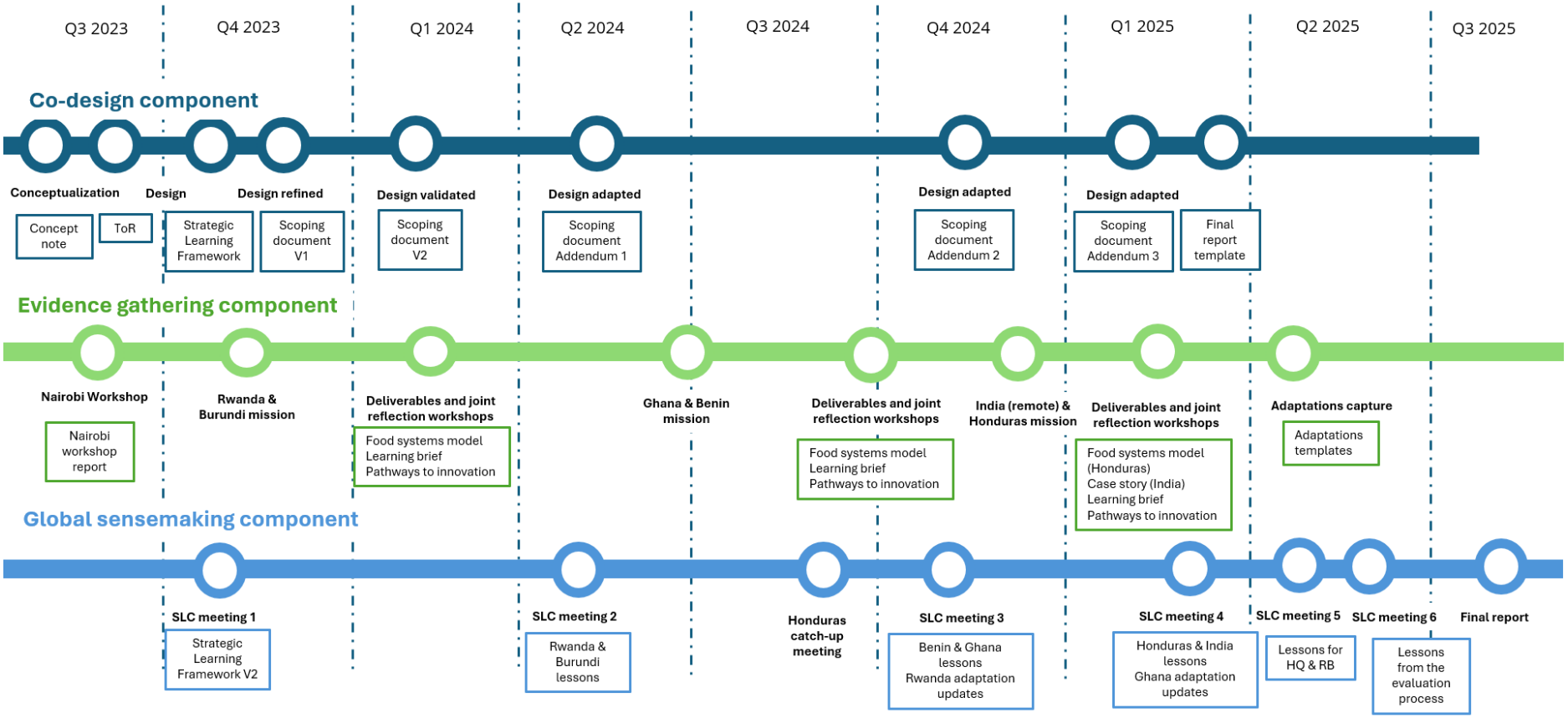
Data collection: Data collection is ongoing throughout the developmental evaluation, starting during the SLC workshop in September 2023 and continuing through the final SLC learning session in April 2025. Country missions will be conducted in all six Rockefeller countries, followed by virtual feedback loops. Data collection will change in response to learning needs throughout the evaluation.

Reporting & Analysis: Country-level deliverables will be produced following each country mission. A final evaluation report will present the findings, conclusions and lessons from the evaluation process.

Dissemination: Findings will be actively disseminated, and the final evaluation report will be publicly available on WFP's website.

Full Terms of Reference are available at https://www.wfp.org/publications/developmental-evaluation-catalyzing-good-food-through-school-feeding-programs-november.

Annex 2. Evaluation timeline



Annex 3. Strategic Learning Framework, revised, June 2023

1. LOCAL ECONONOMIES

Strategic area description

This are focuses on innovation across the food systems supply and value chain, including market dynamics, commodity selection, and inclusive development.

Priority question

1. To what extent and how are innovations in the food supply/value chain, including local/institutional procurement, improving local economic development and for whom?

Lead inquiries (*Leads)*

1.1 To what extent and how are innovations in procurement of fortified food generating effects on local economies (including increasing the market for nutritious foods)?

1.2 How does the program address vulnerability, diversity, and inclusion to improve opportunities for rural communities-especially young girls?

1.3 To what extent are the selected commodities best suited to achieve the intended outcomes?

Scope

The scope of lead inquiry 1.1, which addresses local procurement aspects will include the following:

- Whether and to what extent institutional procurement leads to sustainable market changes.
- Explore what is the most effective and impactful role WFP should play in institutional procurement.
- Explore whether and how school feeding is sufficiently influential to impact other institutions procurement.
- Explore how can the project leverage innovative procurement methods to benefit local agricultural production.
- Look at how the policy environment supports (the expansion of) institutional procurement and uptake in markets (e.g., fortification laws, school Feeding policy)

In terms of fortified foods, we evaluation will also look at aspects such as:

- Exploring how strengthening the capacities of small holders, impacts each actor in the value chain of fortified products.
- Looking at how food fortification can boost and catalyse the development of local economy value chains.
- Checking out how fortified whole grain is prioritized in value chain assessments and relevant advocacy.

The scope of lead inquiry 1.2 on vulnerability, diversity, and inclusion, will include the following angles:

- Look at how sensitive to equitability is the implementation of the WFP-RF programme in each Country Office.
- Explore whether building a more equitable care system in schools and households improves the program health and nutrition results.
- Explore whether and how the project is changing the lives of the more vulnerable, especially in rural communities.
- Look into whether and how improvements implemented in the value chain allow local farmers to have safer and fair access to the market.
- Explore what measures can trigger / activate inclusive private sector productivity.

The scope of lead 1.3 on selected commodities, will cover aspects such as:

- The commodities' FSQ, nutritional improvements, productivity, and climate change resilience.
- Explore the acceptability of commodities by school children and families.
- What makes the supply chain reliable for the communities.

2. SUSTAINABILITY

Strategic area description

This area addresses the time horizon for implementing innovations, its effects and scaling up, with a particular focus on the context and impacts of climate change.

Priority question

2. How might the WFP adapt and operate differently so that WFP-RF project innovations can be implemented on a larger scale and in a sustainable manner?

Lead inquiries (*Leads)*

2.1 How can WFP become an enabler/convener for wider systems change without compromising identity?

2.2 How do current Rockefeller Fund interventions contribute to the intended/unintended effects/influences of climate change?

Scope

The scope of this question will revolve around how the project can generate sustainable effects (through the innovations), given the school feeding programme structure, consumer preferences and market dynamics.

The scope of lead inquiry 2.1 on WFP being an enabler and convener, will include the following:

- Explore how WFP can support governments to fully own and drive sustainability.
- Check the extent to what capacities (institutions, government, private sector, farmers) are being strengthened to ensure/enable sustainability.
- Examine what the balance is between the WFP-RF project contributing to broader School Feeding versus

being its own project promoting a single product.

- Another aspect to look at in terms of coming to scale and be sustainable through WFP's enabling / convening role is to explore what works to secure financial commitments for more nutritious food (including securing government funding to implement policies and programmes)

The scope of lead inquiry 2.2 on climate change, will include:

- Looking at how Climate Change aspects are being incorporated into the project.
- Exploring, in particular, how the project addresses how fortified food value chain impacts climate.
- Looking into what climate angles/measurement WFP can look into within the project to inform sustainability, advocacy, and long-term benefits.

3. SBCC (Social and behaviour change communication)

Strategic area description

This area focuses on effective social behaviour change communication and health and nutrition narratives as the basis for redefining the care system.

Priority question

3. How can the programme effectively use SBCC for different groups (geographic, gender, etc.) given the short implementation period and limited funding?

Lead inquiries (*Leads*)

3.1 What social behaviour changes can realistically be achieved in a short time frame and how?

3.2 To what extent and how can school children influence good eating habits and demand for nutritious foods in their communities/households?

Scope

The scope of this priority question and lead inquiries will include, among others, the following:

- Exploring whether and to what extent SBCC is effective in changing consumers' behaviour.
- Examine considerations around whether and how SBCC is leading / may lead to sustainable market changes.
- Explore whether and how fortification of local maize/whole grain/ ignored commodities is prioritized one of the pathways towards health and nutrition from SBP / safety nets.
- Looking into how acceptance of fortified foods in schools cause significant policy changes for fortification?

4. PARTNERSHIPS

Strategic area description

This area focuses on the optimal relationships between WFP, the government and the Private Sector (including RF), including stakeholder engagement, operational integration and donors' contribution.

Priority question

4. To what extent and in what ways is the current approach/strategy for working with government and other key stakeholders appropriate to ensure scaling-up and sustainability?

Lead inquiries (*Leads*)

4.1 How does WFP's role and approach to interacting with food systems affect programme implementation and results?

4.2 How can the project best balance the dynamics of stakeholders at different levels (Rockefeller Foundation, governments, private sector), including potential contextual factors?

Scope

The scope of lead inquiry 4.1, which addresses the link between WFP approach to partnerships and results, will include the following:

- Explore whether and how the project (WFP-RF partnership) can be a catalyst in each specific country.
- Look into what partnerships should/need to be strengthened to positively affect the nutrition sensitivity of value chains.

The scope for lead inquiry 4.2 about balancing stakeholder dynamics, will include:

- Examine how WFP country offices can manage/juggle a variety of stakeholders and priorities - as is the case in Ghana and look in particular at what the key enablers are.
- Look into how country offices manage communications with the Rockefeller Foundation, RB and different relevant units at HQ.
- Explore consideration on how to protect the relationship with the host government and the private sector when the Rockefeller Foundation is also engaging with these stakeholders.
- Explore how different country offices engage with the Rockefeller Foundation ecosystem like the FWGA (Fortified Whole Gran Alliance)
- If the RF were to grow the partnership with the WFP, in which areas is the WFP strong and in which is it weak? How could this be articulated? Are there areas where the WFP feels challenged and where the RF could find other partners?

5. ADVOCACY

Strategic area description

This area focuses on convening and influencing for better nutrition and healthy diets at the national and international levels, with an emphasis on institutional procurement.

Priority question

5. Which specific advocacy approaches are working well for systems change and which do not? And why?

Lead inquiries (*Leads*)

5.1 To what extent and how does the current engagement strategy effectively influence government and other relevant actors?

5.2 How can the Rockefeller Fund act as a catalyst for change to influence policy at the national level?

Scope

Some specific aspects that lead inquiry 5.1 will include are as follows:

- Look into how project countries have advocated to joining the Schools Meals Coalition (SMC)
- Explore what government systems require in order to understand and track school meal quality – putting the focus on how WFP can contribute to that.
- Explore what it takes to influence the government to expand or improve school meals? Is it just data or political incentives, for example through fundraising and sustainable financing? What does it take to get the government to commit to school meals?

The scope of lead inquiry 5.2 will address.

- Whether and how the project is generating enough evidence to influencing policy.

6. GENDER LENS

This question incorporates the gender lens and runs through the five strategic areas. The WFP-RF project places a high priority on gender equality. The original proposal states that the project will be articulated through a gender lens seeking to challenge and overcome socioeconomic, cultural, and political barriers to girls' education and women's economic empowerment in order to further the intended goals.

Similarly, the proposal stresses that ensuring that the project is gender transformative will be one of the measures of the project's success. In addition, gender equality was an issue that was reflected in both selected priority questions (including those that were voted the most) and questions on all countries. For these reasons, it was felt that a cross-cutting question on gender equality was essential.

Priority question

6. To what extent and how is the programme integrating gender-responsive and gender-transformative measures/elements?

Lead inquiries (*Leads*)

6.1 What are the enabling and inhibiting factors playing a role in incorporating a gender lens, and what could be done to enhance the possibilities of success?

6.2 To what extent and how is the project affecting women's economic empowerment in a way that shifts the unequal gender dynamics in their households and communities?

Scope

This question will revolve around two aspects that emerged in the workshop:

- How is the project addressing gender inequality.
- How can WFP make this partnership gender transformative.

The gender-specific questions for each country presented in Chapter 2 (see Exhibit 4) serve as a starting point to examine whether gender equality issues are being considered in the design and implementation of project activities. The project's overarching theory of change (June 2023) specifies the gender-responsive and gender-transformative nature of the outputs and immediate, intermediate, and long-term outcomes. The evaluation will also address this as information on outputs and outcomes becomes available.

Other aspects addressed within the scope of this question include exploring:

- Whether and to what extent producing more income and livelihood opportunities to women implies that women have more economic empowerment
- Whether and how the project is developing any innovations in gender equality approaches (gender-responsive and gender-transformative)

Other specific aspects we will focus on are:

- Whether and how SBCC approaches developed within the project are empowering female food producers or transformers.

Whether the supported value chains are inclusive of fortified foods (whole grain) in a way that prioritizes the nutritional needs of girls / adolescents using SBP.

Annex 4. Secondary documents reviewed[1]

Benin

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Benin Country Office. (2023, November 8). Benin progress and planning update.

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Project Team Benin. (2024, June). Landscape analysis of Benin' s school feeding environment.

Project Team Benin. (2024, May). Baseline study and formative research for the development of a social and behavioral change communication strategy for improving nutrition in school feeding programs (Final version).

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Project Team Benin. (2024, May). Revue synthèse genre et chaînes de valeur agricoles du riz et du maïs au Bénin [Summary review of gender and agricultural value chains for rice and maize in Benin].

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TRT Afrika. (2024, May). Women' s land rights: How an NGO is breaking barriers in Benin. https://trtafrika.com/insight/womens-land-rights-how-an-ngo-is-breaking-barriers-in-benin-18106140

WFP. (2019, November). Local and regional food procurement policy. https://executiveboard.wfp.org/document_download/WFP-0000108552

WFP. (2022, April). Sustainable Financing Initiative for School Health and Nutrition (SFI): School meals financing rapid assessment - Benin. https://educationcommission.org/wp-content/uploads/2022/12/SFI-Country-Case-Study-Benin-April-2022.pdf

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World Food Programme (WFP) and SNV, 2023. Feasibility Study on School Milk Sourced from Dairy Cooperatives. April 2023.

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World Food Programme (WFP), 2023. Burundi Country Office on Supply Chain – Cash Based Transfer Recommendations. January 2023.
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Ghana

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Annex 5. Stakeholders interviewed[2]

Benin

Interviewees	# and gender	Relevant strategic learning questions
Country Office management meeting Country Director, DCD Head of Programme, WFP-RF project component managers, food technologist, and nutrition specialist.	6 (3 female)	Partnerships, sustainability, and gender equality.
Removed to protect personally identifiable information **(WFP CO)**	1 female	Partnerships, sustainability, local economies, and advocacy.
Country office operational Team meeting. Group discussion with gender specialist, the food technologist (and coordinator of field level project activities), and the partnerships and innovation specialist.	3 (2 female)	Partnerships, sustainability, local economies, gender equality, advocacy, and SBCC.
Removed to protect personally identifiable information **(SFP Team)**	1	Sustainability (climate change aspects) and partnerships.
Removed to protect personally identifiable information **(WFP CO)**	1 female	Partnerships, sustainability, local economies, SBCC, advocacy and gender equality.
Removed to protect personally identifiable information **(WFP CO)**	1	Gender equality, partnerships, local economies and sustainability.
Removed to protect personally identifiable information	1 female	Sustainability, partnerships, and gender equality.
Removed to protect personally identifiable information **(WFP CO)**	2 (1 female)	Partnerships, sustainability, local economies, and advocacy.
Removed to protect personally identifiable information **(WFP CO)**	1 female	Partnerships, sustainability, local economies, SBCC, advocacy and gender equality.
Removed to protect personally identifiable information **(WFP CO)**	1	Sustainability, SBCC, partnerships and local economies.
Supply Chain team - group discussion	2 (1 female)	Partnerships, sustainability and local economies.
Sub-Office staff - WFP warehouse in Bohicon. Visit to the warehouse and group discussion	5 (3 female)	Partnerships, sustainability, local economies, and gender equality.
Strategic Partnerships (Partnership Division) – *Removed to protect personally identifiable information* **(WFP)**	1 female	Partnerships, sustainability, local economies, and advocacy.
Removed to protect personally identifiable	1 female	Sustainability, partnerships, local

[2] WFP. 2025. Scoping Document Addendum, revised February 2025

information **(WFP CO)**		economies, gender equality and advocacy.
University of Abomey-Calavi - Faculty of Agriculture	2	Partnerships, sustainability, local economies, and SBCC.
National University of Agriculture - Food Science and Nutrition	1 female	Partnerships, sustainability, local economies, and SBCC.
International Fertilizer Development Center (IFDC)	2 (1 female)	Local economies, gender equality, partnership, and sustainability.
Ministry of Agriculture, Livestock and Fisheries (MAEP) - CT-SAGSA	3	Local economies, partnerships and sustainability.
Ministry of Agriculture, Livestock and Fisheries (MAEP) - Cellule Technique Genre et Environnement	2	Gender equality, local economies, sustainability and partnerships.
L'Association Nationale des Femmes Entrepreneures Agricoles (ANaFEA) (The National Association of Women Agricultural Entrepreneurs)	2 (female)	Gender equality, local economies, partnerships and sustainability.
Secrétariat Permanent du Conseil de l'Alimentation et de la Nutrition (SP-CAN) **(**Permanent Secretariat of the Food Council and Nutrition) – Group discussion	2	Partnerships and sustainability.
CCPM Klouekanme – Smallholder Farmers organization – cowpeas and maize supplier. Visit to the facilities and group discussion with representatives of the Union of cooperatives.	7 (4 female)	Local economies, gender equality, partnerships, and sustainability.
ESOP Lalo – rice processor (Visit of the premises and interviews	2 (1 female)	Local economies, partnerships, sustainability and gender equality.
CCER Dassa - Parboiled rice processing Cooperative – group discussions with representatives of the cooperative	4 (2 female)	Local economies, gender equality, partnership and sustainability.
GAIN – Beinin Office (The Global Alliance for Improved Nutrition – group interview with three representatives of the food fortification team	3 (1 female)	Partnerships, sustainability, and advocacy.
Netherlands Embassy	2 (1 female)	Partnerships, sustainability, advocacy, and gender equality.

Burundi

Interviewees	# and gender	Relevant strategic learning questions
National School Feeding Programme (Ministry of Education)	1	Partnerships, sustainability, local economies, advocacy, SBCC and gender equality.
Removed to protect personally identifiable information **(WFP CO)**	1	Partnerships, sustainability, local economies, advocacy and gender

		equality.
Country Office Team meeting. Three-hour group discussion with WFP-RF Project Coordinator School Feeding Programme Manager, School Feeding Programme Policy Officer (WFP CO), Head of Nutrition and Nutrition Officer, Head of Bujumbura Field Office, Field Officer, Supply chain and Food and Quality Standards officer, M&E Officer, Head of external partnerships and communications, Partnerships Officer, Head of Procurement, Pantsav project coordinator, and Social protection and gender focal point.	14 (6 female)	Partnerships, sustainability, gender equality, local economies, advocacy and SBCC.
Ministry of Commerce and Tourism	1	Partnerships, sustainability and local economies.
Ministry of Trade and Industry –	1	Partnerships, sustainability and local economies.
Ministry of Agriculture and Environment – *Removed to protect personally identifiable information*	2	Partnerships, sustainability, and local economies.
Ministry of Health	1	Partnerships, sustainability, local economies, and gender equality.
Ministry of National Solidarity, Social Affairs, Human Rights, and Gender	1	Gender equality, partnerships and local economies.
Unikorn (Milling company) – Meeting with the Management and operational staff visit to the premises.	3 (2 female)	Sustainability, partnerships, local economies, and gender equality.
BFF (Milling company) – meeting Management and operational staff– visit to the premises.	4 (4 female)	Sustainability, partnerships, local economies, and gender equality.
Rukaramu Primary School – visit to the premises**. Meeting with school management** (2) **teachers** (2 teachers), **and school staff** (two cooks)**.**	6 (4 female)	Sustainability, partnerships, gender equality and local economies.
AFD (France Development Agency)	1	Partnerships, sustainability, and gender equality.
Meeting with implementation partners (two-hour joint discussion): **World Vision, International Livestock Research Institute (ILRI), Enko Fund, SNV Burundi, CAPAD (Local Producers Federation), and Welthungerhilfe (WHH)**	6 (1 female)	Partnerships, sustainability, local economies, advocacy, SBCC and gender equality.
Removed to protect personally identifiable information **(WFP CO)**	1	Sustainability, local economies, partnerships, and advocacy.
Dutch Development Agency	2	Partnerships, sustainability and local economies.
Removed to protect personally identifiable information **(WFP CO)**	1	Sustainability, local economies, partnerships, and advocacy.

Removed to protect personally identifiable information	1 (Female)	Sustainability, partnerships and local economies.
Secretariat Executif Permanent de la Plataforme Multisectorielle de Securité Alimentaire et Nutrition (PMSAN)	1	Sustainability, local economies, advocacy, gender equality and partnerships.
Removed to protect personally identifiable information **WFP CO**	1	Sustainability, local economies, advocacy, gender equality and partnerships.

Ghana

Interviewees	# and gender	Relevant strategic learning questions
Removed to protect personally identifiable information **(WFP CO)**	2 (female)	Partnerships and sustainability.
UNICEF – *Removed to protect personally identifiable information* **(Ghana Office)**	1	Sustainability, partnerships, local economies and advocacy.
Country Office Team meeting (group discussion with the WFP-RF Project team) – Deputy CD, Head of Nutrition Unit, Project coordinator, Nutritionist, Communication and knowledge management office, M&E officer, Food technologist, Gender officer, and Budget and programme unit officer.	9 (6 female)	Partnerships, sustainability, gender equality, local economies, SBCC and advocacy.
Ghana Education Service (GES) (School Health Education Program Coordinator, School health education and nutrition officer; Food supply and nutrition education officer; Water, sanitation and hygiene in schools officer; HIV/AIDs officer)	5 (4 female)	Partnerships, sustainability, gender equality, local economies and SBCC.
Women in Agricultural Development (WIAD) Directorate at the Ministry of Food and Agriculture (MOFA)	4 (3 female)	Partnerships, gender equality, sustainability, local economies, SBCC and advocacy.
National Food Buffer Stock Company (NAFCO)	1	Sustainability, partnerships, local economies, and advocacy.
Ghana School Feeding Program (GSFP) – Director and Team (Group meeting and discussion, including team presentations on project progress)	15 (? Female)	Partnerships, sustainability, local economies, gender equality, and SBCC.
Removed to protect personally identifiable information **(WFP CO)**	1	Partnerships and sustainability.
Removed to protect personally identifiable information **(WFP CO)**	1 (1 female)	Gender equality, local economies, partnerships, and sustainability.
Removed to protect personally identifiable information **(WFP CO)**	1 (1 female)	Sustainability, partnerships and local economies.
Ghana Health Service (GHS)	1 (1	Partnerships, sustainability, local

	female)	economies, gender equality and advocacy.
Association of Ghana Industries (AGI)	1	Sustainability, partnerships, local economies and advocacy.
Amsig Resources (Rice processing company)	1	Sustainability, partnerships, local economies, and gender equality.
Foods and Drugs Authority (FDA) – (Director of Food Registration and Applied Nutrition, the Head of the Research and Nutrition Department, and specialist on food registration and industry support services.)	3 (3 female)	Sustainability, partnerships, local economies, and advocacy.
University of Ghana	1	Sustainability, advocacy, partnerships, and local economies.
Savanna Agricultural Research Institute (SARI) – Research Unit (two lead researchers)	2	Local economies, sustainability, partnerships, gender equality, and advocacy,
Tolon District Assembly (District of Agriculture) – Group meetings with smallholder farmers (three rice farmers), three rice **parboilers and** three rice **aggregators** (including one marketer).	9 (6 female)	Local economies, gender equality, sustainability and partnerships.
Woribogu Kukuo Ahmadiya Primary School, Tolon - Meeting with the Head Teacher and the district coordinator and the School Health Education Programme (SHEP) Coordinator. Also, group discussion with members of the School Management Committee.	7 (3 female)	Partnerships, sustainability, local economies and gender equality.
District Education Office (DEO), Tolon	3	Partnerships, sustainability and local economies.
Tolon Senior High School (SHS) – *Removed to protect personally identifiable information***. Also, group discussion with two matrons, three students and two teachers.**	8 (4 female)	Partnerships, sustainability, gender equality, local economies, and SBCC.
Caterer at a primary school (Tolon)	1 (1 female)	Sustainability, local economies, and gender equality.
Food and Beverage Association of Ghana (FABAG)	1	Sustainability, partnerships, local economies, and advocacy.

Honduras

Interviewees	# and gender	Relevant strategic learning questions
Country Office Project Team meeting (group discussion with the WFP-RF Project team) – project coordinator; project focal point for nutrition, SBC and gender; project focal point for	8 (5 female)	Sustainability, partnerships, local economies, gender equality, SBCC, and advocacy.

SAMS and FSQ; Senior Programme Monitoring Associate-Research, Assessment, Monitoring (RAM); Head of field office (Choluteca); project field nutritionist, and project field monitor.		
WFP CO *Removed to protect personally identifiable information*	1 female	Sustainability, partnerships, local economies, and advocacy.
WFP CO *Removed to protect personally identifiable information*	1 female	Partnerships, sustainability, and SBCC.
WFP CO *Removed to protect personally identifiable information*	1 female	Gender equality, SBCC, sustainability, and partnerships.
WFP CO *Removed to protect personally identifiable information* **Project focal point for SAMS and FSQ.**	1	Sustainability, partnerships, local economies, gender equality, SBCC, and advocacy.
ADEPES (Pespirense Development Association) - Implementing partner (milk pilot, Choluteca Department) and **AGAAPES** (Pespire Cattlemen's and Farmers' Association). Group meeting with the technical staff and management.	3	Sustainability, partnerships, local economies, and gender equality.
JOGAPES (Young People Organized by the Pespire Livestock Farm) – organization running the dairy processing plant. Plant visit and group discussion with the management team.	4 (3 female)	Local economies, partnership, sustainability, and gender equality.
Gustavo Simón Nuñez Primary School (Mala Laja community, Pespire municipality) – school visit and discussions with students, teachers and cooks. Also, group meeting with School Feeding Committee members, including parents.	4 management (2 female) 7 parents (5 female)	Sustainability, partnerships, SBCC, gender equality, and local economies.
República de Honduras Primary School (El Rebalse community, San Antonio de Flores Municipality) - school visit and discussions with students, teachers and cooks. Also, group meeting with School Feeding Committee members, including parents and a representative of the Education department of the Municipality.	2 management (1 female) 5 parents (3 female)	Sustainability, partnerships, SBCC, gender equality, and local economies.
District directors of education of the four municipalities of Northen Choluteca involved in the project (Pespire, San José, San Antonio de Flores y San Isidro)	3	Sustainability, partnerships, local economies, gender equality, and SBCC.
Interview with small livestock farmers (Rancho Paso Lindo) – Milk supplier to the dairy processing plant.	2 (1 female)	Local economies, partnerships, sustainability, and gender equality.
Interview with small livestock farmers (Rancho La Flor) – Milk supplier to the dairy	2 (1 female)	Local economies, partnerships, sustainability, and gender equality.

processing plant.		
ASOPROGRABT (Brisas de Talgua Association of Basic Grain Producers) – Visit to the facilities and interviews	2	Partnerships, sustainability, local economies, and gender equality.
PROLANCHO FOUNDATION (Foundation for the Integral Development of the Department of Olancho) – Implementing partner. Interview with three members of the management team.	3	Partnerships, sustainability, local economies, and gender equality.
Interview with a small-scale (biofortified) bean producer, including a visit to the cultivation plot.	1	Local economies, partnerships, sustainability and gender equality.
WFP CO *Removed to protect personally identifiable information*	1	Local economies, partnerships, sustainability, gender equality and SBCC.
WFP CO *Removed to protect personally identifiable information*	1 female	SBCC, gender equality, partnerships, and sustainability.
National university of Agriculture (UNAG) – Group meeting	4	Partnerships, local economies, sustainability and gender equality.
National School Feeding Programme (PNAE – Programa Nacional de Alimentación Escolar), **Ministry of Social Development** (SEDESOL – Secretaría de Desarrollo Social)	2 (female)	Sustainability, partnerships, advocacy, local economies, and gender equality.
Ministry of Education (SEDUC – Secretaría de Educación) and telephone conversation with the **School Infrastructure Unit** (SEDUC)	2 (female)	Sustainability, partnerships, advocacy, and gender equality.

India

Interviewees	# and gender	Relevant strategic learning questions
WFP CO *Removed to protect personally identifiable information*	1 (female)	Partnerships, sustainability, advocacy and gender equality.
WFP CO *Removed to protect personally identifiable information* Technical lead on all interventions related to nutrition and school feeding.	1 (1 female)	Sustainability, partnerships, advocacy,
WFP CO *Removed to protect personally identifiable information* **- Technical expert at the CO for School Feeding initiatives of the project** (including the Nutri Garden initiative and the PM Poshan menu mapping)	1	Sustainability, partnerships, advocacy,
WFP CO *Removed to protect personally identifiable information*	1 (1 female)	Sustainability, partnerships, SBCC and advocacy,
Removed to protect personally identifiable information **India CO** for all awareness campaigns under rice fortification and School Nutri Garden initiatives.	1 (1 female)	SBCC, partnerships, sustainability and gender equality.

Rice fortification expert – Bihar State Government	1 (1 female)	Sustainability, partnerships, SBCC and advocacy.
School Nutrition Garden expert in State Government (Rajasthan), and WFP representative Rajasthan.	2	Sustainability, partnerships, advocacy and SBCC.
Removed to protect personally identifiable information **India CO**	1 (1 female)	Sustainability, advocacy, partnerships and SBCC.
Removed to protect personally identifiable information **India CO**	2 (2 female)	Gender equality, SBCC, partnerships and sustainability.
Removed to protect personally identifiable information **India CO**	1 (1 female)	Sustainability, partnerships, gender equality, SBCC, and advocacy.
Removed to protect personally identifiable information **India CO**	1 (female)	Partnerships, sustainability, advocacy and gender equality.
Removed to protect personally identifiable information **India CO**	1	Partnerships, advocacy, and sustainability.

Rwanda

Interviewees	# and gender	Relevant strategic learning questions
WFP School feeding programme – *Removed to protect personally identifiable information*	1 female	Partnerships, sustainability, local economies, and gender equality.
Removed to protect personally identifiable information **(WFP CO)**	2 (females)	Partnerships, sustainability, local economies, and gender equality.
Removed to protect personally identifiable information **(WFP CO)**	1	Local economies, sustainability, partnerships (gov't), and gender equality.
Removed to protect personally identifiable information **(WFP CO)**	1	Local economies, sustainability, partnerships (gov't), and gender equality.
Removed to protect personally identifiable information **(WFP CO)**	2	Local economies, sustainability, gender equality, partnerships
Vanguard Economics *Removed to protect personally identifiable information*	3 (2 female)	Partnerships, local economies, sustainability and gender equality.
Minimex (Milling company) – Management and operational staff (visit to the premises, interview with the Head Miller and exchanges	1 female	Sustainability, partnerships, local economies, and gender equality.

with operational staff)		
Primary School - field visit – group interview with the school management; interview with teachers, and exchanges with school staff) **Gardens for health International Rwanda – group discussion with field staff**	3 (2 female)	Sustainability, local economies, gender equality and partnerships.
Kabiyaki farmers' Cooperative - group meeting with members of the cooperative, including CEO and management)	15 (12 female)	Local economies, gender equality, sustainability.
Program Manager - Fortified Wholegrain Initiative Rwanda (Fortified Wholegrain Alliance – FWGA)	1 female	Partnership, sustainability, local economies and gender equality.
Ministry of Education (MINEDUC) - HGSF project Specialist, Ministry of Education	1	Sustainability, partnerships, local economies and gender equality.
Removed to protect personally identifiable information **(WFP CO)**	1 female	Partnerships, sustainability, and gender equality.
WFP Smallholder Agriculture Market Support Team meeting	2	Local economies, sustainability, gender equality, and partnerships.
Removed to protect personally identifiable information **(WFP-CO)**	1 female	Gender equality and local economies.
Removed to protect personally identifiable information **(WFP CO)**	1 female	Sustainability, partnerships, and local economies.
Removed to protect personally identifiable information **(WFP CO)**	1 female	Partnerships.
The Rwanda Standards Board (RSB) *Removed to protect personally identifiable information*	1	Partnerships and sustainability.
Removed to protect personally identifiable information **(WFP CO)**	2	Sustainability, partnerships and local economies.
National Child Development Agency (NCDA) - interview with two representatives of the Nutrition and Hygiene Department- Programme coordinators	2 (1 female)	Partnerships, sustainability, local economies.

Annex 6. Methodology

Developmental Evaluation Principles

Developmental Evaluation is a principle-based approach. The co-design phase of the evaluation was guided by the eight principles of Developmental Evaluation, which will also guide the subsequent phases.[3] The application of these principles ensures methodological and conceptual rigor in the implementation of the developmental evaluation. However, there were limitations in the extent to which each criteria could be applied. The table below contains the definition of each principle and limitations in its application. Table 6 in section 1.4 explains how each principle was applied in this evaluation.

Principle 1	Description of the principle and considerations on its application
Developmental purpose	Illuminate, inform, and support what is being developed, by identifying the nature and patterns of development (innovation, adaptation, systems change), and the implications and consequences of those patterns.
Limitations Aspects of the partnership between Rockefeller and WFP hindered the ability of the projects to adapt. Namely, the organization of the partnership at the country office level as a donor-grantee relationship (see section 2.4 finding 20 for more details). There was a perception amongst stakeholders at the WFP country offices that project activities were pre-agreed and therefore could not be adapted, or that permission had to be requested from the donor to make adaptations beyond work plans. This perceived lack of flexibility limited the extent to which the evaluation served a developmental purpose.	

Principle 2	Description of the principle and considerations on its application
Evaluation rigor	Ask probing evaluation questions; think and engage evaluatively; question assumptions; apply evaluation logic; use appropriate methods; and stay empirically grounded - that is, rigorously gather, interpret, and report data.
Limitations After the evaluation questions were first developed at the Nairobi workshop in September 2023, then adapted to their final form at the first SLC virtual meeting in November 2023, the language of the questions was not further adapted. Before each country mission, the developmental evaluators met with CO teams to better understand which of the strategic learning areas were most important to them and what they were interested in learning in relation to the questions. However, the language of the questions was not changed. As a result, some of the questions and lead inquiries are unanswered or partially answered as other aspects of the topic area were considered more useful and were, therefore, prioritized. The lack of documented updates to the questions limits the ability to assess whether learning needs were met as they evolved. The methodology for answering the learning questions relied primarily on a review of available secondary documents, interviews, and group discussions with various stakeholders. The limited breadth of sources included allowed for shorter time between data collection and feedback loops, but it also limited the extent to which findings could be triangulated in this report. Most results reported are based on the perceptions of stakeholders interviewed. Where adaptations and learning are described in response to each question, this information was self-reported by country offices and was not triangulated through secondary document review or observation. While findings were validated at country and SLC workshops, the lack of secondary data creates a risk of self-reinforcing bias, where perceptions are gathered from stakeholders and presented back to them, who then reconfirm their perceptions. This was mitigated by including the auxiliary evaluator at the reporting stage and by collecting data from various stakeholder groups in each country office (see Annex 5 for more details).	

[3] Phases of Developmental Evaluation are Planning; Co -Design, Evidence Gathering, Global Sense-making and Reporting.

Principle 3	Description of the principle and considerations on its application
Utilization-focused	Focus on intended use by intended users from beginning to end, facilitating the evaluation process to ensure utility and actual use.

Limitations

The large number and variety of learners created trade-offs in terms of whose learning needs were prioritized in data collection, analysis, and reporting. COs were prioritized as the primary learners, which limited adaptation at global and regional level within the timeframe of this evaluation. Due to time constraints and the number of COs, some countries were not engaged through data collection and in-person missions until late in the project's implementation, which limited their ability to use findings within project timelines. There was no evidence of adaptations made by certain stakeholders within the learning community. The advanced stage of the project in certain countries, the timing of the developmental evaluation mission towards the end of the programme, and the perception that context limited the extent to which certain countries could learn from others may have contributed to the lack of adaptation in some contexts. Despite the lack of evidence of instrumental use for some stakeholders, all stakeholders reported learning from the evaluation process (see 'learning and adaptation' sections for more details).

Principle 4	Description of the principle and considerations on its application
Innovation niche	Elucidate how the change process and results being evaluated involve innovation and adaptation, the niche of developmental evaluation.

Limitations

The short time frame of the project and number of stakeholders limited the evaluators' ability to continue to engage with country offices following country missions and initial feedback loops. In order to collect data in all countries and produce country-level deliverables, evaluators did not have the time to return to previous countries for in-person engagements to follow-up on the implementation of adaptations – this represented a trade-off. The large geographic scope of the project with users in multiple time-zones also limited CO engagement in strategic learning community discussions. While two COs shared updates on the progress of their adaptations at more than one learning community meeting, other COs were only able to present initial insights, which may have limited the understanding of innovation and adaptation. These limitations hindered the ability of the developmental evaluation to serve an innovation purpose.

Principle 5	Description of the principle and considerations on its application
Complexity perspective	Understand and interpret development through the lens of complexity and conduct the evaluation accordingly. This means using complexity premises and dynamics to make sense of the problems being addressed; to guide innovation, adaptation, and systems change strategies; to interpret what is developed; to adapt the evaluation design as needed; and to analyze emergent findings.

Limitations

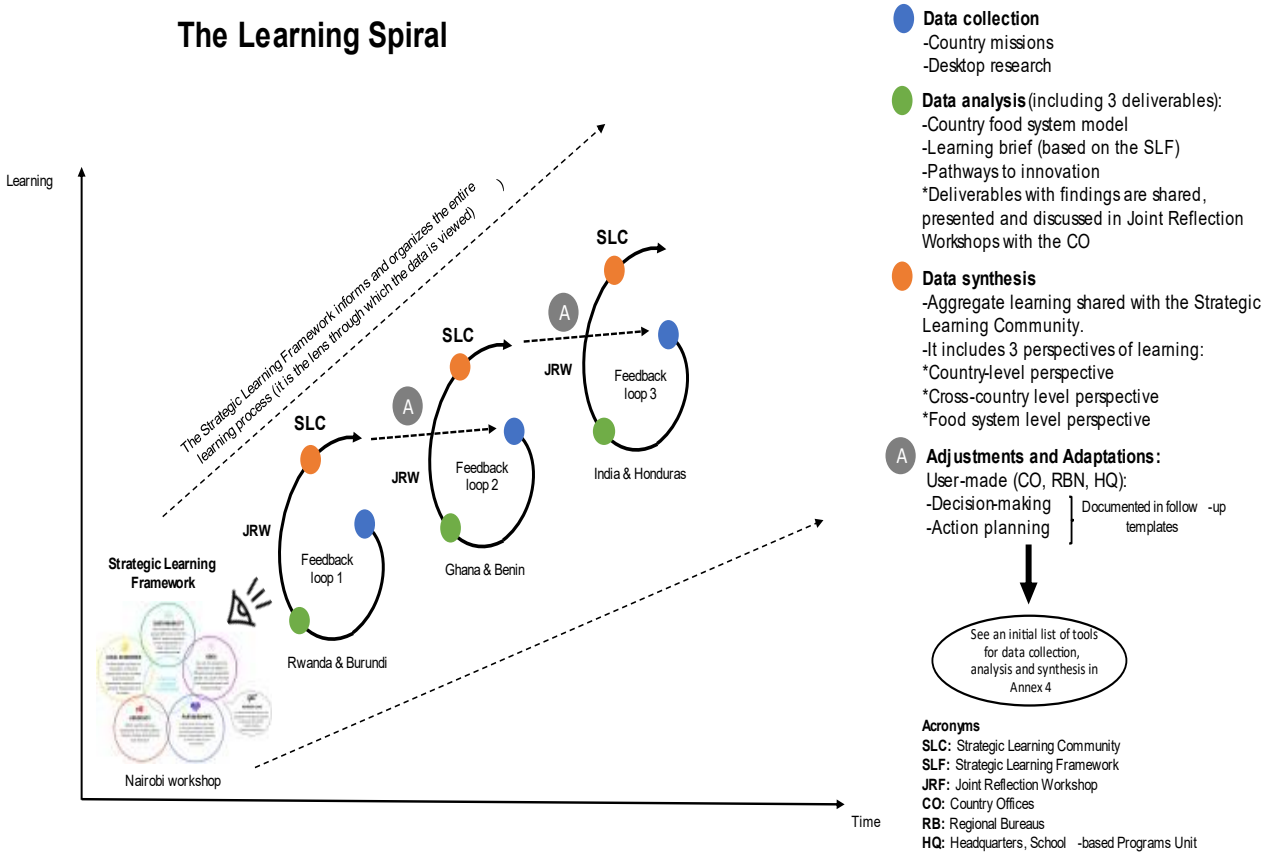
Dilemmas and trade-offs raised during the evaluation were often only discussed with the evaluators at initial feedback meetings on the final day of evaluation missions, during a subsequent call when country deliverables were introduced, and to a limited extent, during the SLC meetings. This limited the evaluation's ability to capture how these dilemmas were addressed, support next steps and adaptations, and to capture learning from how dilemmas and questions were resolved.

Principle 6	Description of the principle and considerations on its application
Systems thinking	Think systematically throughout, being attentive to interrelationships, perspectives, boundaries, and other key aspects of the social system and content within which the innovation is being developed and the evaluation is being conducted.
Limitations The short timeframe of the evaluation and limited time spent gathering data in each country (one week each) limited the ability of the evaluation to more completely capture the dynamics of the system in each context.	

Principle 7	Description of the principle and considerations on its application
Co-creation	Develop the innovation and evaluation together Interwoven, interdependent, iterative, and co-created - so that developmental evaluation becomes part of the change process.
Limitations The developmental evaluation occurred at a time of organizational change including a restructuring process at HQ and regional level and later reductions in organizational funding which affected country office capacity. Contextual challenges, such as a rapid transfer of the school feeding programme to the government in Benin and changes in leadership in the WFP Burundi CO, also affected the extent to which stakeholders from different country offices engaged in the learning community throughout the developmental evaluation – especially after their specific country mission had ended. Competing priorities at the country office also made continued engagement challenging.	

Principle 8	Description of the principle and considerations on its application
Timely feedback	Time feedback to inform ongoing adaptation as needs, findings, and insights emerge, rather than only at predetermined times (e.g., quarterly, or at midterm and end of project)
Limitations While deliverables were meant to be shared immediately after missions with subsequent workshops providing a timely feedback opportunity, challenges including CO staff availability, evaluator availability, and quality assurance of the country deliverables led to 3-4 month gaps between missions and these feedback loops. More information on the timing of missions and feedback workshops is included in the table below. Additionally, the short duration of the project limited learning community members' ability to implement changes, although there is anecdotal evidence that learning may influence future projects (see "learning and adaptation" in the findings for more details). Apart from the decision to conduct Burundi and Rwanda visits first, mission timing was based on logistical feasibility rather than on upcoming key decisions at the country office level, which limited the evaluation's ability to adhere to this principle.	

This evaluation is grounded in the approach of learning and applying a principles-based model, as articulated by Dr. Michael Quinn Patton. The inquiry process is continuous throughout the evaluation and aims at gaining evidence-based insights and having important conversations that lead to decisions about how to adapt, evolve or improve the current intervention. The inquiry is guided by the Strategic Learning Framework, (see Annex 3) and ongoing data collection, analysis and synthesis aims to learn for adaptation, as illustrated in Figure 2.



Learning is at the core of this Developmental Evaluation. This evaluation was commissioned to meet organizational learning needs, by testing assumptions, generating evidence and analysis on which to base adaptations to the project and contributing to the global evidence base of food systems transformation.

The learning process in this evaluation comprises an iterative sequence of data collection, data analysis, data synthesis and sense-making. Figure 2 shows an upward learning spiral that illustrates how learning occurs and how cumulative learning is expected to develop. Data is collected in a continuous sequence of interconnected loops consisting of country missions and complementary evidence gathering (at global and regional levels) that serve as the basis for feedback loops. The feedback loops include the presentation and discussion of findings, which should lead to meaningful conversations and, ultimately, to adaptations in the project. Feedback loops with the Strategic Learning Community (SLC) will occur at least three times, in order to provide frequent touchpoints for learning and communication. As shown in Figure 2, the collection and analysis of evidence and the feedback loops are guided by the learning questions of the strategic learning framework (see annex 2), which is the frame of reference for generating learning.

Data collection, analysis, synthesis, and sense-making

This evaluation does not apply a traditional 'Evaluation Matrix', with indicators and progress markers mapped out ex-ante, since this opposes the 'developmental' nature of the evaluation.[4] Pre-prescribing data collection and analysis methods could compromise adaptation. In order to adapt to learning needs, data collection and analysis approaches were selected from an array of possible tools that will be applied as appropriate to answer the learning questions and respond to new insights. The rationale for the selection of tools and methods will be explained post-facto. As explained in Developmental Evaluation (Patton, 2011,

[4] Patton, MQ (2010) Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use New York: Guildford Press

page 288), "developmental evaluation is purpose-driven not methods driven" and evaluators should pick methods and tools that are appropriate to the situation and context and that provide meaningful, credible, practical and useful answers for the primary intended users. If stakeholders believe other methods are needed to properly capture information and generate learning, then data collection will be revisited. A description of qualitative data analysis tools is included in table 1 below.

Table 1: Qualitative data analysis methods

Key qualitative data analysis methods	Description
Evidence mapping	This tool consisted of determining the empirical evidence that had to be collected during the implementation of the pilot in the 12 selected pilot schools in Ghana, as well as the evidence that would not be collected, as a way of aligning expectations.
Review of project results against indicators and outputs	This tool was used in all countries to assess the degree of project implementation prior to conducting country visits.
Thematic analysis of "Knowledge Exchange" meeting notes	Cross-country learning topics were identified during the Nairobi workshop. Feedback notes were then developed on each topic, encouraging peer to peer learning.
Pattern analysis	Pattern analysis was used to analyze all primary secondary data gathered according to each of the SLQs. The analysis allowed for the identification of recurring themes and outliers within the evidence, and identification of key challenges (structural-, operational- and partnership-related).
Systems mapping	This tool was used to analyze the interrelationships between the different stakeholders in food value chains. It was combined with rich pictures and value chain information to look at the data from a food systems perspective. The mapping allowed the evaluation team to visually capture the complexity of food systems and made the complexity of food systems more accessible to evaluation stakeholders.
Value chain mapping and analysis	The food value chain is the network of stakeholders involved in growing, processing, and selling of food, from farm to table. A mapping of these networks was used to analyze the multiple interactions between different stakeholders in a particular country. It was used to inform food system models in five out of the six countries (not in India, where a case story was developed instead).
Leverage points	Leverage points are points in the food system where changes and improvements are already happening or could happen. Identifying leverage points helps to highlight early innovations that could be leveraged further by the WFP-RF project and inform discussions on further adjustments or adaptations.
Option analysis & horizon scanning	A combination of options analysis and horizon scanning was applied to the data analyzed by SLQ as part of developing the Pathway to Innovations deliverables. The analysis of the options made it possible to identify and analyze possible courses of action, solve challenges, resolve dilemmas and identify future pathways, taking timeframes into account (short-, medium- and long-term).
Process mapping and analysis	Process mapping was proposed as a tool to accompany the development of a market-focused business development strategy in Honduras (see Pathways to Innovation). In particular, it was proposed following a marketing process sequence, as the most widely used framework to assess market and business development opportunities.
Critical path analysis	The critical path method is a project management algorithm used to identify the sequence of dependent tasks (the "critical path") or questions required to complete a decision-making process. The evaluation took the essence of this method and adapted it to propose a joint analysis of critical external factors, alliances and gaps in Ghana and Benin. In both case the tool was applied to the possible pathways forward presented in the Pathway to Innovation documents.

Strategic learning sessions that included process analysis and adaptative decisions	The Strategic Learning sessions conducted within the Strategic Learning Community meetings were used to facilitate the discussion of the findings, including the analysis of the iterative process of aggregated findings and the facilitation of the discussion on the potentially useful decisions to adjust/adapt the project for the betterment of its implementation.
Reflective inquiry	The "what, so what, now what" framework for reflective inquiry was used a method to generate reflection and learning. This framework was used in in-country joint debriefing sessions, in remote joint reflection workshops and in strategic learning community workshops.
Storytelling & sensemaking	Storytelling and sense making are particularly useful tools for agreeing on collective meaning and contributions to systems change. The tools were used to develop the India case story.
Agile methodology	The agile methodology is useful for working with responsive pilots as it enables fast, effective and highly collaborative ways of working in complex and challenging environments. It was used in Rwanda and in Benin to structure elements of the pathways to innovation. It was particularly applicable in Benin, where the CO were under time pressure to implement the pilots before the end of the WFP-RF project while simultaneously transferring management of the school feeding programme to the government.

Data collection

Country missions were used as the main source of primary data when collecting evidence, but also existing M&E products, relevant research and studies, and evidence from global and regional sources (conferences, papers, relevant summits, and briefings). The collection of secondary evidence from regional and global sources will be ongoing throughout the evaluation.

The order and timing of the country missions was decided in collaboration with the evaluation managers and the country offices based on:

- Timing of upcoming project decisions or project implementation milestones
- Availability of the country office
- Timing of the feedback loops

Table 2 outlines the phases of a country visit. Fieldwork agendas for each country mission are included in Annex 10. After the country visit, the Developmental Evaluators produced a set of deliverables based on the situation of the project in the country and following a utilization-focused approach. The deliverables were linked to both the questions of the Strategic Learning Framework and the decision-making needs of the country office.

Data collection methods included observation, key informant interviews, semi-structured group discussion, and desk study. A list of key stakeholders interviewed or engaged in group discussion in each country is found in Annex 5. Secondary documents included in desk study for each country are found in Annex 4.

Table 2: Phases of a country visit

Visit scoping and contextualization
In this phase, the strategic learning framework (SLF) is grounded to the country visited and the learning questions are adapted to the reality of the country and the project (contextualization). The SLF questions to be included depend on two criteria: Relevance and feasibility. Whether the question is relevant to the country depends on the specifics of implementation and relationships with partners. If aspects of the SLF are not suitable, this will be discussed and agreed before the visit. Feasibility considerations include access to key informants and data and how realistic it is to answer the questions given the time constraints. The country office (CO) staff and the Dev Ev team will look at the SLF together, guided by two questions: *What can the CO visit contribute to addressing the SLF (strategic areas, priority questions, lead inquiries, and scope*)? And *what is the CO interested in – in terms of strategic areas, priority questions, lead inquiries, and scope*?

The scoping of the visit will take place in a series of remote meetings between the evaluation team and the country office. CO members of the Strategic Learning Community (SLC) will be invited to all meetings, and other CO members may join these planning meetings as desired. All decisions will be made jointly, according to the principle of co-creation. The result of this scoping should be clarity on the focus of the visit in terms of strategic areas and topics to be examined. This will be the basis for the selection of stakeholders to be met and the documentary evidence.

Evidence stocktaking

Based on the strategic learning areas and priority topics, an overview of the supporting documents is prepared in consultation with the country office. This phase involves examining what evidence is available, what evidence is missing and what data sources and data collection methods exist. The country office, with support of the evaluation managers, will gather a document library of relevant secondary materials and share this library with the evaluators prior to the country mission. At minimum, the secondary materials in the document library will include the following:

- Rockefeller country-specific proposal
- Country Strategic Plan
- WFP-RF project logframe
- Country-level project reports
- Past school feeding evaluations and studies
- Country-specific project Theory of Change

Country visit preparation

The output of the visit preparation is the mission agenda for the five-day visit. The country office develops a proposal for an initial list of stakeholders to serve as key informants based on the focus of the visit, which in turn is based on the Strategic Learning Framework. The initial stakeholder list will include:

- Members of the SLC in the Country Office
- Members of relevant government ministries
- Relevant members of the country office team including the Deputy Country Director, Country Director, Project Coordinator, M&E lead, school feeding lead, nutrition, supply chain, smallholder agricultural market support, procurement, gender, partnerships, and food safety and quality (others as determined by SLC)
- Representatives from the private sector such as millers, farmers including cooperatives, and caterers
- Representatives from schools
- Implementing partners (e.g. national and international NGOs, civil society organizations)
- Other stakeholders that the SLC members propose based on who they feel can provide relevant information on the Strategic Learning Questions such as other UN Agencies, donors and international organizations in the country

This initial proposal is refined through remote discussions between the country office and the Developmental Evaluators. Based on the stakeholders identified during these visits and the application of the strategic learning questions identified by the country office, the evaluators will design relevant tools and protocols to collect data. Tools and processes will be validated through discussion during virtual meetings prior to the visit, during the visit, and after the visit. Users will be consistently asked to validate findings and processes throughout the evaluation.

A "snowball" approach will be used during data collection discussions to identify other relevant stakeholders whose perspectives should also be captured beyond the stakeholder list prepared prior to the country visit. Interviewees will be asked during their interviews whether there is anyone else the evaluators should meet with to learn about the topics discussed. Through this approach, the evaluators reduce the likelihood that important voices are excluded. Following the country mission, further data collection sessions may still take

place to fill any gaps identified (i.e., further interviews, focus groups, etc.).

In addition to the list of stakeholders, the evaluators will also discuss with the country office how vulnerable groups can be identified and included in the evaluation process.

Unlike in a summative evaluation, the Evaluation Committee (EC) will not approve data collection tools prior to the data collection. To ensure oversight and transparency, the EC will have access to documentation of the methods used after the country visit. All users will have the opportunity to raise concerns about methods used during the feedback loops. Developmental evaluators will address these concerns by providing further explanation or re-visiting data collection, as needed.

In-country visit

During the visit to the country, the Dev Ev team will hold face-to-face meetings and group discussions with key informants and stakeholders. This will include meetings with WFP country teams, relevant ministries and government agencies, schools, the private sector, millers and caterers, NGOs, other UN agencies, and initiatives (such as the Scaling Up Nutrition (SUN) movement), as relevant. Country visits include a one-day field visit (to schools, cooperatives, millers) and a debriefing at the country office on the last day of the visit. The purpose of the field visit is to observe project implementation and collect data, provide the evaluators with a deeper understanding of the intervention, and spark country-specific insights. In country visits evaluators will follow ethical considerations, including privacy and protection from retaliation as explained in section 4 of this document. The precise data collection and analysis methods used will vary based on the insights and learning needs of each country context. Annex 4 outlines a menu of possible methods and how they may be applied through the different stages in the evaluation. Initial findings will be shared with Country Office stakeholders at a debrief meeting before the conclusion of the mission. This debrief meeting acts as the first point of validation of emerging takeaways.

If necessary, the Developmental Evaluators may conduct supplementary remote interviews with key informants who could not be interviewed during the country visit or with other key informants deemed relevant.

Data analysis methods used in each country mission.

Burundi and Rwanda

The methods used for data analysis and synthesis were pattern analysis and pattern identification, systems mapping, value chain analysis, creative tensions, leverage points, option analysis and horizon scanning.

We used pattern analysis to analyze all primary data (from interviews) and secondary data (from documents) gathered from the SLQ on local economies, sustainability, partnerships, gender equality, and advocacy. Pattern analysis involved identifying recurring themes and regularities in the data we collected through interviews (individual and group discussions), the study of documentation and field observations. In both countries, we identified patterns in relation to challenges, and we categorized them e.g., into structural challenges, operational challenges, partnership challenges.

Rationale: We used pattern analysis because it is a suitable tool for analysing qualitative data from different sources to identify commonalities and differences. This tool was appropriate for all strategic learning questions.

We combined systems mapping , rich pictures and value chain analysis to analyze and synthesize the data for the strategic learning questions on local economies and sustainability. We also used visualization techniques based on systems mapping and value chains to develop the food system model for each country - the document that presents the context overview. Systems mapping was used both in analyzing the data and in synthesizing it. Therefore, we decided to organize the findings in the food system model by country using a map.

Rationale: We considered systems mapping through rich pictures and value chain analysis to be appropriate

tools because they allow us to look at the data from a food systems perspective (which is a central feature of the project), in a complex context where the intervention focused on specific fortified commodities – hence the value chain approach. The systems mapping allows to include the many interconnected players in a complex system with their interactions. Due to the level of complexity of a food system, the systems mapping is an appropriate tools as it allows to visually capture this complexity. Furthermore, a rich picture is a systemic tool that allows to present the system mapping in a more visual, and therefore, amenable way. This brings greater clarity and allows sensemaking when analysing the many interconnected interactions among the stakeholders of the system.

In a similar vein, the value chain allows to bring order and greater clarity to the many interactions among different stakeholders, distinguishing which interactions happen at the supply side and the demand side of the value chain, respectively.

Whereas the gender equality, advocacy, and partnerships questions did not have the same systematic characteristics, so this analysis approach was not appropriate for the other questions.

We have used creative tensions to identify different perspectives that generate positive tensions between vision and reality. We mainly used this tool when examining data on partnerships.

Rationale: Creative tensions, together with the concept of system boundaries, helped us identify dilemmas across all the areas of the SLQ. Dilemmas are often a way complexity expresses itself in a system, exposing a conflict or tension that describes a systemic behavior. By turning these tensions into creative tensions, the system visualizes a way forward, which is helpful in order to identify pathways or leverage points as potential solutions.

We used the systems thinking concept of leverage points and combined it with horizon scanning.

Rationale: When carrying out the pattern analysis we looked for leverage points as points in the food system model where changes and improvements were already taking place. Leverage points represent trending early innovations that could be leveraged by the WFP-RF project intervention. Horizon scanning is a technique suitable for identifying trends in early innovations, as it is a method for detecting early signs of potentially important developments. Leverage points are not straightforward solutions to a problem or challenge, but rather emerging properties of a complex system that might, eventually and in due course, become beneficial for addressing the problems and challenges of such system.

When drafting the Pathway to Innovations deliverable, we applied a combination of options analysis and horizon scanning to the data we had analyzed by SLQ.

The analysis of the options made it possible to identify courses of action and identify paths into the future, taking into account a time perspective (short, medium and long term). The combination of options analysis and horizon scanning enabled the identification of entry points, such as agile methods in Rwanda or a cluster approach and portfolio sense-making in Burundi (both included in the Pathways to Innovation)

Rationale: we have used option analysis and horizon scanning because they enable us to anticipate possible courses of action (opportunities) to solve current challenges and dilemmas. As the pathways to innovation is a forward-looking learning document, these approaches were appropriate for its purpose.

When analyzing the data we used triangulation, as planned. We triangulated data from different sources and with different data collection methods, i.e. we compared evidence and perspectives from informants, individual and group discussions, documents and factual records.

We took advantage of the fact that the two evaluators were present at most of the interviews and group discussions to cross-check and validate notes, facts and interpretations.

In terms of triangulation, we compared the primary qualitative data collected through interviews with secondary data (from documentary sources). In addition, the accuracy of the data was checked by the country office staff at two points in time: when the preliminary findings were presented at the end of the country mission and after the country office staff had read and checked the three deliverables presented.

Benin and Ghana

The methods used for data analysis and synthesis were pattern analysis and pattern identification, systems

mapping, value chain analysis, dilemmas, critical path analysis, leverage points, horizon scanning and the agile methodology.

We used pattern analysis to analyze all primary data (from interviews) and secondary data (from documents) gathered from the SLQ on local economies, sustainability, partnerships, gender equality, and advocacy. Pattern analysis involved identifying recurring themes and regularities in the data we collected through interviews (individual and group discussions), the study of documentation and field observations. In both countries, we identified patterns in relation to challenges, and we categorized them into contextual challenges and gaps. Gaps are missing aspects across the value chain that hinder the overall capacity of the WFP-RF project to deliver its expected results.

Rationale: We used pattern analysis because it is a suitable tool for analysing qualitative data from different sources to identify commonalities and differences. This tool was appropriate for all strategic learning questions.

We combined systems mapping , rich pictures and value chain analysis to analyze and synthesize the data for the strategic learning questions on local economies and sustainability. We also used visualization techniques based on systems mapping and value chains to develop the food system model for each country - the document that presents the context overview. Systems mapping was used both in analyzing the data and in synthesizing it. Therefore, we decided to organize the findings in the food system model by country using a map.

Rationale: We considered systems mapping through rich pictures and value chain analysis to be appropriate tools because they allow us to look at the data from a food systems perspective (which is a central feature of the project), in a complex context where the intervention focused on specific fortified commodities – hence the value chain approach. The systems mapping allows to include the many interconnected players in a complex system with their interactions. Due to the level of complexity of a food system, the systems mapping is an appropriate tools as it allows to visually capture this complexity. Furthermore, a rich picture is a systemic tool that allows to present the system mapping in a more visual, and therefore, amenable way. This brings greater clarity and allows sensemaking when analysing the many interconnected interactions among the stakeholders of the system.

We also used dilemmas, a tool of systems thinking, to identify and examine tensions, trade-offs and contradictions within complex systems (https://thesystemsthinker.com/entry-points-to-modeling-listening-for-dilemmas/).

Rationale: We used dilemmas in the Ghanaian food system model to identify seemingly contradictory issues that can create doubt and confusion about what strategic choices can be made to move forward. The dilemmas also helped us to identify future challenges or unintended consequences in the medium term. The use of dilemmas is appropriate when complex systems behave in seemingly contradictory ways. As this was the case in Ghana’s food system model, we decided to use this tool to raise awareness of the dilemmas, of the complexity of the system, and for finding ways forward.

We used the systems thinking concept of leverage points and combined it with horizon scanning.

Rationale: When carrying out the pattern analysis we looked for leverage points as points in the food system model where changes and improvements were already taking place. Leverage points represent trending early innovations that could be leveraged by the WFP-RF project intervention. Horizon scanning is a technique suitable for identifying trends in early innovations, as it is a method for detecting early signs of potentially important developments. Leverage points are not straightforward solutions to a problem or challenge, but rather emerging properties of a complex system that might, eventually and in due course, become beneficial for addressing the problems and challenges of such system.

In developing the "Pathway to Innovations", we have applied the critical path method (algorithm) to the possible pathways forward we have identified.

The critical path method is a quite simple project management algorithm used to identify the sequence of dependent tasks (the "critical path") or questions required to complete a decision-making process. We have taken the essence of this method and adapted it to propose a joint analysis of critical external factors, alliances and gaps in Ghana and propose the development of a critical path for pilot project design and

implementation and a critical path for agile pilots in Benin. These suggestions are contained in the document Pathways to Innovation.

The agile methodology was also used in Benin to structure one of the pathways to innovation. This path includes a section on how to work with agile pilots that enable fast, effective and highly collaborative ways of working in complex and challenging environments.

Rationale: We used an adaptation of the critical path methodology/algorithm to structure a collaborative inquiry for the country office to accelerate the implementation of the pilots. We suggested agile methodology as it includes elements suitable for the situation in which Benin had to implement the pilots before the end of the WFP-RF project, under time pressure and in a particularly challenging context (transfer of the school feeding programme to the government).

As in Rwanda and Burundi, when analyzing the data in Ghana and Benin we used triangulation. We triangulated data from different sources and with different data collection methods, i.e. we compared evidence and perspectives from informants, individual and group discussions, documents and factual records.

We took advantage of the fact that the two evaluators were present at most of the interviews and group discussions to cross-check and validate notes, facts and interpretations.

In terms of triangulation, we compared the primary qualitative data collected through interviews with secondary data (from documentary sources). In addition, the accuracy of the data was checked by the country office staff at two points in time: when the preliminary findings were presented at the end of the country mission and after the country office staff had read and checked the three deliverables presented.

Joint reflection and feedback loops

Following the country mission, the three deliverables were shared with the country office. This included an introductory meeting in which the Developmental Evaluators presented the deliverables, following which the documents were disseminated for stakeholders' consideration and discussion. Once the deliverables were reviewed, a joint reflection meeting was held between the office staff and the Developmental Evaluators. The aim of this session is to continue the exchange that began during the debriefing of the country visit and to incorporate the three deliverables of the Developmental Evaluators into the discussion.

Feedback loops are strategic learning sessions. The aim is to reflect together in a safe space on predefined strategic learning questions in order to draw lessons, derive good practices and generate learning that feeds into decision making processes and adaptation.

For most country missions, **Debriefing sessions** took place on the last day of the country visit. The debriefing session in Rwanda was organized by SLQs so that strategic learning questions requiring more immediate action or where learning was considered more substantial were prioritized in the presentation. In Burundi, the debriefing session was presented by issues requiring attention, to maximize the utilization-focused nature of the evaluation.

Debriefing sessions in Benin and Ghana countries were presented by emerging takeaways focusing on issues requiring attention, to maximize the utilization-focused nature of the evaluation.

Debriefing sessions took place on the last day of the country visit in the case of Honduras, and a few days later of the remote mission in the case of India. Debriefing sessions in both countries were presented by emerging takeaways focusing on issues requiring attention, to maximize the utilization-focused nature of the evaluation.

Rationale: Debriefing sessions were selected due to their ability to deliver a first round of feedback right after the country mission and engage in a first reflection dialogue with the office prior to drafting the deliverables.

Joint reflection workshops for all countries were conducted remotely following the missions to discuss the three deliverables and reflect on the current situation and the ways forward.

Rationale: These workshops sought to be useful for the country office and led to insights that could benefit the strategic learning community of the project at large.

The "what, so what, now what framework" is the reflection-action method that was used to structure the joint reflection workshops. This approach organises discussions in three pillars: the *"what"* includes the discussion of the synthesis findings, the "s*o what?*" focuses the discussion on their implications, and the "*now what?*" on the actions forward. The "what" consisted in a summary presentation by the Dev Ev team on the main findings based on the three deliverables. For the "so what?", in addition to plenary discussions, we leaned on the use of Mentimeter (a software tool for quick polls) and the Zoom chat to get everyone's views on the implications. For the "so what" participants were divided in groups (using Zoom breakout rooms) to discuss the ways forward. The group work was presented in the plenary.

Rationale: this framework is recurrently used in developmental evaluations to generate reflective action and learning.

In the case of India, the six thinking hats was a method used to guide the discussion on the pros and cons of exploring the feasibility of knowledge exchanges as proposed in the pathways to innovation.

Rationale: this tool, developed by Edward the Bono, is a tool appropriate for facilitating group discussion and individual thinking in cases where the objective is to promote different perspectives to improve decision making. The different perspectives include six thinking styles that use the six metaphorical hats: facts and data, emotions and intuition, caution and judgement, optimism and benefits, creativity and ideas, and process and overview. We wanted the participants to offer different perspectives, so that is why this tool was chosen.

Follow-up on decision making and adaptations

In summative evaluations, accountability is linked to the performance of the project. In developmental evaluations, accountability relates to what has been learned and how this knowledge is used. In this context, follow-up is about examining the decision-making processes and ultimately the adaptations that result from the evaluation's insights and collective reflections. The evaluation aimed to track what was learned and how the learning was used for adaptation. Decisions about adaptations was designed to feed into subsequent loops, as developmental evaluation is an ongoing, iterative, cumulative process - as illustrated in Figure 2.

Components of the evaluation and deliverables

This evaluation is organized around three main components with overlapping timelines, as opposed to chronological phases:.

Co-design Component: This component began with the recruitment of the Developmental Evaluators in July 2023 and has focused on finalising the methodological approach; defining sequencing, roles, and responsibilities; confirming the quality assurance plan; and conducting joint and individual briefings, notably the workshop in Nairobi. Due to the nature of the Developmental Evaluation, this phase continued until the end of the evaluation, to allow design of the evaluation to be adapted to changes in contexts.

Deliverables from this component comprise the Concept Note, the Terms of Reference (V1), the first and second versions of the Strategic Learning Framework, two versions of the Scoping Document. All of these deliverables may be updated as necessary

Evidence Gathering Component: This component is characterised by the country visits and in-person and virtual workshops.

Deliverables from this component comprise the country deliverables including the case story, the Foods Systems Model, the Learning Brief and the 'Pathways to Innovation' document for all six countries.

Global Sense-making Component: This phase is when the Developmental Evaluators take the learning from the evidence-gathering phase, synthesize it and share for discussion with the Strategic Learning Community.

Deliverables from this component comprise the final evaluation report. The final evaluation report is based on a synthesis of all deliverables of the evaluation and any additional lessons learned or findings.

The timings and deliverables are detailed in Annex 2.

Gender Equality and Inclusion

Understanding how to incorporate an approach to the project that is gender responsive and, to the extent possible, gender transformative is a key learning objective of the evaluation. The evaluation includes a specific strategic learning question focusing on gender equality and two sub-questions, which serve as "lenses" to further direct the gender equality inquiry. Through this learning question, the evaluation captures the gendered aspects of the other strategic learning areas. Driven by learning needs of the key stakeholders, the evaluators investigated gender responsiveness of specific project activities and contextual factors which may influence girls' and women's experience with the project. For example, considering how local economic development for women in particular has been influenced by the project, under thematic area 1.

The evaluators analysed secondary data with an intersectional gender focus, which recognizes that sociodemographic characteristics such as age, disability, race, ethnicity, sexual orientation, socio-economic characteristics, and other identities interact with each other to affect individuals' experiences.

While the evaluation does not include a specific learning agenda question focusing on equality and inclusion for persons with disability or for individuals from disadvantaged groups, feedback from these groups was sought in data collection to the extent possible. While the learning questions will drive the data collection process and inquiry, promoting GEWE and inclusion were raised in discussions throughout the learning process.

Ethical considerations

The developmental evaluation (Dev Ev) adhered to the UNEG Ethical Guidelines for Evaluation. In particular, the four principles of evaluation ethics are observed in the evaluation: Integrity, Accountability, Respect and Beneficence.

Accordingly, the evaluators are responsible for safeguarding and ensuring ethics at all stages of the evaluation cycle. This includes, but is not limited to, ensuring informed consent, protecting privacy, confidentiality and anonymity of participants, ensuring cultural sensitivity, respecting the autonomy of participants, ensuring fair recruitment of participants (including women and socially excluded groups) and ensuring that the evaluation results in no harm to participants or their communities. During the inception phase the following ethical issues, related risks, safeguards and measures were considered:

Privacy

In accordance with the ethical and responsible data management provisions of the UNEG Guidelines, the evaluation will ensure the protection and confidentiality of personal data in any form and in any type of processing, with particular care when processing data of vulnerable or marginalized individuals or groups.

Protection from retaliation

The evaluation respects the provisions of the UNEG Guidelines' principle of beneficence, which requires that no harm be done to anyone. In particular, the evaluation team will do everything in its power to avoid injury or discomfort, using diligence when working in sensitive contexts and with populations in conditions of vulnerability.

Findings and evidence collected and analysed during the evaluation were shared in safe spaces, particularly in feedback loops within the Strategic Learning Community (SLC). Mechanisms to ensure safety were consent based. The Dev Ev never proposed processes of data collection, feedback loops or sharing of results that have not been consented by all parties/stakeholders involved. Those who fear retaliation will have the space and opportunity to raise their concerns before information is shared.

Transparency

All documents produced as part of the evaluation and shared internally or externally will contain only documents that do not violate the privacy or expose the intimacy of key informants.

All Dev Ev deliverables will be shared with the aim of contributing to learning from the project, provided they do not violate privacy or expose key informants. To ensure transparency while protecting privacy, the evaluation may produce customized versions of the deliverables, some for internal use and others for external use and wider dissemination.

Assumptions, risks, and limitations

Assumptions

The main overall assumption is that the conditions that lead to the evaluation conforming to the eight DE principles, and thus being a developmental evaluation, remain throughout the process. In other words: we assume that the evaluation will continue to meet the fidelity requirements.

The second overall assumption is that the Dev Ev team will be able to incorporate emergence throughout the exercise. Emergence occurs when new things that can affect the utility of the evaluation appear (emerge) unexpectedly during the evaluation. These may be contextual or organizational changes or the result of new interactions with stakeholders. Since such changes can affect the utility of the evaluation, we need to adapt the evaluation so that it remains user focused. Including emergence in evaluations is about how we ensure that evaluations adapt to contextual changes, and ultimately how we can make evaluations adaptive. In this context, we assume that the factors that enable emergence to be included are present throughout the evaluation:

- Adaptive contracting: sufficient flexibility in contractual arrangements so that adjustments are procedurally permissible, feasible and quick.
- Contingency budgeting: sufficient flexibility in budget allocations to allow for adjustments in spending, e.g., for unforeseen travel, or hiring of external experts.
- An organizational culture that supports the use of evaluation: The evaluation will be able to adapt as necessary to ensure intended use by intended users, avoid rigidity and acting with agility to support the relevance, timeliness and use of the evaluation.

The third overall assumption is that the participating Country Offices will have the capacity to facilitate country missions, participate in data collection and feedback loops, and implement the learning arising from the evaluation.

Risks

Given the developmental nature of the evaluation, risks that can be reasonably managed will be addressed by embracing emergence and by being adaptive. There are several risks that may go beyond what we consider reasonable.

The first is **insufficient stakeholder engagement** and understanding of the developmental evaluation, particularly in an environment where personnel rotate to and from country offices, regional bureaus, and headquarters divisions. Stakeholder involvement, particularly of primary intended users, is essential in a developmental evaluation. Without robust involvement, core principles such as utilization-focused, co-creation and timely feedback cannot be applied.

In case of insufficient involvement, the following mitigating measures should be taken:

- Analyse the causes. If factors are internal and circumstantial, we will try to mitigate these through key informant interviews and possibly a retrospective workshop focused on finding solutions and learning from the situation.
- If necessary, we would adapt the evaluation to less intensive interactions while documenting the reasons for this in order to draw lessons for future developmental evaluations.

The second main potential risk would be **sudden significant changes in context** that prevent the implementation of country visits. In this case, we would consider activating the remote developmental evaluation mode. If this is also not an option, we could remove country missions as key inputs and fundamentally redesign the Strategic Learning Framework.

The third potential risk is for **compromised impartiality and independence** as the evaluators will be

embedded in the programme. Embedment in the programme is essential for evaluators to effectively meet the learning objectives and execute a true developmental evaluation approach. The risks to impartiality and independence can be mitigated through trust and frank discussion amongst the evaluators and evaluation managers. Evaluators will help hold each other accountable for impartiality by raising concerns if they feel the other's objectivity has been compromised. The Evaluation Managers, who have been and will not be involved in programme implementation, will also take responsibility to raise concerns of impartiality or compromised objectivity with the evaluators.

The fourth potential risk is **compromised timeliness** of results if unforeseen circumstances lead to delays in data collection or feedback loops. This risk is more likely to affect stakeholders in Rwanda and Burundi as the developmental evaluation is occurring near the end of programme implementation. This risk will be mitigated by contextualizing learning questions to the present information needs of the country offices, conducting country missions in Rwanda and Burundi before others, conducting feedback loops as soon as information is available, and leaving the opportunity to adapt the learning questions to changing information needs.

An additional potential risk is inability to meet stakeholder expectations for learning given the **availability of data**. This risk can be mitigated by setting clear expectations for the outcomes of the developmental evaluation from the outset.

Risks associated with the introduction of a new approach.

This is the first decentralized developmental evaluation to be conducted at WFP. As such, it involves the introduction of a new evaluation approach, which makes it an innovation in this organizational context. The evaluation team concluded at the beginning of the exercise that the prerequisites for a developmental approach are in place (as explained in the terms of reference). However, it is a challenge to combine emergence, co-creation and timely feedback over a defined period of time. The main risk would be that the exercise becomes de facto a formative rather than a developmental evaluation (formative evaluations are halfway between summative and developmental evaluations).

As an innovative approach, the evaluation is geared towards organizational learning. The fact that the implementation of the evaluation work deviates from the actions foreseen in this scoping report should not be a problem as long as it leads to relevant learning outcomes in the context of strategic learning framework. The final report will contain the key findings and insights from the developmental work, including the key learning outcomes from the whole process (from scoping to end), detailing what worked, what did not work and why.

Risks associated to commitment to and acceptance of the developmental approach.

The intense level of engagement in developmental evaluations implies a continued commitment from staff at all levels involved. A loss of momentum would be a risk, as it would jeopardise the high level of engagement required for a developmental evaluation.

In addition, summative and formative evaluations conclude with a series of recommendations. This is not the case with developmental evaluations, which offer evidence-based findings, pathways and options for joint analysis and reflection of learnings to identify leverage points (action planning) instead of recommendations. Acceptance of this new approach is not always immediate and can be met with resistance.

Commitment and acceptance of the implications of a developmental approach by the evaluation team, key stakeholders and the rest of the organization are critical to the quality of the process. To mitigate this risk, the evaluation team will engage in conversations with key stakeholders to disseminate and explain the process and its links between evaluation and organizational development so that utilization of learning during the exercise is prioritized.

Risks associated with knowledge management requirements.

Developmental evaluations can lead to the generation of large amounts of data (evidence, mission

deliverables, presentations, minutes of workshops). Therefore, intensive data or knowledge management is required to ensure that users are not inundated with data, which could have a negative impact on their access to the data and ultimately on their use of the data for decision-making. To avoid this risk, the evaluation will coordinate with knowledge management initiatives of the project to ensure that users have access to the data during the implementation process to make strategic decisions.

Evaluation Committee

Significant changes and adjustments caused by the materialisation of major risks, or the non-occurrence of the above key assumptions must be approved, agreed and validated by the Developmental Evaluation Committee (DEC). Section 5 contains details of the roles, responsibilities, and members of the DEC.

Methodological limitations

The risks mentioned above such as insufficient stakeholder engagement, compromised timeliness, and challenges in the availability of data all have methodological implications as they can affect the depth and breadth in which the planned methods can be applied. These would include methods for data collection, methods for data analysis, and methods for reflection, iteration, learning and action.

Limitations of the methods for data collection

Access to access to primary data sources. As mentioned above, reduced access to primary data sources would pose a major risk. This could result in the evaluation team not being able to collect data from interviews and focus group discussions with key stakeholders during planned country visits. Interviews and focus groups are crucial data collection methods for primary data as they allow for engagement with different perspectives and explore questions of how and why, which is very conducive to generating learning.

To mitigate this risk, the evaluation team, in consultation with the WFP CO, may postpone the mission or conduct interviews and group discussions virtually. If country visits are possible but key informants are not available, evaluation team members will conduct remote interviews following country visits.

Staff turnover. The turnover of staff in stakeholder organizations and in the WFP can influence institutional memory and the type of findings that can be obtained during the evaluation. To compensate for this element as much as possible during country visits, the evaluation team will try where possible to reach key informants, even if they are not involved in the project at the time of data collection. To this end, the evaluators will use snowball sampling of informants in the countries, i.e. they will ask the interviewed informants to refer to relevant people who may be in the country and available for an interview, even if they are no longer involved in the project.

There are no limitations on access to secondary data, as the external evaluators have direct and timely access to WFP documentation.

Limitations of the methods for data analysis

Some of the methods for analysing data require a sufficient amount of data in order to be able to make reasonable claims. For example, causal feedback loops and the identification of system archetypes require a critical mass of evidence to make statements about how variables influence each other. In this regard, data availability challenges will affect their applicability. The evaluation team will only apply data analysis methods if the minimum requirements are met, i.e. if the quality, quantity and scope of the data allow for credible application of the methods.

Limitations of the methods for reflection, iteration, learning and action.

If risks such as insufficient stakeholder engagement and compromised timeliness materialize, this could lead to limitations in the methods for reflection, iteration, learning and action (in short: learning methods). In a developmental evaluation, the process of answering questions (in this case learning questions) is a continuous, cumulative process. The fact that the individuals involved in the various reflection points change significantly (due to staff turnover or disengagement) limits the depth and breadth of learning outcomes that can be achieved in this process.

Similarly, limited engagement and compromised timeliness (e.g. due to delays in data collection) could lead to less absorption by users of developmental evaluation findings (insight from country missions), which could

have a direct impact on the effectiveness of learning methods.

The evaluation team will adapt the scope and depth of the planned learning methods to the extent to which these risks materialize during the evaluation. The quality assurance process will address this aspect.

Quality assurance mechanisms – how credibility is ensured

How the embedded evaluators will assure quality.

The embedded evaluators will ensure the credibility of the evaluation by demonstrating adherence to the eight principles of developmental evaluation and how these have been applied and followed in the different phases of the evaluation, e.g., in the design/scoping phase, in country missions, in feedback loops and in the draft of learning outcomes (deliverables). This process will be transparent. Embedded evaluators will demonstrate how the principles have been applied in the various accounting documents and deliverables they will produce during the course of the evaluation. As discussed in section [insert number], evaluators will keep each other accountable for impartiality and independence given their embeddedness in the project.

In order to promote utility, the key objective of the developmental evaluation, the evaluators will facilitate opportunities for stakeholder feedback, ensure that lines of inquiry are aligned with stakeholder information needs and are updated as needed to promote use, and develop learning products based on needs.

How WFP-based evaluation team) will assure quality.

The WFP-supported part of the evaluation team will contribute to the quality of the evaluation by ensuring that the institutional mechanisms support and enable the implementation of the eight principles (e.g., co-creation, utilization focused, timely feedback loops).

In addition, the WFP-supported evaluation team will complement the process with an external third-party quality assurance, also known as the Decentralized Evaluation Quality Service (DEQS), conducted by ITAD, a specialized evaluation company. This external quality assurance reviewer will oversee the appropriate application of the eight developmental evaluation principles. In addition, the third-party quality assurance will check the credibility of the findings presented in the feedback loops and the quality of the facilitation and synthesis work carried out by the embedded evaluators. The Evaluation Managers will not take part in the implementation of the project in order to promote impartiality and independence of the developmental evaluation. They will work with evaluators to identify any impacts on impartiality caused by the embedment of the evaluators.

In order to promote utility, the Evaluation Managers will schedule regular feedback loops, facilitate opportunities for stakeholder feedback alongside the evaluators, and hold evaluators accountable for generation of learning products.

Credibility of the findings

This developmental evaluation is subject to constant scrutiny. Users and other stakeholders have various options and mechanisms for checking the findings and challenging their quality or credibility. For example, findings of the country visits are presented and validated in country debriefing meetings. Subsequently, the three deliverables containing the findings, are made available to the country office staff, who review them and later discuss them with the evaluators. The higher level findings are also reviewed by the strategic learning community in feedback loops. Fact-checking, accuracy and veracity are ensured in all these cases through user scrutiny. The goal of findings is to spark critical conversations that lead to learning and adaptation. If the findings are not accurate or credible, they will be disregarded. However, before presenting any finding evaluators apply due diligence applicable to all UN evaluations, such as ensuring the accuracy of data and triangulation whenever possible.

Annex 7. Expected and actual project outcomes and outputs

Global project

Global Outcome	Indicator	Benin		Ghana		Honduras		India	
		2024 targets	2024 results	2024 targets	2024 results	2024 targets	2024 results	2024 targets	2024 results
Component 1: Optimization of school menus and strengthening of demand and supply chains									
Global Outcome 1: Increased institutional and public demand for nutritious school meals, which are equitably and sustainably produced	Number of boys and girls receiving nutrient rich and fortified food enabled through RF catalytic funding	80,000	198,122	9,000	1,194	7,000	6,958	190,000	140,000
	Value of nutrient rich and fortified food served in schools sourced from smallholder farmers enabled					207,600	46,469		

	through RF catalytic funding (USD)								
	Volume of nutrient rich and fortified foods served in schools sourced from smallholder farmers enabled through RF catalytic funding (MT)			1,000	1.1	78	22.65		
	Quantity of nutrient rich and fortified food provided for girls and boys benefiting from school-based programming enabled through RF catalytic funding (MT)	15,000	16,809	1,000	1.1	78	22.65		
	Average number of school days per month on which nutrient rich and fortified food were served, enabled	18	17			20	20		

	through RF catalytic funding								
	Number of people reached through behaviour change communication (SBCC) media campaigns and interpersonal approaches promoting nutrient rich and fortified foods enabled through RF catalytic funding	Interpersonal: 3,000	Interpersonal: 159,595	Interpersonal: 20,000 Media: 3,000,000	Interpersonal: 4156 Media: 267,244	Interpersonal: 8,000 Media: 8,000	Interpersonal: 7,098 Media: 20,000	Interpersonal: Bihar 40,407 Chattisgarh 100,000 Media: Bihar 82.2 million Chattisgarh 23.6 million	Interpersonal: Bihar 60,080 Chattisgarh 15,000 Media: Bihar 40 million Chattisgarh 0
Global Outcome 2: Strengthened capacities of smallholder farmers, food producers, processors, and providers of school meals to deliver safe and more nutritious food	Number of smallholder farmers, particularly women who benefit from improved access to technologies and enhanced skills to increase their access to market, enabled through RF catalytic	2,000	10,178	5,000**	341	161	162		

	funding								
	Number of smallholder farmer organizations supported through RF catalytic funding	50	55	150	70	2	2		
	Number of smallholder farmers, food producers, processors, and providers of school meals engaged in capacity strengthening initiatives to deliver safe and more nutritious food	2,000	7,416	8,000	5	161	162		
	Number of smallholder farmers, food producers, processors and providers empowered and actively engaged in supplying nutrient rich and fortified food products	5,000	23,412	4,000	301	161	162		

	to schools, through RF catalytic funding								
Component 2: Assessment, metrics, and indicator development									
Global Output 1: Relevant evidence is increasingly produced along with better measurement of results to inform decision-making on nutritious menus, effectiveness and efficiency	Number of tools or knowledge products developed or revised to enhance national systems contributing to zero hunger and other SDGs through RF catalytic funding*	2	2	4	3	3	8	3	1
Component 3: Advocacy and support for policy adoption and change									
Global Outcome 3: Improved policies and/or practices for healthy diets and equitable food production, procurement and/or	Number of national policies, strategies, and programmes in the field of school health and nutrition, strengthened/ developed, enabled through RF	3	1	1	0	2	2	2	2

preparation	catalytic funding*								
	Number of people engaged in capacity strengthening initiatives to enhance national stakeholder capacities contributing to zero hunger and other SDGs enabled through RF catalytic funding*	50	46	60	70	35	60	419	4,821
	Number of national institutions engaged in capacity strengthening activities at national and subnational levels through RF catalytic funding*	5	5	10	12	2	2		

Regional project[5]

Global Outcome		Indicator	Rwanda	
			2022 targets	2024 results
	Component 1: Optimization of school menus and strengthening of demand and supply chains			
Global Outcome 1: Increased institutional and public demand for nutritious school meals, which are equitably and sustainably produced		Number of boys and girls receiving nutrient rich and fortified food enabled through RF catalytic funding	108,000	32,000
		Value of nutrient rich and fortified food served in schools sourced from smallholder farmers enabled through RF catalytic funding (USD)		
		Volume of nutrient rich and fortified foods served in schools sourced from smallholder farmers enabled through RF catalytic funding (MT)		
		Quantity of nutrient rich and fortified food provided for girls and	8	118.7

[5] Specific targets for Burundi were not available to the evaluators. Burundi's project indicators are included in the table on page 140

		boys benefiting from school-based programming enabled through RF catalytic funding (MT)		
		Average number of school days per month on which nutrient rich and fortified food were served, enabled through RF catalytic funding	199	199
		Number of people reached through behaviour change communication (SBCC) media campaigns and interpersonal approaches promoting nutrient rich and fortified foods enabled through RF catalytic funding	Interpersonal: 14,000	Interpersonal: 40,916
Global Outcome 2: Strengthened capacities of smallholder farmers, food producers, processors, and providers of school meals to		Number of smallholder farmers, particularly women who benefit from improved access to technologies and enhanced skills to increase their access to market, enabled through RF catalytic funding	-	-

deliver safe and more nutritious food		Number of smallholder farmer organizations supported through RF catalytic funding	-	-
		Number of smallholder farmers, food producers, processors, and providers of school meals engaged in capacity strengthening initiatives to deliver safe and more nutritious food	-	-
		Number of smallholder farmers, food producers, processors and providers empowered and actively engaged in supplying nutrient rich and fortified food products to schools, through RF catalytic funding	-	2,476 farmers -1,78 women -1,298 men -Provided 50 MT high iron beans (a one time distribution)
	Component 2: Assessment, metrics, and indicator development			
Global Output 1: Relevant evidence is increasingly produced along with		Number of tools or knowledge products developed or revised to enhance national systems contributing to zero hunger and other SDGs through	-	6

better measurement of results to inform decision-making on nutritious menus, effectiveness and efficiency		RF catalytic funding*		
	Component 3: Advocacy and support for policy adoption and change			
Global Outcome 3: Improved policies and/or practices for healthy diets and equitable food production, procurement and/or preparation		Number of national policies, strategies, and programmes in the field of school health and nutrition, strengthened/ developed, enabled through RF catalytic funding*	2	9
		Number of people engaged in capacity strengthening initiatives to enhance national stakeholder capacities contributing to zero hunger and other SDGs enabled through RF catalytic funding*	10	10
		Number of national institutions engaged in capacity strengthening activities at national	8	8

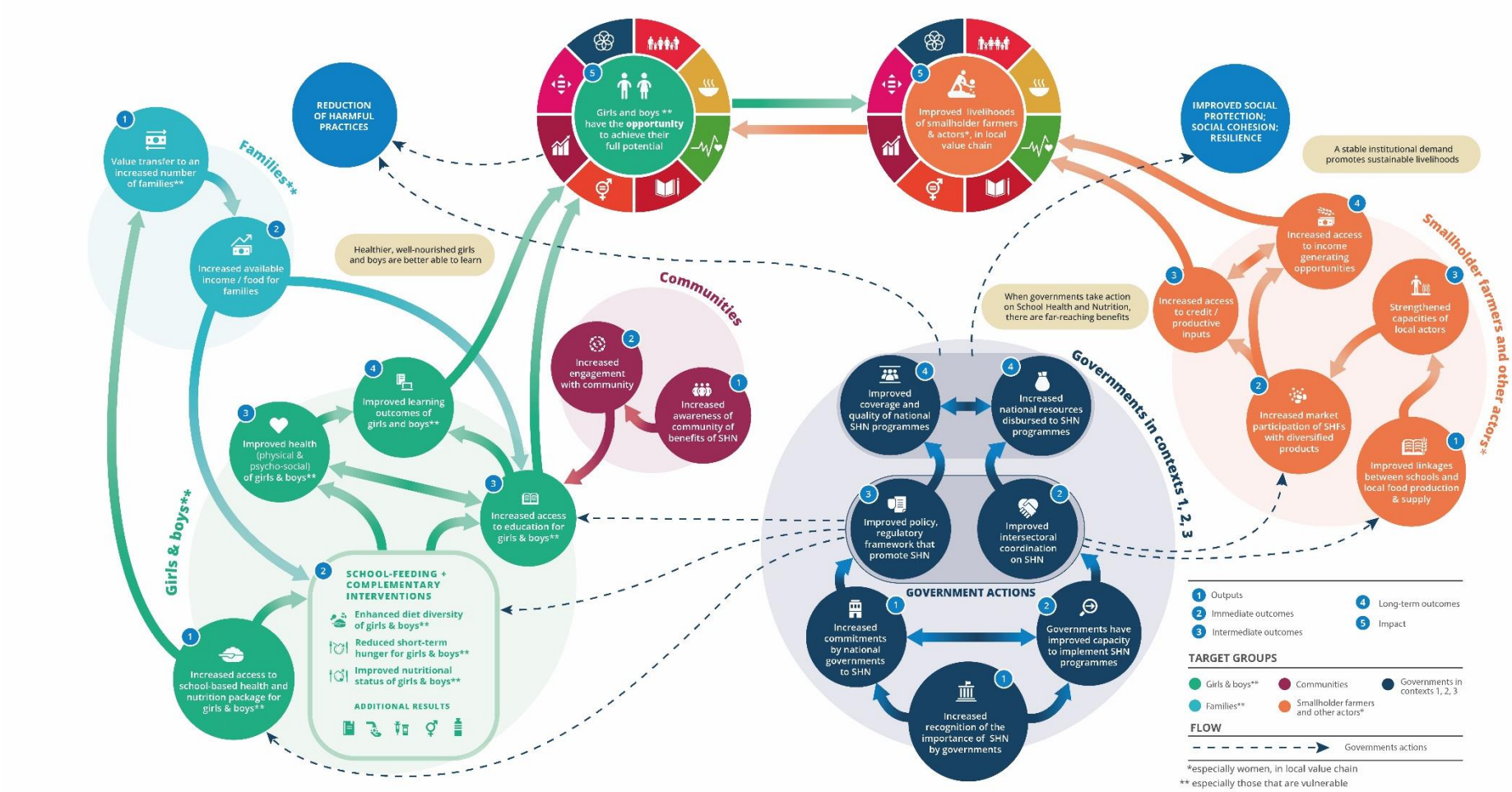
		and subnational levels through RF catalytic funding*		

Results		Indicators
Global Outcome 1: Increased institutional and public demand for nutritious school meals, which are equitably and sustainably produced	Outcome 1.1	Number of boys and girls receiving nutrient rich and fortified food enabled through RF catalytic funding
	Outcome 1.2	Value of nutrient rich and fortified food served in schools sourced from smallholder farmers enabled through RF catalytic funding
	Outcome 1.3	Volume of nutrient rich and fortified foods served in schools sourced from smallholder farmers enabled through RF catalytic funding
	Output 1.1	Quantity of nutrient rich and fortified food provided for girls and boys benefiting from school-based programming enabled through RF catalytic funding
	Output 1.2	Average number of school days per month on which nutrient rich and fortified food were served, enabled through RF catalytic funding
	Output 1.3	Number of people reached through behavior change communication (SBCC) media campaigns and interpersonal approaches promoting nutrient rich and fortified foods enabled through RF catalytic funding
	Output. 1.4	[top 4 - interpersonal, bottom 3 - media]
Global Outcome 2: Strengthened capacities of smallholder farmers, food producers, processors, and providers of school meals to deliver safe and more nutritious food	Output 1.5	Number of smallholder farmers, particularly women who benefit from improved access to technologies and enhanced skills to increase their access to market, enabled through RF catalytic funding
	Output 1.6	Number of smallholder farmer organizations supported through RF catalytic funding
	Output 1.7	Number of smallholder farmers, food producers, processors, and providers of school meals engaged in capacity strengthening initiatives to deliver safe and more nutritious food

	Output 1.8	Number of smallholder farmers, food producers, processors and providers empowered and actively engaged in supplying nutrient rich and fortified food products to schools, through RF catalytic funding
Global Output 1: Relevant evidence is increasingly produced along with better measurement of results to inform decision-making on nutritious menus, effectiveness and efficiency	Output 2.1	Number of tools or knowledge products developed or revised to enhance national systems contributing to zero hunger and other SDGs through RF catalytic funding*
Global Outcome 3: Improved policies and/or practices for healthy diets and equitable food production, procurement and/or preparation	Outcome 3	Number of national policies, strategies, and programmes in the field of school health and nutrition, strengthened/developed, enabled through RF catalytic funding*
	Output 3.1	Number of people engaged in capacity strengthening initiatives to enhance national stakeholder capacities contributing to zero hunger and other SDGs enabled through RF catalytic funding*
	Output 3.2	Number of national institutions engaged in capacity strengthening activities at national and subnational levels through RF catalytic funding*

Annex 8. Overarching Theory of Change

WFP School Feeding Strategy Theory of Change



Annex 9. Data collection tools

Tools applied in all country missions

The protocols for the key informant interviews and the group discussions were based on the six questions of the strategic learning framework (validated version SLF.v2).

All interviews and group discussions followed the same sequence:

- A brief presentation of the developmental evaluation.
- A round of introductions from the participants.
- An open-ended, framing question about how participants were involved in the project and their main impressions. If participants were unfamiliar with the project or project details, the question was extended to working with WFP on school feeding.
- Based on the answers to the introductory questions, we then began probing, using the Strategic Learning Framework as a checklist for the probing aspects. The SLQs we focused on in the interviews were based on the match between the type of stakeholders and the themes of the learning questions (sustainability, partnerships, gender equality, local economies, etc.). See the interviewee table above for a list of SLF topics covered in each stakeholder interview.

Besides the opening questions and specific probing questions, the protocols also included:

- Follow-up questions: questions on aspects that had emerged in previous interviews (threads that had emerged, issues to be clarified, aspects that had been mentioned in other interviews and on which we wanted to hear their views).
- A systematic final question in the sense of: Is there anything else we have not addressed in this conversation that you think should be mentioned?

DEVELOPMENTAL EVALUATION OF THE WFP-RF PROJECT:

TEMPLATE TO CAPTURE ADAPTATIONS FROM THE EVALUATION

Objective
The objective of this template is to document the learnings resulting from the Developmental Evaluation (DevEv), in particular the actions (adjustments and/or adaptations) that can help the project and the team in the country office to improve their efforts to accelerate nutritious foods through school feeding in the country. The learnings documented here will support the analysis in the final developmental evaluation report. This report will document how/if the developmental evaluation contributed to learning and adaptation and why or why not. Insights on how your country office has learned and adapted may help others implementing similar projects.
Whom is this template for? How to fill it out?
This template is for the focal point of the Rockefeller DevEv in each CO. The person(s) coordinating the DevEv in each CO should ideally consult with the team members involved in the DevEv process and provide a collective answer to the following questions. Your responses to this template will be shared with the developmental evaluation team, including the evaluation manager, Josep and Jordi, and the evaluator who will write the final evaluation report. Responses will be used as inputs for the final evaluation report, which all CO will have the opportunity to review before publication. The template will not be shared with Rockefeller or others.
Question 1. Based on what you learned from the developmental evaluation discussion, deliverables, and process, what actions are you planning to take, or have you already taken? Please share any examples of changes you have made as a result of the developmental evaluation.
(This can include actions you've taken in the Rockefeller project and elsewhere. As long as the action resulted from the developmental evaluation, please include it here. You may include ongoing discussions and ongoing plans for further action. Also indicate here if/how learnings have been integrated into future project or planning, such as CSPs, future proposals, or other CO activities).
Question 2. Were there any actions suggested by the developmental evaluation, either in the deliverables or in the discussions, that you did not take. If so, why not?
(Your response will help WFP and the evaluators learn about barriers to adaptation, your experience with the developmental evaluation, and better understand how the solutions proposed through the evaluation fit (or do not fit) in your CO's context)
Question 3. What have you learned from the developmental evaluation thus far? Are there any key takeaways you have gathered?
(You may consider specific WFP-RF project learnings, lessons related to the broader country project portfolio,

food systems, country office ways of working, approaches to partnerships and beyond. Even learning about the developmental evaluation process can be included here. Consider learning from any step of the process, including the Nairobi workshop, the DevEv team country visit or virtual mission, the post-visit deliverables, the joint reflection workshop, and meetings with the strategic learning community).
Question 4. Are there any other issues that you would like to discuss further with the Developmental Evaluation team or other Rockefeller project COs to inform action planning?
This may include general questions, learning gaps that have not been addressed, support needed to implement suggestions from the DevEv, or other

Annex 10. Fieldwork agenda

Rwanda fieldwork agenda

Day	Date	Time	Interview	Notes
Day 1	Mon 27 Nov	8:30 - 9:00	Country Director	Brief meeting with CD
		9:00 - 9:40	School Feeding Manager	
		10:00 - 10:40	SO2 Manager and Head of Programme	
		11:00 - 11:40	SF Team	
		12:00 - 12:40	Supply Chain Officer	
		13:00 - 14:00		
		14:00 - 14:40	Programme Policy Officer M&E and Head of RAM/VAM	
		15:00 - 15:40	Nutrition unit colleagues	
		16:00 - 16:40	Rockefeller Coordinator	
Day 2	Tue 28 Nov	9:00 - 9:40	Vanguard Economix	
		10:00 - 10:40	Head Miller Minimex	
		11:00 - 11:40		
		12:00 - 12:40	School and Cooperative Visit	
		13:00 - 14:00		
		14:00 - 14:40		
		15:00 - 15:40		
		16:00 - 16:40		
Day 3	Wed 29 Nov	9:00 - 9:40		
		10:00 - 10:40	HGSF Specialist MINEDUC	
		11:00 - 11:40		
		12:00 - 12:40	EPC Unit	
		13:00 - 14:00	Lunch	
		14:00 - 14:40	FSQ Officer – SF/Supply Chain unit	Online interview – Teams

		15:00 - 15:40	Procurement Associate – Huye Field Office	Online interview – Teams
Day 4	Thu 30 Nov	09:00 - 09:40	Smallholder Agricultural Market Support (SAMS)	
		10:00 - 10:40	Logistics Assistant-Food Technologist – Supply Chain	
		11:00 - 11:40	Gender and Protection Officer	
		12:00 - 12:40		
		13:00 - 14:00		
		14:00 – 15:00	Interview with NCDA	
		15:00 – 16:00	Interview with RSB	
Day 5	Fri 01 Dec			
		10:00 – 13:00	Debriefing with CO	
			Procurement Officer – SF	Time TBD
			Strategy Technical Lead RF	Online interview – Teams

Burundi fieldwork agenda

AGENDA Rockefeller Foundation Developmental Evaluation mission

Day 1 (Monday 4th Dec): WFP Office

- **9.AM – 10 AM:** Security Briefing

- **10.30 AM – 11.30 PM:** Meeting with MoE (Dir DNCS)
- **10.30 AM – 11.30 PM:** Meeting with MoE (Dir DNCS)
- **2.30 PM – 4.30 PM:** Group Interview with WFP key staff: PROJECTS COORDINATORS, ACTIVITIES MANAGER, HEAD OF SECTIONS AND/OR REPRESENTATIVES: SMP1, SAMS, NPA1, GENDER, ACL, energy, PROCUREMENT, LOGISTIC, CAPACITY STRENGHNING,

Day 2 (Tuesday 5th Dec):

Morning (WFP office) : Group Meeting: with representatives of key ministries

- MoE (Dir DNCS)
- MoH (Dir PRONIANUT)
- Ministry of Gender. Social Protection
- MoA (Point focal, DGA)
- MoI/T (Point focal, Secr Perm)
- PMSAN-SEP

Afternoon (on their site/office): Individual Meeting

- PMSAN-SEP
- MoE (Dir DNCS)

Day 3 (Wednesday 6th Dec)

Morning (WFP office or on their site/office): Group Meeting: with UN agencies, NGOs, cooperation and development agencies

Dutch embassy, French Embassy, World Bank, AFD

Afternoon (on their site/office): Individual Meeting

- BBN
- UNIKORN

Day 4: (Thursday 7th Dec):

Morning (WFP office): Group Meeting with implementation partners: CP, private sector, civil society, research institutes, specialised institutes, academia

SNV, IITA, ILRI, CNTA, BBN, ISABU, COPROSEBU, SBN

Afternoon (on their site/office): Individual Meeting

- Rukaramu school (visit + discussion with school committee)

Day 5 (Friday 8th Dec): WFP Office

- ***Morning: Desk time: Wrap up et debriefing with CO PP4N team.***
- ***Noon: Debrief with Management and concerned teams.***

Ghana Fieldwork Agenda

Institution	Key informants	Strategic Learning Areas	Venue
24th June 2024			
a. Security briefing	Security focal person		WFP CO Conference Room
b. Meetings with CO team	Dep. CD Head, Social Protection Unit Head, Nutrition Food Technologist Project Coordinator	1. Local economies 2. Sustainability 3. SBC 4. Gender 5. Partnerships	WFP CO Conference Room

	Communication and Knowledge Management Gender Specialist , Social Protection Unit Procurement Unit Budget Officer	6. Advocacy	
c. Ghana Education Service	Names removed to protect personal information	1. Local economies 2. Sustainability 3. SBC 4. Gender 5. Partnerships 6. Advocacy	GES HQ
25th June 2024			
a. Ghana Health Service	Names removed to protect personal information	1. SBCC 2. Sustainability: 4. Gender 5. Partnerships 6. advocacy	GHS HQ
b. NAFCO	Names removed to protect personal information	1. SBCC 2. Sustainability: 3. Local economies 4. Gender 6. advocacy	NAFCO HQ
c. MOFA- Women in Agricultural Development (WIAD)	Names removed to protect personal information	1. Local economies 2. Sustainability 3. SBC	WIAD Office, East Legon

		4. Gender 5. Partnerships 6. Advocacy	
d. Ghana School Feeding Program	Names removed to protect personal information Names removed to protect personal information	1. SBCC 2. Sustainability: 3. Local economies 4. Gender 5. Partnerships 6. advocacy	GSFP Secretariat, Ridge
26th June 2024			
a. UNICEF	Names removed to protect personal information		UNICEF Accra Office
b. FDA	Names removed to protect personal information	1. SBCC 2. Sustainability: 3. Local economies 4. Gender 6. advocacy	FDA HQ
c. WHO	Names removed to protect personal information	1. SBCC 2. Sustainability: 3. Local economies 4. Gender	Online

		5. Partnerships 6. advocacy	
d. FAO	Names removed to protect personal information	1. SBCC 2. Sustainability: 3. Local economies 4. Gender 5. Partnerships 6. advocacy	FAO CO
e. Department of Population, Family and Reproductive Health, University of Ghana	Names removed to protect personal information	1. SBCC 2. Sustainability: 3. Local economies 4. Gender 5. Partnerships 6. advocacy	UG
27th June, 2024			
a. SARI	Names removed to protect personal information	1. SBCC 2. Sustainability: 3. Local economies 4. Gender 5. Partnerships 6. advocacy	SARI, Tolon
b. Amsig Resources	Rice processing team	1. SBCC 2. Sustainability: 3. Local economies 4. Gender 5. Partnerships	AMSIG, Tolon

		6. advocacy	
c. Tolon SHS	• School Head • SHEP Coordinator • Parent Teacher Association • School Management • Students	1. SBCC 2. Sustainability 3. Local economies 4. Gender 6. advocacy	Tolon SHS
d. Woribogu Kukuo Ahmadiya Primary School	• School Head • SHEP Coordinator • Parent Teacher Association • School Management Committee • School children	1. SBCC 2. Sustainability 3. Local economies 4. Gender 6. advocacy	WKA Primary School, Tolon
e. Smallholder farmers / cooperatives		1. SBCC 2. Sustainability 3. Local economies 4. Gender 5. Partnerships 6. advocacy	Tolon
28th June, 2024			
Debriefing session with WFP CO leadership and RF team to share preliminary insights	WFP CO team		WFP CO Conference Room
Post Mission			
Follow-ups and necessary ad hoc feedbacks			

Benin fieldwork agenda

Day	Date	Time	Interview or other activity	Notes	
Day 0	Sun 30th June				
Day 1	Mon 1st July	8:00 - 9:00	Brief With CD, DCD Head of Programme, RAM	Brief meeting with CO Management • Opening statement, introduction and overview of agenda • Mission objective and plan discussion • Presentation of overall vision of Developmental Evaluation and its application for RF project	Conference room
		9:00 - 10:00	UNDSS Security briefing		UNDSS Office
		10:00 - 10:30	RF Component 2 Manager and Head of RAM/VAM unit	Overall vision of the Assessment, metrics and indicator development with linkage with RF project	Conference room
		10:30 - 11:00	RF Component 1 Manager and Head of School Feeding unit	Overall vision of the School Feeding program with linkage with RF project	Conference room
		11:00 – 11:30	RF Component 3 & 4 Manager and Head of CSKM unit	Overall vision of the Advocacy and support for policy adoption & change with linkage with RF project	Conference room
		11:30 - 13:00	key staff involved in RF activities	RF activities updates; challenges & opportunities	Conference room

		13:00 - 14:00	Lunch		
		14:00 - 16:00	Meeting with SP-CAN (that conduct the FNG Study) under the lead of ANAN		Conference room / ANAN
		16:30 – 17:30	Meeting with institutes that conduct some Studies under RF projects		Conference room
		17:30 – 17:45			
Day 2	Tue 2nd July	8:00 - 9:30	Supply Chain team		Conference room
		10:00 - 11:00	Interview with IFDC/ACMA key partners on RF project activities		IFDC
		11:30 - 13:00	Interview with GAIN key partners on RF project activities		GAIN
		13:00 - 14:00			
		14:00 - 16:00	Meeting with Ministry of Agriculture, Livestock and Fisheries (MAEP) technical teams		MAEP ou CTSAGSA si possible
		16:30 - 17:30	Meeting with ANAF et ANaFEA two agencies invested in gender equality topics in the		Conference room

			agricultural sector		
		17:30 – 17:45			
Day 3	Wed 3rd July	08:00 – 10:30	Meeting at suppliers' facilities Visit to milled rice processor (ESOP Lalo) Visit to cowpeas and maize supplier (SHF organization) CCPM de Klouekanme		Field visit
		11:00 – 12:30			
		12:30 - 13:30			
		13:30 – 14:30			
		14:30 – 15:30			
		15:30 – 16:00			
		16:00 – 17:00			
		17:00 – 17:45			
		17:45 – 18:00			
Day 4	Thur 4th July	08:00 – 09:30	Meeting at suppliers' facilities Visit to Premium Rice Mills Industries (PRMI) factory Visit to milled rice (UDR) & parboiled rice processors (URFER-C)		Field visit
		10:00 – 12:00			
		12:00 – 13:30			
		13:30 – 14:30			
		14:30 – 15:00			
		15:00 – 16:00			
		16:00 – 17:30			
		17:30 – 17:45			

Day 5	Fri 5th July	08:00 – 09:30	Meeting with Sub-Office staff Visit to WFP warehouse in Bohicon		
		09:30 – 12:00			
		12:30 – 13:30	Debrief with CD, DCD Head of Programme Program team & Supplychain team Mission debriefs findings and discussions on next steps		Conference room
Day 6	Sat 6th July				

Honduras fieldwork agenda

PROPUESTA DE AGENDA

MISIÓN DE EVALUACIÓN DEL DESARROLLO (DE)

PROYECTO ROCKEFELLER

HORARIOS	ACTIVIDAD	LUGAR
8:00 AM – 8:30 AM	Reunión de apertura de la misión: - Presentación - Alcance - Objetivos	Salón de CO - Tegucigalpa

8:30 AM – 10:00 AM	Reunión con Equipo de Alimentación Escolar: - Nutrición - SBC - Género	Salón de CO - Tegucigalpa
10:00 AM – 10:30 AM	Reunión con Equipo de RAM	Salón de CO - Tegucigalpa
10:30 AM – 12:00 PM	Reunión con Equipo de Alimentación Escolar: - SAMS - FSQ	Salón de CO - Tegucigalpa
12:00 PM – 12:30 PM	Reunión con Equipo de Campo del Proyecto	Salón de CO – Tegucigalpa (virtual)
12:30 PM – 1:30 PM	Almuerzo	
1:30 PM – 3:30 PM	Traslado de Tegucigalpa a Pespire	
3:30 PM – 4:30 PM	Reunión con ADEPES (Socio Implementador Local)	Oficina WFP en Pespire
4:30 PM – 5:00 PM	Reunión con Junta Directiva JOGAPES	Oficina WFP en Pespire

5:00 PM – 5:30 PM	Traslado de Pespire a Nacaome	
HORARIOS	**ACTIVIDAD**	**LUGAR**
7:30 AM – 8:00 AM	Traslado de Nacaome a Pespire	
8:00 AM – 9:00 AM	Visita a la Planta Procesadora de Lácteos AGAAPES	Planta Procesadora de Lácteos AGAAPES
9:00 AM – 9:10 AM	Traslado	
9:10 AM – 9:30 AM	Visita a centro escolar 1	Por definir
9:30 AM – 10:00 AM	Reunión con Comité de Alimentación Escolar y Maestros	Por definir
10:00 AM – 10:20 AM	Traslado	
10:20 AM – 10:40 AM	Visita a centro escolar 2 (por definir)	Por definir
10:40 AM – 11:00 AM	Reunión con escolares	Por definir
11:00 AM – 11:20 PM	Traslado	
11:20 AM – 12:00 PM	Reunión con Director Municipal de Educación de Pespire	Oficina WFP en Pespire
12:00 PM – 1:00 PM	Almuerzo	

1:00 PM – 1:30 PM	Traslado	
1:30 PM – 2:30 PM	Visita a ganadero 1 proveedor de leche (por definir)	Por definir
2:30 PM – 3:00 PM	Traslado	
3:00 PM – 4:00 PM	Visita a ganadero 2 proveedor de leche (por definir)	Por definir
4:00 PM – 4:30 PM	Traslado de Pespire a Nacaome	
HORARIOS	**ACTIVIDAD**	**LUGAR**
7:30 AM – 12:00 PM	Traslado de Nacaome a Catacamas	
12:00 PM – 1:00 PM	Almuerzo	
1:00 PM – 1:20 PM	Traslado	
1:20 PM – 2:20 PM	Visita a Planta de Proceso de Granos Básicos ASOPROGRABT y reunión con Junta Directiva	Planta ASOPROGRABT
2:20 PM – 3:00 PM	Reunión con PROLANCHO (Socio Implementador)	Planta ASOPROGRABT
3:00 PM – 3:30 PM	Traslado	
3:30 PM – 4:00 PM	Visita a Productor 1	Por definir

4:00 PM – 4:30 PM	Traslado	
4:30 PM – 5:00 PM	Visita a Productor 2	Por definir
5:00 PM – 5:30 PM	Traslado de Jamasquire a Catacamas	
HORARIOS	**ACTIVIDAD**	**LUGAR**
7:30 AM – 8:00 AM	Traslado	
8:00 AM – 9:00 AM	Reunión con la Universidad Nacional de Agricultura (UNAG)	
9:00 AM – 1:00 PM	Traslado de Catacamas a Tegucigalpa	
1:00 PM – 2:00 PM	Almuerzo	
2:00 PM – 2:30 PM	Traslado	
2:30 PM – 3:30 PM	Reunión con Representante de SEDESOL	Centro Cívico Gubernamental
3:30 PM – 4:30 PM	Reunión con Representante de SEDUC	Centro Cívico Gubernamental
4:30 PM – 5:00 PM	Traslado de la CO al Hotel	
HORARIOS	**ACTIVIDAD**	**LUGAR**

8:00 AM – 10:00 AM	Retroalimentación de parte de la Misión	Salón de CO - Tegucigalpa

Annex 11. Country-specific activities

Benin

Geographic focus: Country-wide support to the national school feeding programme Training for cooks in Djidja and Lalo			
Component 1	Component 2	Component 3	Component 4
Leverage and/or diversify existing WFP procurement channels and encourage CBT modality for purchasing food Support Governments at national, sub-national and school level through their school meal initiatives to optimize nutritious and locally produced food procurement Capacity strengthening of smallholder farmers local procurement Develop and support implementation of nutrition, food quality and food safety standards Build capacity on local food processing and quality control Introduce wholegrain and fortification technologies to food processors (rice grains & vitamin A-enriched cottonseed oil) and build capacities of smallholder farmers on biofortified food and broker investments and technical assistance towards MSE	Undertake Fill the Nutrient Gap Analysis Value chain analysis based on FNG results Include disaggregated information on the involvement of men and women in the production process and value chains Feasibility analysis and capacity assessments of staple food fortification for the school meal programme and other foods with high nutritional potential Development and implementation of metrics to capture dimensions of quality and capacity development Development and implementation of metrics to capture dimensions of quality and capacity development Conduct formative assessments of barriers to behaviours related to nutrition and health among school age children linked to acceptability and consumption of fortified maize flour, fortified rice and biofortified maize, and a more diverse diet as well as	Promote policies, practices, programs and funding, in the country contexts that promote more nutritious, sustainable and equitable approaches Channel at the country level, the products, achievements, and tools developed through this partnership Disseminate through the School Meals Coalition to engender policy dialogue and learning with the aim to encourage other countries and partners to localize and adopt the approach of this project Connect the achievements of this project to the follow up to the Food Systems Summit and the progress made by the School Meals Coalition at the stocktaking event led by the Secretary-General in 2023 Support governments to design and adopt or amend specific procurement and fortification policies, school meals policies, healthy eating policies, and to adopt the indicators developed under component 1,	Develop an understanding of whether and how the Good Food Scoring Framework can be developed and used in Benin Understand opportunities and challenges to local adaptation and effective use of Good Food Scoring Framework, assessing options to adopt through the School Meals Coalition platform

focused on the supply of nutritious foods Establishes baselines, sets targets and consistent monitoring for SBCC activities including a more holistic nutrition education Social behaviour change communication on nutrition, with special attention to school and community garden supporting diversification and consumption of nutritious locally produced foods (SBCC) Develop new recipes and revisit cooking methods which consider more nutritious commodities and reduce the environmental footprint Building capacity of school cooks and definition of locally adapted and nutritious school meals menus	market and food supply chain analyses	among others	

Burundi

Good Food Procurement	Capacity strengthening	Behavior change communication	Good Food Policy: Fortification Policy Enforcement
a) Identification of and onboarding of suppliers that can meet the whole grain / other good food standards a. Research study undertaken to assess and evaluate key issues faced by schools in procuring fortified and nutritious foods. b. Improve storage capacity for fortified wholegrain maize meal and possibly fresh food. c. Mapping and technical audit of medium-scale millers at	Support the Government and relevant ministries (education & health) to finalize, disseminate and implement the five-year Home Grown School Feeding Strategy (2022-2027).	In cases where the BCC material cannot be adapted from Rwanda or re-used from previous materials (e.g. milk), we will specifically design BCC campaigns based on the findings from FGDs to design the pilot product along with the initial experience form the introduction of the new products into the school program	Engage in and support national policy discussions around fortification and regulatory development as well as the national school feeding policy and the design of the HGSFP strategy in particular.

province or district level which have the capacity or potential of providing 10MT of wholegrain fortified maize meal per day at the standards required by Bureau Burundais de Normalisation et Contrôle de la Qualité (BBN). d. Provision of machinery/implements (e.g. micro-feeders) and required training to 10 medium-scale millers to meet hygiene and safety standards required to provide fortified maize meal to school feeding programs and to the market. Arrangements for co-financing of the machinery will be used. e. Facilitation of relationships between medium scale millers and the GAIN Premix Facility to provide the needed premix to ensure the final product meets adequate fortification level required to meet nutrient adequacy. f. Facilitate training sessions of medium-scale millers on food procurement, food quality and safety in collaboration with the Centre National de Technologie Alimentaire (CNTA); g. Provision of tools (e.g. m			

oisture meters, proper storage bags) and food safety/hygiene training to cooperatives sourcing quality maize for medium-scale millers. h. Linkages with institutional buyers such as schools, prisons, hospitals and with other nutrition-specific or sensitive programmes in the targeted provinces (e.g. with the prevention of stunting programmes) to promote the uptake of fortified whole-grain maize meal. **Specifically for Milk** 1. Improve milk processing and food quality and safety at collection centres. 2. Provision of quality control materials to milk collection centres 3. Training of collectors on hygiene, transport etc. 4. Provide and trial 5 bulk milk units/centres in the school in coordination with the private sector and the International Fund for Agriculture Development (IFAD). Canteen staff trained on proper hygiene,			

maintenance etc. of the machine as well as on processes for procuring fresh milk.			

Ghana

Component 1	Component 2	Component 3	Component 4
Develop and support implementation of nutrition, food quality and food safety standards Support Governments at national, sub-national and school levels through their school meal initiatives to optimize nutritious and locally produced food procurement Introduce wholegrain and fortification technologies to food processors and build capacities of smallholder farmers on biofortified food and broker investments and technical assistance towards MSE focused on the supply of nutritious foods Develop new recipes and revisit cooking methods which consider more nutritious commodities and reduce the environmental footprint Link and harmonize the use of WFP tools such as School Menu Planner PLUS and Enhance (Fill the Nutrient Gap 2.0) with dietary quality indicators, including Global Meal Quality Score and Global Diet Quality Score Establishes baselines, sets targets and consistent monitoring for SBC activities including a more holistic nutrition	Develop and implement new metrics to capture several dimensions of meal and menu quality Undertake Fill the Nutrient Gap Analysis Conduct formative assessments of barriers to behaviours related to nutrition and health among school age children linked to acceptability and consumption of whole grains, fortified foods and a more diverse diet as well as market and food supply chain analyses Conduct onsite visits to rice milling plants Include disaggregated information on the involvement of men and women in the production process and value chains	Promote policies, practices, programs and funding, that promote more nutritious, sustainable and equitable approaches Disseminate evidence generation work through relevant platforms to engender policy dialogue and learning with the aim to encourage policy shift and knowledge sharing Support governments to design and adopt or amend specific procurement and fortification policies, school meals policies, healthy eating policies, and to adopt the indicators developed under component 1, among others	Develop an understanding of whether and how the Good Food Scoring Framework can be developed and used in Low- and Middle-Income Countries Understand opportunities and challenges to local adaptation and effective use of Good Food Scoring Framework, focusing on three of the project's countries, assessing options to adopt through the School Meals Coalition platform

education			

Honduras

Component 1	Component 2	Component 3	Component 4
Capacity building activities in Nutritional Food Education so that educational authorities, teacher, and local School Feeding Committees improve their knowledge to provide balanced food dishes to students. Development of quality and safety manuals to improve standards for the school menus including milk and fortified beans. Strengthening of the value chain, through training and support in the acquisition of technology for smallholder farmers producing milk and biofortified beans and equipment of schools. The productive potential of rural women, will be strengthened as members of the Milk Recollection Centre, through access to productive resources, assets and services, as well as the fundamental services for food and nutrition security. Engagement with the Government on updating guidelines for the School Feeding Programme.	Food perception survey to evaluate acceptance for consumption, from an organoleptic point of view, through qualitative and quantitative tests that help conclude which recipes are most accepted by the beneficiaries and their nutritional contribution. A survey on knowledge, attitudes and practices (formative research) in aspects of food and nutrition, will be implemented to carry out actions that contribute to food security. Mapping of value chains for biofortified beans and milk, including cold chain analysis. Mapping of school infrastructure and capacities. Perform an analysis to know the nutritional content of the foods to be included in the School Feeding ration. Analysis of consumption to evaluate the nutritional contribution with the incorporation of fortified products in the ration. Review the milk and bio-fortified project and regenerate lessons learned.	Spotlight country progress/successes alongside products and tools developed through RF partnership to promote practices, programmes, and funding. Support the Government in engaging with multi-sectoral stakeholders to strengthen and support the national School Feeding programme.	No component-specific activities

India

Component 1	Component 2	Component 3	Component 4
Provide technical assistance for mainstreaming fortified rice in Bihar. Implementation of SBCC campaign on fortified rice (FR) in Chhattisgarh Pilot school kitchen gardens to further diversify school meals (and in addition to including fortified rice)	Study on school meals-specific food baskets Assessment for creating demand for millet in feeding programs Study on diversifying the safety net food basket Feasibility study on mainstreaming fortified whole wheat flour Assessment of kitchen garden pilot	Millets advocacy campaign Advocacy for implementation of international fortification standards (mainstreaming fortified rice in food-based safety nets) Dissemination of findings of school meals basket mapping Dissemination of findings of diversified Public Distribution System (PDS) Dissemination of findings of the feasibility analysis of wheat flour fortification	No component-specific activities

Rwanda

Supply of Good Food to School Feeding Programs	Capacity strengthening	Behaviour change communication	Good food policy: enhancement to fortification	Good food data
Continue to explore the use of wholegrain MML in the WFP school meals programme, fostering linkages to the National School Feeding Programme. Develop the bio-fortified beans value chain through agronomy support, enhanced post-harvest management and market linkage facilitation. Conduct a value chain analysis of milk and eggs to inform their effective utilisation in the National School Feeding Programme.	Support further review analysis of current procurement system for school feeding, based on early experiences in the national school feeding programme Second expertise to key government ministries/agencies to advise on and help develop public procurement models and systems for school feeding Deliver procurement and food safety and quality technical backstopping to schools, focused on good foods. 1. Provide capacity strengthening at central and decentralized levels on procurement and food storage and handling. 2. Further develop and disseminate procurement and dietary guidelines and training materials, menu guidance and	Support the dissemination of existing BCC materials to the new districts / schools identified for transition for whole grain Conduct a formative research to identify facilitators and barriers to consumption of nutritious foods and uptake good nutrition behaviours. 1. Develop BCC strategy to promote the consumption of nutritious foods based on the findings of the formative research. Undertake SBCC activities among children and their households to promote good nutrition behaviours including the consumption of nutritious foods in WFP supported schools.	Survey on consumption and availability of fortified foods and bio- fortified crops in the school feeding food basket, with a focus on orange-fleshed sweet potato, and high-iron beans. Convene stakeholder forum on fortification, investments and regulations required, leveraging the SUN Business Network and other existing platforms.	Take stock of GMQS pilot and define the way forward and roll-out plan for WFP supported schools in 7 districts. Policy dialogue to define strategy and evidence priorities around nutrition and diets of school-aged children and adolescents, to define appropriate metrics and priority investments. National market assessment focused on good food and the impact of school feeding demand on supply chains and market actors for the NSFP Further develop metrics to measure diet quality among school- aged children, building on GMQS experiences

	nutritious cookbooks. Deliver training at local government and school-level, focused on how schools can procure and prepare nutritious meals using seasonal and locally available foods using energy-efficient and affordable methods of cooking			

Annex 12. Acronyms

Abbreviation	Definition
ANAN	National Agency for Food and Nutrition (Benin)
ASOPROGRABT	Brisas de Talgua Association of Basic Grain Producers (Honduras)
CO	Country Office
FDA	Foods and Drugs Authority (Ghana)
FNG	Fill the Nutrient Gap
FRK	Fortified Rice Kernels
FSQ	food safety and quality
FWG	Fortified Whole Grain
FWGA	Fortified Whole Grain Alliance (Rwanda)
GAIN	Global Alliance for Improved Nutrition
GALS	Gender Action Learning System
GES	Ghana Education Service
GMQS	Global Meal Quality Score
GSFP	Ghana School Feeding Programme team
HQ	Headquarters
JOGAPES	Young People Organized by the Pespire Livestock Farm (Honduras)
NAFCO	National Food Buffer Stock Company (Ghana)
NFFA	National Food Fortification Alliance (Ghana)
NFSP	Rwanda National School Feeding Programme
NGO	non-governmental organization
OEV	WFP Office of Evaluation
PP4N	Power of Procurement for Nutrition initiative
PPGS	WFP's School Meals and Social Protection Service
PUR	parboiled unpolished rice

Abbreviation	Definition
RB	Regional Bureau
RF	Rockefeller Foundation
SBCC	Social and Behaviour Change Communication
SDGs	Sustainable Development Goals
SHF	smallholder farmers
SLC	Strategic Learning Community
SLF	Strategic Learning Framework
SLQ	Strategic Learning Question
SMC	School Meals Coalition
SSTC	South-South and Triangular Cooperation
SUN	Scaling up Nutrition
ToC	Theory of Change
ToR	Terms of Reference
UNAG	National University of Agriculture (Honduras)
UNEG	UN Evaluation Group
UNICEF	United National Children's Fund
VE	Vanguard Economics
WFP	UN World Food Programme

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UNEG	UN Evaluation Group
UNICEF	United National Children's Fund
VE	Vanguard Economics
WFP	UN World Food Programme

Annex 13. Selected country deliverables

BENIN LEARNING BRIEF

LOCAL ECONOMIES

Strategic area description

This are focuses on innovation across the food systems supply and value chain, including market dynamics, commodity selection, and inclusive development.

Priority question

To what extent and how are innovations in the food supply/value chain, including local/institutional procurement, improving local economic development and for whom?

Lead inquiries (*Leads*)

To what extent and how are innovations in procurement of fortified food generating effects on local economies (including increasing the market for nutritious foods)**?**

How does the program address vulnerability, diversity, and inclusion to improve opportunities for rural communities-especially young girls?

To what extent are the selected commodities best suited to achieve the intended outcomes?

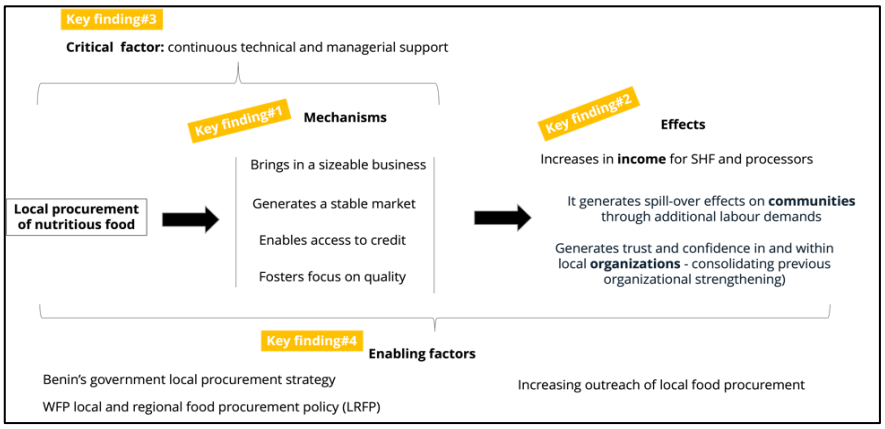
1. The project experience in Benin offers clear insights into how nutrition-sensitive innovations in food value chains linked to local procurement can improve local economic development and for whom, which is the essence of the priority learning question in this strategic learning area.
2. At the time of the country visit,[6] WFP had just purchased red beans from smallholder farmers (SHF) cooperatives and unpolished (wholegrain) parboiled rice from rice processors, who in turn purchased the paddy rice from local smallholder rice farmers. The WFP supported the whole process, and when schools start again in September 2024, these nutritious foods will be available in schools. In this context, we were able to conduct interviews with the SHFs, the processors and the national organizations supporting them, [7]allowing us to gather first-hand information about the impact of local sourcing on the local economies.

[8]**Figure 1 Summary of the key findings**

[6] The country mission to Benin took place from Monday, July 1, to Friday, July 5, 2024.

[7] Such as the Ministry of Agriculture, Livestock and Fisheries (MAEP) and the National Association of Women Agricultural Entrepreneurs of Benin (ANAFEA)

[8] The project seeks to impact local economies by purchasing highly nutritious food directly from smallholder farmers and processors at source, without intermediaries (traders and wholesalers), linking school meals with small local producers.



3. Figure 1 summarizes the four key findings of this learning area, explained in more detail in the following pages. The findings are structured around the perceived effects of local procurement of nutritious food on local economies and the mechanisms and critical and enabling factors that make this impact possible.

4. **Key finding#1. Local procurement of nutritious food leads to positive effects on the local economies through four mechanisms: sizeable business, stable market, access to credit, and focus on quality.**

5. **Sizeable business:** Local procurement brings significant business to cooperatives, farmer organisations and processors as WFP orders include large quantities in a single order. This occurs in a context where farmers and processors serve small to medium orders and sell produce in local markets to a variety of small customers. Prior to this opportunity to participate in an institutional market, SHF organizations used to aggregate small quantities.

6. For example, for the parboiled rice processors cooperative in Dassa (CCER Dassa), WFP's order of unpolished parboiled rice accounted for 73% of the annual production of processed rice.[9] For CCPM-Klouekanme, an SHF organization, it was the first time it sold red beans to WFP and the first time it pooled the product of cooperative members' produce in one order. The WFP order comprised 20% of the total annual production of the SHF organization. The remaining 80% was sold in varying small quantities at five regional markets in the Couffo department.[10]

7. **Stable market:** Local procurement creates a stable market for these organizations in a context where alternatives are rather volatile. Institutional procurement through the WFP has three main features that promote stability. First, prices and quantities are agreed in advance, which prevents farmers from selling at a loss if they need money for the next crop or cannot store the product. Secondly, farmers receive a one-off lump-sum payment that allows them to invest in the next crop after selling the initial crop. Thirdly, WFP payments are made in a maximum of 30 days after delivery, which ensures a reliable and predictable income.[11]

8. **Access to credit:** Local procurement of food by WFP for the PNASI also enables smallholder farmers to access loans from microfinance institutions, as the procurement contract serves as a guarantee. This is a factor that was particularly emphasized in group interviews with SHF and processors, as access to finance is a major challenge for agriculture in Benin, especially for women.[12]

[9] 22 metric tons out of 33 processed. Source: Group interview with members of the CCER Dassa cooperative.

[10] Source: group interview with members of the CCPM of Klouekanme (SHF organization).

[11] Source: Group interview with members of the CCPM of Klouekanme (SHF organisation) and group interview with members of CCER Dassa (cooperative for processing parboiled rice). We also consulted the document "Local procurement in Benin (March 2024)" to confirm the procurement process.

[12]The limited possibilities of access to credit for women farmers are also acknowledged in the CSP 2024-2027 (paragraph 24).

9. **Focus on quality:** Smallholder producers felt that local procurement of nutritious food improves the quality of produce and production processes, as school meal requirements are higher than open market standards.

10. However, a downside they noted - also related to quality - was the delay in food quality tests, which are conducted in foreign laboratories. Positive test results are necessary for the food to be delivered to WFP warehouses.

11. Key finding#2. **The main perceived effect of local procurement is the increase in income for smallholder farmers and processors, but there are also impacts at the organizational and community level.**

12. **Increase in income for SHF and processors:** This increase is because the quantities sold to the WFP are higher (the volumes are larger) and the price tends to be better than the market price in an environment where farmers often have to sell at lower prices because they have problems with storage or need cash.[13]

13. **Organizational effects:** Local procurement through institutional markets builds trust and confidence in and within local farmer cooperatives and unions by providing reliable contract-based orders, contributing to predictable cash flows, and facilitating access to credit.[14] We have found that this consolidates the work of other previous projects on organizational strengthening of farmer cooperatives, including women's leadership. Some of these previous interventions mentioned in the interviews were trainings by the Catholic Relief Services and phase two and three of the ACMA project, both of which include trainings on women farmer leadership (this aspect is discussed in more detail in the section on Gender).[15]

14. **Effects on Communities**: Local purchasing creates positive spill-over effects on communities by increasing labour demand, which benefits the wider community economically. Higher quality products for school canteens require cleaning, mostly done by women from female-headed households. The predictable nature of procurement orders becomes a foreseeable source of earnings for this group. Additionally, men are hired to load trucks, with workloads also anticipated through contract-based purchasing orders. These benefits extend to vulnerable groups (e.g., women-headed households) but occur within the informal economy. [16]

15. Key finding#3. **Continued technical and managerial support from the WFP and other organizations is a critical factor in activating the four mechanisms through which local procurement impacts local economies.**

16. Interviews with smallholder farmer cooperatives and food processors indicate that this technical and managerial support involves close guidance on product and process quality management, governance, and access to fertilizers and finance. This support is provided through WFP's Smallholder Agriculture Market Support (SAMS) and partnerships with projects and institutions like the Ministry of Agriculture, Livestock and Fisheries (MAEP) and the International Fertilizer Development Centre (IFDC), which implements the ACMA3 project funded by the Netherlands.

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[13] Source: interview with management, and cooperative members of CCER Dassa (Parboiled rice processors).

[14] Source: interviews with members of CCER Dassa (parboiled rice processors), which corroborated the opinions of the interview with the ANAFEA, National Association of Women Agricultural Entrepreneurs of Benin.

[15] ACMA stands for Communal Approach to the Agricultural Market in Benin and is project financed by the Embassy of the Kingdom of the Netherlands in Benin.

[16] Reported by the International Fertilizer Development Centre (IFDC), implementer of the ACMA project; the ANAFEA; and members of the CCPM of Klouekanme (SHF organization) and CCER Dassa (parboiled rice processing cooperative).

17. Experiences from SHF cooperatives and food processors who previously tried to supply the PNASI on a procurement-only basis (without accompaniment) show that risks can lead to losses. For instance, small producers signed procurement contracts without fully understanding the implications, or made investments before receiving quality test results, only to find the order cancelled due to contamination (ochratoxin, aflatoxin).

18. One positive effect of this support from WFP is that it can encourage processors to develop new product categories and innovations. For the Cooperative of Parboiled Rice Processors in Dassa (CCER Dassa), the production of unpolished parboiled rice (UPR) for the WFP was an innovation - previously they produced *polished* parboiled rice. Now the cooperative is exploring the possibility of obtaining certification to enter the commercial market for UPR. According to the cooperative's management, continuous technical support from the WFP has been instrumental in helping them reach this point.

19. **Key finding#4. The experience in Benin shows that the prioritization of local procurement by both the government and the WFP, together with the increasing reach of local procurement, are key factors in enabling the positive impact of nutritious food procurement on the local economy.**

20. Since 2018, the Ministry of Agriculture (MAEP) has had a local food procurement strategy to promote small farmers and link their produce to school canteens, a high priority for the current government. WFP, which has implemented the PNASI for the government since 2017, approved a local and regional food procurement policy in 2019. In 2021, the WFP reportedly began implementing a local procurement strategy for the PNASI, the national school program, in collaboration with the MAEP. [17]

21. Future prospects for the school feeding model impacting local economies are promising due to the PNASI transfer process. Firstly, the government plans to continue purchasing from smallholder farmers (SHF). Discussions with the Technical Unit for Monitoring and Support of Food Security Management (CT-SAGSA) of the MAEP during the country visit revealed that one of the six components of the developing school feeding programme model includes local procurement and a strategy to collaborate with SHF.

22. Secondly, the rapid expansion of local procurement suggests a significant potential impact on local economies. WFP data shows that by 2023, local purchases made up about 65% of school meals provisions, with over 30% from small producers. This figure is estimated to have increased from 65% to 90% in 2024. [18] All this in a context where the PNASI now covers 75% of public primary schools, benefiting 1.2 million schoolchildren across 5,536 schools.[19]

23. In summary, the mechanisms and factors are in place to enable local procurement of nutritious food to have a significant impact on the local economy. The impact of the WFP-RF project on the local economies now depends on the implementation of the pilot projects[20], their adoption by ANAN and their subsequent expansion. The section on sustainability contains several comments in this regard.

[17] Source: CO operational team meeting. Note: Prior to 2021 most of the food procured for the PNASI came from the Global Commodity Management Facility (GCMF).

[18] Source: the estimation on the increase was mentioned in the interview with the supply chain unit in Benin's country office. The 65% and 30% come from the document: **Experience of local procurement within the scope of the Beninese school canteens programme (WFP, February 2024)**

[19] **Experience of local procurement within the scope of the Beninese school canteens programme (WFP, February 2024)**

[20] See partnerships and sustainability sections for more information on the pilots.

GENDER LENS

Priority question

To what extent and how is the programme integrating gender-responsive and gender-transformative measures/elements?

Lead inquiries (*Leads*)

What are the enabling and inhibiting factors playing a role in incorporating a gender lens, and what could be done to enhance the possibilities of success?

To what extent and how is the project affecting women's economic empowerment in a way that shifts the gender dynamics in their households and communities?

24. Although the project implementation is still at a relatively early stage, the experience in Benin provides insights into the way and extent to which the project is impacting women's economic empowerment and changing gender dynamics in households and communities - which is part of the strategic learning framework.

25. At the time of the country visit, the WFP-RF project had not yet implemented any targeted gender interventions in SHF or food processing organizations. However, as mentioned in the section on the local economies, we observed that promoting local procurement of nutritious food had important effects on economic empowerment. The following five key findings elaborate on this (Findings #1-2) and highlight what could be done to improve the likelihood of success (Findings #3-5).

26. **Key finding#1. Field interviews show that purchasing nutritious food locally from smallholder farmers empowers women economically, including the strengthening of their leadership roles and the improving of their incomes. This empowerment is possible because there are established structures - women's cooperatives in Benin - that have been strengthened over time.**

27. Local purchases through the PNASI and the mechanisms they activate (see Figure 1) consolidate past efforts to promote women's leadership and strengthen the capacity of women's organizations. [21] Women cooperatives facilitate economic empowerment for their members through local purchasing, which acts as an enhancer.

28. Interviews revealed that when purchasing quantities are small and volatile, new members are more likely to leave women SHF cooperatives. Without reliable orders, access to credit, and predictable cash flow, women cooperatives become weaker. However, local purchasing by institutions such as the PNASI has the opposite effect, increasing the confidence and trust of the members in these women's organizations.

29. Exchanges with SHF cooperatives also revealed that economic empowerment derived from institutional markets reinforces women's leadership in two ways. First, it provides tangible examples that resonate across the organization, extending beyond conceptual messages. Female senior management in SHF cooperatives emphasized the importance of cooperative members witnessing improvements and organizational successes (such as entering new markets and generating more income) brought about by the leadership of cooperative women (both managers and members), beyond just leadership training. Secondly, the empowerment

[21] Conducted by projects like ACMA, for example, funded by The Netherlands and implemented by the IFDC, and by trainings on governance, leadership and access to markets delivered by ANAFEA, the National Association of Women Agricultural Entrepreneurs of Benin.

derived from institutional markets offers role models for what women's entrepreneurship can look like to the wider community.

30. **Key finding#2. The effects of local purchases in institutional markets (in this case the PNASI) strengthens women's SHF organizations by attracting new members (women) to the cooperatives and retaining them.**

31. As new members join cooperatives and existing members are retained, this helps to create an increasing critical mass of women who benefit from economic activities through formal structures, a virtuous circle with multiplier effects (more women benefit from this process). This is particularly important in a context where women are highly engaged in the agricultural sector, but mostly in informal activities.[22]

32. Organizations such as the National Association of Women Agricultural Entrepreneurs of Benin (ANAFEA), which works to integrate women into the formal sector through formal structures, emphasize that institutional markets are important for this purpose and that women in agricultural cooperatives prefer them to the open market.

33. **Key finding#3. One of the cooperatives supported by the WFP-RF project represents a success case and, although anecdotal, could provide leverage for WFP and its partners to increase impact on strengthening women empowerment.**

34. Two years ago, the Vice President of the Republic of Benin, who strongly supports women entrepreneurs in the rice sector, [23] visited a small cooperative of rice farmers and encouraged them to expand their production capacity. With the support of the WFP and MAEP, the cooperative strengthened their capacity and now has a contract to supply 200 metric tons of unpolished parboiled rice (UPR) to the PNASI. [24] A few weeks before the DevEv country visit, the Vice President visited the cooperative and was reportedly pleasantly surprised by the results, pointing to this as an example that should be championed and brought to the attention of other women farmers' organizations.[25]

35. The possibility of positively affecting women's lives through the institutional procurement of WFP was already mentioned in international media in mid-2022.[26] This case demonstrates the real-world impact of institutional procurement and provides leverage to motivate and incentivize smallholder farmers, especially women's groups, to produce for schools - a high policy priority of the current government.

36. **Key finding#4. The project experience in Benin also sheds light on the factors that enable or hinder the inclusion of a gender-specific lens, another important area of the strategic learning framework.**

37. The Synthesis review of gender and agricultural value chains of rice and maize in Benin, conducted by the MAEP and WFP with project support, offers relevant insights. Published in May, the study reveals that despite equal numbers of women and men in agricultural value chains, Benin's agricultural sector remains marked by inequalities. These include unequal access to decision-making bodies of agricultural professional organizations, employment, and productive resources like land, finance, and equipment. The study identifies key explanatory

[22] Source: interviews with the technical cell on gender and environment of the Ministry of Agriculture (MAEP); ANAFEA; and field interviews with (SHF organization) CCPM de Klouekanme; and parboiled rice processors (CCER Dassa).
[23] https://ceci.org/en/news-and-events/womens-entrepreneurship-and-rice-growing-a-winning-equation-in-benin.
[24] The WFP-RF project contributed to this process.
[25] Source: group interview with the capacity strengthening and knowledge management (CSKM) unit team
[26] See the last paraph in this article.

factors: low levels of education and training among women, dominant patriarchal gender norms in Beninese society, and women's poor knowledge of their rights.

38. Most of the organizations interviewed during the country visit agreed that transformative changes are a long journey. However, they all see economic empowerment, already occurring partly due to local procurement of nutritious food, as the starting point. There is a consensus that economic empowerment provides an entry point for gender-transformative actions. When women are better positioned economically, their voices are more likely to be heard.

39. **Key finding#5. The WFP-RF project offers the opportunity to use the economic empowerment achieved so far as a starting point for gender transformation activities.**

40. According to ANAFEA/Benin and MAEP's technical unit on gender and environment, one of the main barriers to gender advancements is resistance from men due to prevailing gender norms. Men may be reluctant to allow women to work or oppose women's direct access to income and participation in training. Although the Beninese constitution guarantees equal access to land rights, it is estimated that less than 30% of women have de facto access to land rights due to customary practices.[27] This restricts women's ability to provide collateral when applying for loans.

41. In this context, a consensus is emerging on the fact that that long-term solutions that transform gender start with strengthening the commitment of men to support positioning, leadership and better access to productive resources and economic opportunities for women within SHFs.[28] The WFP-RF project has just produced a Gender Action Plan developed jointly with the MAEP. The plan, which will be shared and validated with key national stakeholders in July 2024, includes several activities that also involve men (sensitization), which could be the starting point for a gender transformative approach. Given the limited duration of the project and the momentum created by the local procurement from women's cooperatives, our view is that there is a strong case for prioritizing these activities before the end of the project.

42. Although still in the ideation stage, the project plans to conduct a study with UNICEF and the WFP Nutrition team that will focus on gender-related barriers and gaps in school feeding and community nutrition. If the study results are produced and disseminated, they could significantly contribute to identifying gender-based nutrition barriers. These findings could also be incorporated into the government-implemented PNASI to include appropriate remedies.

[27] See the source of information.

[28] Source: interviews with the Cellule Technique Genre et Environnement (Technical Unit on Gender and Environment) at the MAEP; the ANAFEA, and the Diversity, Gender and inclusion specialist (WFP CO).

PARTNERSHIPS

Strategic area description

This area focuses on the optimal relationships between WFP, the government and the Private Sector (including RF), including stakeholder engagement, operational integration and donors' contribution.

Priority question

To what extent and in what ways is the current approach/strategy for working with government and other key stakeholders appropriate to ensure scaling-up and sustainability?

Lead inquiries (*Leads*)

How does WFP's role and approach to interacting with food systems affect programme implementation and results?

How can the project best balance the dynamics of stakeholders at different levels (Rockefeller Foundation, governments, private sector), including potential contextual factors?

43. The outcomes of WFP-RF project is part of the transfer of the Integrated National School Feeding Programme (PNASI) from the WFP to the National Agency for Food and Nutrition (ANAN), which was established by government decree in July 2023. In December 2023, the WFP was informed that the transfer of the PNASI must be completed by September 2024. Although the gradual handover of the school feeding programme was part of the WFP Country Strategic Plan 2024-2027, this decision by the government significantly accelerates the process.[29]

44. The PNASI is one of the government's most important social protection programmes and a main pillar of the WFP country programme in Benin. According to the WFP CSP 2024-2027, "all pilot projects and operational improvements in the WFP [school feeding] model will be tested under the national model before potential scale-up to maximize success and sustainability". [30] The innovative approaches introduced as part of the WFP-RF project are among these improvements to be tested. Therefore, we believe that the Benin experience can make an important contribution to address the question of the strategic learning framework about approaches for working with government and other stakeholders to ensure scale up and sustainability. We summarize these contributions in four key findings.

45. **Key finding#1. The government and the WFP have agreed on a learning space in which innovative approaches are to be tested in "WFP schools". This provides the WFP-RF project with a solid opportunity for uptake, scale up and sustainability of new approaches if the pilots show positive results.[31]**

46. Under the transition model, WFP will transfer the entire PNASI programme to ANAN, but will continue to manage 800 schools in eight districts. In these schools, WFP will test innovative approaches (including those brought in through the WFP-RF project) and inform and guide the government to test innovations for scale-up, with a focus on access to nutritious diets. For example, testing how to bring fresh food to schools, cash transfers to schools for purchase of fresh food and animal protein and centralized local procurement of non-perishables (maize and rice), food fortification (maize meal and rice), or testing community-level fortification versus semi-industrial fortification.

[29] Source: interview with the Strategic Partnerships (Partnership Division) specialist supporting the transition process.

[30] Paragraph 81 of the CSP 2024-2027.

[31] By uptake we refer to the extent to which the innovative approach testes by the pilot is accepted and adopted by the Government (given the results are positive)

47. This exchange space is reportedly part of the national framework coordination agreement between the government and the WFP, covering all areas of school feeding implemented by ANAN. Therefore, the results of the WFP-RF pilots, as well as other findings, will be shared and communicated through this institutionalized space.

48. **Key finding#2. This innovation learning space approach sheds light on engagement strategies that can effectively influence the government, or about how the Rockefeller Fund acts as a catalyst for policy change** - which are the two main inquiries under the advocacy strategic learning area of the developmental evaluation.

49. The experience in Benin suggests that creating explicit and agreed-upon innovation spaces during a school feeding programme transition/handover provides a fertile ground for effective advocacy strategies. In Benin, the demand for knowledge (evidence) comes directly from the government, which is seemingly open to testing new approaches to improve nutrition in the school feeding programme while generating local economic impact.[32] This aligns perfectly with the spirit of the WFP-RF project. [33]

50. It is worth considering whether this approach of creating spaces to test innovative approaches for scaling up through pilots could also be implemented in school feeding programmes directly operated by governments and supported by WFP technical assistance.

51. **Key finding#3. The experience in Benin is a unique case of rapid transfer of the school feeding programme to the government.**

52. Although this observation goes beyond the WFP-RF project, it is relevant for exploring strategies for working with partners on scaling up, ensuring sustainability and balancing stakeholder dynamics at different levels (three elements of the Partnerships strategic learning area).

53. The eventual handover of the school feeding programmes to the national government is an objective of the WFP.[34] What makes the situation in Benin unique for WFP is the short time span of the transition combined with the scale and importance of the programme: a nine-month transition (a very fast pace) for a flagship programme with a large coverage (75%).[35]

54. Lessons learned from the transfer could be useful for WFP at the corporate level while identifying strategies to ensure scale-up and sustainability of innovations in school feeding programmes on a broad scale (beyond the WFP-RF project). Assumptions for the transition have been made and risks anticipated (the country office has reportedly developed alternate action plans if the current transition plan proves unsuccessful). In the coming months, very valuable data can be obtained on what has worked and what has not - a source of valuable lessons for other country offices.

55. In the box below, we summarize four elements of the *transfer* that we, the Developmental, Evaluation team consider worth mentioning as good practices that could inspire other country offices:

[32] Source: country office management meeting, Benin CO interviews (all WFP staff).

[33] Which according to the WFP-RF project proposal (page 3) is "(...) to begin to test approaches to influence government policy, to reach children with better diets at scale, while also boosting economic empowerment opportunities of local producers, including for women smallholder farmers"

[34] WFP School Feeding Strategy 2020-2030 emphasizes the importance of national ownership and the transition to government-led school feeding programs.

[35] Although the formal handover of the implementation of the programme takes place in September, WFP will continue implementing it in 8 districts of a total of 77 for a four-year period.

Box 1:
56. **Continuous support.** The government takes over, but WFP supports purchase of food in the first school year after the handover.
57. **Shared vision**. Use of a joint roadmap and action plan for the transition by WFP and the government.
58. **Emphasis on shared learning through reviewing past experiences.** Focus on capitalization of experiences by producing a document on lessons learned from the implementation of the PNASI (2024); and organizing a joint workshop with the government where lessons were presented to and discussed with ANAN.
59. **The focus on joint learning through experimentation.** The school feeding model is co-designed and incorporates a space for improvements to be tested. This is the transition space for scaling up successful innovative approaches at the beginning of this section on partnerships and in the next section on sustainability.

60. **Key finding#4. The project in Benin offers a positive example of engaging with the Rockefeller ecosystem of partner organizations.**

61. One of the aspects to explore under partnerships in the strategic learning framework is how different country offices engage with the Rockefeller Foundation ecosystem, such as the Fortified Whole Grain Alliance (FWGA) and the Good Food Innovation Fund (GFIF). The WFP Benin country office has collaborated with the Global Alliance for Improved Nutrition (GAIN), which started its programme in Benin in September 2023. This programme focuses on fortifying maize meal to support the implementation of the PNASI.

62. The two organizations have been looking for synergies in the context of the community-level food fortification pilots, and both are addressing key challenges in fortification, with WFP working on food processor capacity and GAIN working on strengthening laboratory testing and equipment capacity.[36]

63. In addition, both WFP and GAIN receive funding from the Embassy of the Kingdom of the Netherlands in Benin, which supports school feeding as part of an integrated approach (education, agriculture and health) to food security and nutrition in the country. The Embassy sees both organizations as important complementary partners in supporting local fortification.[37]

64. At the time of the country visit, WFP and GAIN were in discussions on drafting a Memorandum of Understanding to outline the terms of cooperation and potential synergies in maize fortification in the framework of the PNASI.

[36] Group meeting with representatives of GAIN (The Global Alliance for Improved Nutrition) Benin country office and meeting with the WFP CO.
[37] Source: Interview with personnel of the Embassy of the Kingdom of the Netherlands in Benin (Food Security and Nutrition).

SUSTAINABILITY

Strategic area description

This area addresses the time horizon for implementing innovations, its effects and scaling up, with a particular focus on the context and impacts of climate change.

Priority question

How might the WFP adapt and operate differently so that WFP-RF project innovations can be implemented on a larger scale and in a sustainable manner?

Lead inquiries (*Leads*)

How can WFP become an enabler/convener for wider systems change without compromising identity?

How do current Rockefeller Fund interventions contribute to the intended/unintended effects/influences of climate change?

65. The project in Benin presents several insights about how the WFP can adapt so that WFP-RF project innovations can be implemented on a larger scale and in a sustainable manner. The country-specific situation of rapid transfer of PNASI implementation to government provides an interesting framework for how scale-up and sustainability can be addressed.

66. We have summarized the main considerations in five key findings:

    - Key Finding #1: Reflects on the good **positioning** of the WFP-RF pilots for scaling up and explains the reasons for this positioning.
    - Key Finding #2: Highlights the **risks** associated with the project's constrained remaining timeframe, which can lead to gaps in technical expertise and hinder the completion and scalability of the pilot tests.
    - Key Finding #3: Points out that the implementation of the pilots may require **adjustments** in project coordination.
    - Key Finding #4: Reflects on the opportunities to connect the project with **environmental and climate change** initiatives.
    - Key Finding #5: Offers a final observation about the **limitations** of the project's timeframe given its nature and operational requirements.

67. **Key finding#1. WFP-RF project pilots are particularly well positioned for uptake and scale-up within the PNASI for three reasons: The pilots are based on studies that are valued by key stakeholders (**Key finding #1.1**), the pilots are linked to government priorities and evidence requirements (**Key finding #1.2**), and the fact that the PNASI transition framework supports and facilitates scale-up (**Key finding #1.3**).**

68. **Key finding#1.1. The pilots are based on studies that are valued by key stakeholders.**

69. The first stream of evidence took place in the first year of the project and included ample research. These studies include the FNG analysis, the fortification feasibility study for wholegrain maize flour and rice, the formative research for the development of an SBCC strategy, and the synthesis review of gender in the rice and maize value chains. Interviews with national stakeholders during the country visit indicate that this stream of evidence is highly valued by key national stakeholders, including government agencies such as the Secretariat of the Food Council and Nutrition (SP-CAN), which played a key role in the PNASI prior to the

establishment of ANAN, the MAEP, the main WFP partner for the implementation of PNASI's local procurement strategy, and academia. [38]

70. The significance and utility of the Fill the Nutrient Gap (FNG) analysis were emphasized in all interviews with these institutions. Particularly, the analysis is valued for estimating the cost of nutritious diets, which allows for the calculation of cash-based transfers to purchase nutritious foods.

71. The project is now moving into a second phase (or stream) where evidence will be generated through the implementation of pilots connected to the results of the first-year studies.

72. The FNG and the fortification feasibility study provide examples of these connections. For example, FNG study identifies various options for improving the food basket to enable nutritious school meals to be tailored to individual regions. A procurement model needs to be developed for the national school feeding programme, and the pilots will test the options. Similarly, the fortification feasibility study identifies a two-step approach for fortification that can be tested in the WFP-RF pilots.[39]

73. **Key finding #1.2. Pilots are linked to government priorities and evidence requirements.**

74. The PNASI requires interventions that focus on nutrition and local procurement, both government priorities.[40] The WFP-RF project specifically targets these two priorities.

75. The WFP-RF project also focused on aspects that correspond to the main recommendations of the of the PNASI joint evaluation published in July 2022.[41] This evaluation recommended strengthening the nutritional impact of the programme by improving the quality of meals (ensuring a balanced diet with micronutrient-rich foods), improving the program's impact on cooperatives and small producers, and implementing a gender-sensitive strategy to maximize impact.

76. In this sense, a recent assessment of the lessons learned from the implementation of the PNASI,[42] highlights the need to further build the capacity of local suppliers and small-scale producers and to consider gender-sensitive approaches in all programme activities - two aspects that are also at the core of the WFP-RF project.

77. It is also clear from the interviews that the PNASI is high on the agenda of the government and ANAN. ANAN and the WFP-RF project (and its pilot projects) are currently focusing on increasing local sourcing from smallholder farmers and processors (including FSQ considerations), increasing the supply of fresh food, diversifying the food basket and food fortification. A key aspect of the ANAN agenda is to generate evidence to strengthen nutritional sensitivity, and the WFP-RF project is central to this.

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[38] Such as the School of Science and Technology for the Preservation and Processing of Agricultural Products of the National University of Agriculture of Benin and the Faculty of Agronomic Sciences of the University of Abomey-Calavi.

[39] In the short term it suggests importing pre-fortified rice kernels to mix with local rice and in the long term it proposes that processors use semi-industrial rice fortification equipment.

[40] For the priority on nutrition see the Benin National Development Plan 2018-2025: *"Ensure food security, nutrition, and access to safe drinking water for all" is a specific objective (page 165). Focus on nutrition is also mentioned on page 17, 25 and 158 among many others. For local procurement as a government priority see:* Minutes of the Council of Ministers January 2024 produced by the General Secretariat of the Government of Benin and the Decree 2024-1114 of September 2024 on the status of ANAN (available in the "Sources cited" folder)

[41] Final Joint Decentralized Evaluation of the National Integrated School Feeding Programme (PNASI) in Benin - 2017 to 2021.

[42] Lessons Learned from the Implementation of the Integrated National School Feeding Programme of Benin (PNASI). Capitalization of experiences (May 2024)

78. From the discussions with MAEP and SP-CAN, it emerged that they are interested in the pilot projects to diversify regional food baskets and to include fresh food and a balanced diet in school menus.

79. In this context, there are significant opportunities that can be exploited in terms of scalability, as the results of the WFP-RF pilots will inform government priorities and current calls for evidence.

80. **Key finding#1.3. The PNASI transition framework supports and facilitates scale-up.**

81. As explained in key finding #1 on partnerships, during the transition, the government and WFP agreed on a learning space to pilot innovative approaches in WFP-managed schools (800 hundred in 8 districts).[43] Within this framework, the empirical findings from the tested innovative approaches will inform the co-design of the national school feeding model. Although this is no guarantee that the innovative approaches will be scaled up, it is an important factor if the pilot projects show positive results.

82. **Key finding#2. In this promising context, the WFP-RF pilots may experience gaps that pose a risk for scaling up.**

83. The completion of the pilots is a prerequisite for the scaling up the innovative approaches introduced as part of the project. The status of the pilots varies, and the different pilots are at different stages. For example, the pilot on unpolished parboiled rice (UPR) is ongoing, the pilot on fortified maize flour is about to start with Socia Bénin, a major processor, and the pilot on fortified rice has not yet started - reportedly, only minor preparatory work has been carried out to identify rice processors.[44]

84. There is one year left until the end of the project, and in order for the results of the pilots to be brought to scale, the pilots need to be tested (implemented), evidence generated and analyzed, and the results need to be discussed and disseminated with ANAN. For some pilots, this process may extend beyond the project duration.

85. This raises the question of which pilots are feasible, and if they are implemented, what can be done to fill the gap that will be created when the WFP-RF projects come to an end, as the expertise of the staff supported by the project will no longer be available. This creates a gap in the skills required to manage the pilots (tests), analyze the data, interpret the results, and share the results with the government. This would affect the specialist areas of fortification and FSQ (food technology), gender, nutrition and procurement. The Pathways to Innovation document contains some suggestions on how the discussion can be structured to address the situation.

86. **Key finding #3. Based on experience in other project countries, we assume that the implementation of the pilots may require adjustments in project coordination.**

87. In Benin, project coordination went smoothly in the first phase of generating research-based findings through studies. Coordination on the basis of the programme manager and the component managers has worked well in this context.[45]

88. In Rwanda, Burundi, and Ghana, we have observed that once the pilot implementation begins, the need for coordination within the country office extends beyond the team members involved in the project components and becomes more intensive. Given that the project is about food systems, coordination during the implementation of the pilots increases the need for country offices to meet to discuss details. This may mean regular coordination and detailed

[43] Source: interview with WFP CO staff and management.

[44] Source: interviews with WFP-RF project staff and direct observation for the pilot on unpolished parboiled rice (UPR).

[45] Source: interviews with WFP-RF project staff, including project component coordinators, and WFP CO management.

exchanges between nutrition, SAMS, school feeding, FSQ and supply chain (procurement, logistics).

89. The Pathways to Innovation (P2I) document outlines ways in which the agile team methodology could be beneficial in this context. Experience in other countries also shows that a joint work plan can facilitate coordination during the implementation of pilot projects.

90. **Key finding #4. The project in Benin offers opportunities to link with initiatives in the areas of environment and climate change. These opportunities still need to be fully explored before the pilots are implemented.**

91. The WFP-RF project proposal seeks to link nutritious school meals, local economies and environmental sustainability.[46] One of the areas of the strategic learning framework to be explored for the DevEV is the project's link to climate change and environmental sustainability (how are aspects of climate change incorporated into the project and how does the project impact climate change).

92. The project in Benin offers interesting, untapped opportunities in this respect, as the country office is counting on the support of an energy and environmental consultant. This expert, seconded by Swiss Cooperation, supports the PNASI, the national school feeding programme to which the WFP-RF project contributes directly.[47] Some of the work and initiatives carried out by this energy and environment advisor are linked to the WFP-RF project.

93. Some examples are solar energy (solar panels) for millers, the testing of improved cooking stoves, and the testing of alternative fuels to wood (nuts) in the south of Benin where 70-80% of schools use wood stoves for cooking which exacerbate climate change.[48] Similarly, unpolished parboiled rice processors (targeted by the project) use wood in a context where available alternatives such as biomass could be explored.

94. The country office is reportedly developing a proposal for the Green Climate Fund based on three components that offer opportunities for synergies with the WFP-RF project pilots.[49] The three components are cooking, capacity building and resilience of school food providers and climate change awareness at school level (tree planting, agroforestry).

95. **Key finding #5. One insight that is emerging for future similar interventions is the perception that the timeframe of the project is insufficient in relation to its objectives and operational requirements.**

96. The project is systemic in its design, as it addresses leverage points in value chains and food systems. This means that new actors – such as food processors – need to be involved and collaborate with WFP, which takes time. On the other hand, the operational requirements and preparatory work to get the project up to speed also take time and were not included

[46] The project proposal states that "(…) *the project will start developing and testing approaches to shift towards more nutritious options for school meals which boost local economic opportunity and increase environmental sustainability* (page 1).

[47] Source: interview with the Energy and environmental consultant (SFP Team) and country office operational team meeting.

[48] Source: percentage provided by Energy and environmental consultant (SFP Team) in the interview. Note: The Global Child Nutrition Foundation's 2021 report notes that school kitchens in Benin are typically equipped with charcoal or wood stove (see infrastructure on page 1)

[49] See https://www.greenclimate.fund/countries/benin. The Green Climate Fund (GCF) is a global fund established to support developing countries in their efforts to respond to the challenges of climate change by financing projects aimed at reducing greenhouse gas emissions and enhancing climate resilience.

in plans for the project duration. This includes the recruitment of staff and the procurement processes for research studies.[50]

[50] Sources: This is the evaluators' assessment based on discussions we had at the country office operational team meeting. In all these interviews, the timeframe of the project was felt to be inadequate in relation to the objectives and operational requirements. Note: The other stakeholders interviewed did not (and could not) have a complete overview of the project objectives or detailed knowledge of the operational requirements that the project entailed at the outset.

BURUNDI LEARNING BRIEF

SUSTAINABILITY

Strategic area description

This area addresses the time horizon for implementing innovations, its effects and scaling up, with a particular focus on the context and impacts of climate change.

Priority question

How might the WFP adapt and operate differently so that WFP-RF project innovations can be implemented on a larger scale and in a sustainable manner?

Lead inquiries (*Leads*)

How can WFP become an enabler/convener for wider systems change without compromising identity?

How do current Rockefeller Fund interventions contribute to the intended/unintended effects/influences of climate change?

97. The experience in Burundi offers a wide range of insights into the factors that can play a role in how the innovations of the WFP-RF project can be implemented on a larger scale and in a sustainable manner (the priority question in this strategic learning area). Burundi can offer a broad range of insights for two reasons.

98. The first reason is the advanced stage of project implementation, as the country office in Burundi participated in the regional project "Scaling up fortified whole meals in school feeding programs (SFP) in Rwanda and Burundi and supporting an innovation hub in Kenya", which started in November 2021. The second reason is that key stakeholders consider the pilot project in Burundi to be successful and the country office is now exploring which elements of the project could be scaled up.[51]

SCALE UP

99. **Scaling up is an integral part of the project.** As outlined in the project proposal, the grant aims to scale up fortified whole meal in school feeding programmes and, among others, has the objectives of leveraging school feeding procurement as an enabler for better nutrition outcomes for school children, and advance the policy dialogue and investment in capacity strengthening around public food procurement.[52]

100. **The FWG maize meal pilot project has been successful in several ways and is now to be expanded.** Key stakeholders such as the leadership of the NSFP mention that the pilot project has made the case for FWG maize meal in the country, helped break the stigma of fortification and gained buy-in at high political levels (showing that there is research-based evidence of the impact of fortification in reducing micronutrient deficiencies and hidden

[51] Interview with the management of the National School Feeding Programme (NSFP) at the Ministry of Education. That the pilot was successful is also document in "Rwanda's wholegrain trailblazers: Reflections on a fortified wholegrain maize meal

pilot in school meals (August, 2022).

[52] Project proposal (October 2021), page 7.

hunger)[53]. This complements the important contributions made by the WFP outside the project at policy and institutional level (see Advocacy). The milling companies visited during the country mission also see the project as afeasible and impactful intervention.

101. **The experience in Burundi sheds light on the factors that, in our view, make it possible to scale up. We observe two groups of factors. A first group of factors is related to the national political, regulatory, and institutional environment.** These factors are present in Burundi.[54] There is a political will, a regulatory framework (decree on fortification,[55] the government has committed to increase the budget for the school feeding programme,[56] and a fortification strategy is in progress[57]) and a Multisectoral Platform on Food Security and Nutrition (PMSAN).

102. **The second group of enabling factors relates to large-scale fortification capacities at the national level.** There are several limitations here. There is no stable processing (in production, energy shortage, fuel shortage, no transportation due to fuel shortage), supply capacity is lower than demand, there are few medium and large mills. Currently, the production of FWG maize meal cannot cover the 25% of all schools that are supplied by the National School Feeding Programme (NSFP).[58] Rwanda shows the importance of a developed and incentivized food processing sector (technically and financially) as a prerequisite. The RF-WFP fortification model relies on medium and large mills that have technical and production capacity and Food Safety and Quality (FSQ) (an important prerequisite for the approach to work on a larger scale).

103. **A major obstacle to scaling up the project is that laboratory testing for Food Safety and Quality (FSQ) Standards has to be done in Kenya**, which takes two to three weeks and delays the delivery of ready-to-use FWG flour to schools. Currently, the Burundi Bureau of Standards and Quality Control (BBN), the national government agency, does not yet have the capacity to carry out the analysis in the country.

104. **Interviews with milling companies reveal that they face several obstacles:**

i. It takes two years for a local miller to obtain the five certificates required to produce FWG (product, intellectual property, good practices, environment, and hygiene).

ii. The unstable energy supply leads to breakdowns, repairs and production interruptions. The generators run on fuel, which is scarce in the country due to the depreciation of the exchange rate.

iii. Solar power only works for small mills, which is in conflict with solar energy solutions to increase fortification capacity on a large scale.

iv. Limited access to finance as millers need to invest upfront in the model (which is profitable but they need funds for the investment).

v. The starting point for quality standards is relatively low. It is a medium-term way to set up food safety management systems and upgrade equipment.

105. **A major challenge for scaling up the project is the current food shortage in schools.** If there is no food in schools, fortification does not impact the nutritional outcomes for school age

[53] This is not a direct influence of a specific project activity, but due to the fact that the WFP's messages on food fortification came through in project-related discussions (https://www.wfp.org/publications/food-fortification).

[54] See also the advocacy section below.

[55] "Décret n° 100-68 du 18 mars 2015 portant réglementation de la fortification des aliments au Burundi." This decree regulates the fortification of various foods including maize flour.

[56] Draft Burundi country strategic plan (2024–2027), paragraph 18.

[57] Draft Burundi country strategic plan (2024–2027), paragraph 113.

[58] Source: Interviews with WFP country office staff

children,[59] which is one of the main objectives of the project. We visited a model school near Bujumbura that had not had any food for four weeks.[60] The school management estimated that pupil attendance had dropped by 70% during this time because there were no school meals. Although this was a single event, it illustrated the scale of the problem.[61] Discussions with WFP and government staff revealed that this is not an isolated incident. The WFP has made it its main concern.

106. It should be noted that the fact that there is no shortage and food is available in schools does not necessarily mean that the conditions for scaling up are in place. Another important prerequisite is that the schools actually use FWG maize meal. In our view, it is difficult to verify whether this is the case, as the new decentralized model monitors the quantity rather than the quality of nutritious food. The limitations of the monitoring mechanisms for fortification in Burundi were also cited as a factor hindering the enforcement of the fortification decree, as it is difficult to determine whether the flour is actually fortified.[62]

107. **Experience in Burundi shows that for the WFP-RF project model to work within the planned timeframe, several conditions must be met. The first is a certain level of economic development, including the development of the food processing sector.** Providing schools with good quality, safe and nutritious food is a challenge in Burundi, as millers have relatively low baseline levels and must meet relatively high FSQ standards. The situation of the food processing sector in Burundi and the general economic conditions do not allow to consider scaling up the project in the same way as in Rwanda. This opens the discussion as to whether the scaling-up sequence in the project should be adjusted depending on the situation in the country.

108. A minimally developed food processing sector (mills) must be in place for the project to have a catalytic effect.[63] If this prerequisite does not exist, it must be created, and that takes time. Consequently, expectations need to be adjusted, because without this prerequisite it is unlikely that the project, a short-term intervention with catalytic funding, will achieve the intended outcomes.

109. **Our view is that the project in Burundi requires a transition to scale.** Food insecurity in schools needs to be urgently addressed and at the same time there is a will to scale up the pilot. However, what seems feasible given the situation is a gradual expansion, at least for FWG maize meal. This would require a transition to scale-up.

110. Against this background, the quantitative targets and expectations have not been adjusted and do not take into account the need for a gradual transition. The current project targets assume a much more favourable situation, which unfortunately does not correspond to the current reality.

111. **A final consideration with regard to the scaling up is that we see a tension between short-term and medium-term needs.** The unavailability of food in schools (hunger) and the lack of micronutrients have led to an understandable desire to scale up FWG maize meal quickly. At

[59] Project proposal (October 2021). Specific objectives of the project (page 7).

[60] Rukuruma School in Bujumbura rural province.

[61] In this particular case, the school management (headmasters and teachers) was not clear about the reasons for the shortages. The main hypothesis was delays due to the transition to the new decentralized procurement model and delays in the transfer of contracts between the district authorities and the cooperatives. However, it could also have been due to fuel shortages, which is a pervasive problem in Burundi.

[62] Source: Interviews with WFP field staff, and CO team.

[63] This was the intention of the Project. See Project proposal (October 2021). Specific objectives (page 7).

the same time, several conditions must be met for the model to be implemented on a large scale e.g. quality and safety for medium-sized food processors.

112. This tension means that food in schools urgently needs to be replaced by high-quality, nutritious food. This is a major stumbling block that needs to be overcome. Often school children do not receive meals because there is no food in schools. In this context, there is a functioning system (PP4N)[64], but it is not possible to meet all the needs of schools through this model, which needs a transition to scale.

SUSTAINABLE SCALE UP

113. **Prerequisites for continuous, sustainable scale-up. Once the prerequisites for scaling up the model and its geographical expansion are in place, several aspects should be fulfilled in order to sustain the model in the long term**:

114. The millers should operate without WFP support. This means that they must be able to bear the costs of raw materials, transportation, packaging and premix (which is imported from South Africa). These elements are now supported by the WFP.

115. A continuous power supply is a prerequisite for sustainable production. A prerequisite that is currently not in place. The power supply problems have halved the production of FWG compared to expectations.

116. Overcoming the current grain shortage in the country (quantity, regularity and quality) or the possibility for millers to import the grain (import bans on maize to protect smallholder farmers do not allow this option at times)

117. The milling of FWG must be profitable even without WFP support. With WFP support, it is now profitable given the country's challenges.

118. A key indicator of the sustainability of the scale-up would be that the WFP buys the final FWG product directly from the millers at a competitive price.

119. **In addition to the factors mentioned, we see several elements that could affect the long-term sustainability of the model. These are elements that take time to develop and are necessary for a lasting impact through nutrition-sensitive food systems:**

120. A focus on the development of the agribusiness sector (including agroindustry and nutrition, food technology, food science and nutrition.

121. Investing and creating the conditions for a continuous pool of professional talent entering the sector.

122. A growing role of academia in this process (tertiary education). In our opinion, there is no faculty of nutrition and food and no technical degree programmes for practitioners.

[64] PP4N stands for the Power of Procurement for Nutrition (PP4N) initiative and is the name of the pilot project that was first implemented in Rwanda (2020) and then continued in Rwanda and extended to Burundi. We use the term model to refer to the PP4N initiative.

PARTNERSHIPS

Strategic area description

This area focuses on the optimal relationships between WFP, the government and the Private Sector (including RF), including stakeholder engagement, operational integration and donors' contribution.

Priority question

To what extent and in what ways is the current approach/strategy for working with government and other key stakeholders appropriate to ensure scaling-up and sustainability?

Lead inquiries (*Leads*)

How does WFP's role and approach to interacting with food systems affect programme implementation and results?

How can the project best balance the dynamics of stakeholders at different levels (Rockefeller Foundation, governments, private sector), including potential contextual factors?

123. At the heart of the partnership questions in the strategic learning framework are partnerships for scaling up and sustainability. Burundi also offers rich insights in this regard. The partnerships in this project and across the WFP portfolio reflect the tension between the pursuit of food systems transformation, which requires a holistic and integrated approach, and the management of projects under specific thematic units (internal dimension) and specific donors (external dimension), leading to silos and fragmentation.

The internal dimension

124. **The WFP-RF project, the Power of Procurement for Nutrition (PP4N) initiative, represents an entry point into the work of transforming food systems in WFP. In this regard, the project is a tangible source of knowledge and learning**. The project has placed food systems at its centre and is the first initiative to bring WFP to play a role in food systems by addressing all phases of the food transformation. Internally, the project brings together nutrition, school feeding, procurement, supply chain, food safety and quality (FSQ), certification and resilience (energy and water). It therefore places high demands on the interaction between the six or seven teams involved in the project. It also faces the challenge that school feeding, and food systems are under different outcomes in the Country Strategic Plan. Externally, the project involves intensive collaboration with other fortification projects and with a wide range of partners in the food systems and value chains of the selected commodities.

125. **The project has highlighted the tensions that arise when applying a systems logic (food systems) in the current structures that follow the fragmentation of the development aid sector.** If this project had been a one-off experiment, it would not have had many wider implications in terms of the need to adapt to systems logic. However, the WFP move towards food systems transformation makes it an aspect to reflect upon.

126. **Burundi has made relevant and creative attempts to resolve the tensions and find workable solutions to work within the current internal (within WFP) and external (donor) structures in a food systems perspective.**

127. There is one person responsible for coordinating fortification (activities) across units and projects.

128. Fortification portfolio approach: The role of the coordinator facilitates synergies between the RF-WFP (PP4N) and other projects. There is an explicit attempt to look for complementarities and link projects from different donors. This is the case with the synergies between the PP4N and the Dutch-funded PATSAB project (Support Project for the Transformation of Agri-food Systems in Burundi), – which also pursues a food systems approach. Similarly, the PP4N's work with food processors (millers) is now being continued through a Swiss cooperation project that supports the modernization of millers' production lines.

129. At the time of the DE country visit, the Burundi country team was exploring the possibility of establishing a Task Force for Food Systems Transformation to enable work across the value chain on both the supply and demand side (nutrition, resilience, market support for smallholder farmers, school feeding, logistics, procurement, finance). In doing so, the WFP essentially aims to ensure that coordination no longer takes place only in project related meetings, but in cross-cutting issues (fortification meetings) that could ultimately lead to a transformation of food systems.

The external dimension

130. **Despite these efforts and workable solutions, the dynamics of the development aid sector, which includes actors at different levels (donors, implementing partners, ministries), tends to work in a fragmented and siloed (project-based) manner, which affects the approach of WFP and all other actors in interacting with food systems in Burundi**. This is a feature of the development aid system and goes beyond the project. However, given the importance of a food system transformation approach for a sustainable scale-up of the fortified whole grain maize meal pilot, we believe that it is worth exploring alternatives, such as *clusters* (see Pathways for Innovation for further considerations).

131. Fragmented project-based approaches can make it difficult to achieve project outcomes, especially outcomes that reflect changes at the food system level (as is the case with the WFP-RF project). The group interview with several WFP implementing partners revealed that different projects work with different stakeholders and sectors depending on donor priorities. There are often problems with geographical integration, for example when projects promoting agricultural markets for smallholder farmers are implemented in provinces where there are no nutrition projects. These inconsistencies make the food systems approach a major challenge.

132. In the WFP-RF project, which reflects systemic outcomes, food producers, millers and pilot provinces for the decentralized procurement model should be linked (which is not always the case) if decentralized procurement through FWG maize meal is to have an impact on the nutritional outcomes of school children and the local economy.

133. **Another finding in the area of partnerships is that although the WFP-RF project is an innovative partnership, it is being implemented according to the traditional project approach.** The partnership between the WFP and the RF in Burundi is highly valued and considered as innovative and strategic. A partnership that goes beyond the boundaries of the traditional donor project and requires WFP to work differently, adapt quickly and work with a systems approach. However, as in Rwanda, this innovative space exists alongside the traditional project-donor-implementation logic. There is a polarity. Sometimes the RF is seen

as a donor and sometimes as a strategic ally. When seen as a donor what stand outs is the comparatively low contribution and the high demands on implementation (interestingly, the RF does not see itself as a donor). As a strategic, innovative partner, the RF is characterized by its flexibility, adaptability and the value of its ecosystem of partners. The same is true for the RF in relation to the WFP. Sometimes the WFP is seen as a strategic partner, bringing critical expertise and national partners in school feeding, nutrition, and the food value chain. Sometimes it is referred to as a grantee, an implementing agency that must deliver results based on activities and targets. We believe the way this polarity is managed and experienced is not unimportant, as it determines the potential of such a partnership.

134. **The experience with the partnership in Burundi sheds light on the possibilities of using the partnership between the RF and the WFP at country level**. The partnership is characterized by a high degree of flexibility in project implementation an effective connection to the Rockefeller partner ecosystem. This has led to timely adjustments (e.g. exploring options for energy consumption, energy transition, water, solar panels). The case of Burundi sheds light on how the network of partners from the RF ecosystem can be integrated and utilized. In this regard, the partnership seems to have at times followed an alliance mode that goes beyond the pattern of partnership between donors and implementers.

135. **The WFP is a valued and recognised partner in Burundi. In view of the topics covered in the Pathways to Innovation document, this offers numerous opportunities**. The WFP is perceived by government actors and development partners as an important player in the food system.

136. **Against this background, the institutional framework for nutrition and fortification in Burundi seems appropriate to start a dialogue to identify and address the structural and operational challenges that hinder the scalability of the project**.[65] The Multisectoral Platform for Food Security and Nutrition (PMSAN) could be a place to share experiences from the implementation of the PP4N so far and to initiate a joint dialogue on the way forward could be initiated. Three aspects lead us to believe that this joint dialogue could be an aspect to be considered. First, the PMSAN reflects the recognition that nutrition is a cross-cutting issue that cuts across all food systems and across all ministries. Second, a national fortification strategy is being developed (with WFP support) and a work is underway on a roadmap for food system transformation. Third, the PMSAN is working on a proposal to amend a presidential decree that would allow a joint committee to include UN agencies in the planning and coordination of the multisectoral platform.

[65] The Burundi Food Systems Model presents this structural and operational challenges in detail. Some of them are also mentioned throughout this learning brief.

ADVOCACY

Strategic area description

This area focuses on convening and influencing for better nutrition and healthy diets at the national and international levels, with an emphasis on institutional procurement.

Priority question

5. Which specific advocacy approaches are working well for systems change and which do not? And why?

Lead inquiries (*Leads*)

5.1 To what extent and how does the current engagement strategy effectively influence government and other relevant actors?

5.2 How can the Rockefeller Fund act as a catalyst for change to influence policy at the national level?

137. The project experience in Burundi also sheds light on specific approaches and engagement strategies that work well to support national policy change. The experience in Burundi seems to make it clear that scaling up FWG maize flour under the school feeding programme (SFP) requires a more sophisticated approach that goes beyond project activities in a context where the SFP is intended as a lever for transforming food systems.

138. **The project does not have an explicit advocacy strategy. However, there is ample evidence that the WFP in general, and the WFP-RF project in particular, has supported policy and advocacy on nutrition. Two approaches appear to have worked particularly well: evidence generation and the innovative nature of the WFP-RF project.**

139. **Evidence generation**. An illustrative example is the value for money study examining the costs and benefits of school meals. The study has not yet been completed, but its effects are clearly recognized by the relevant stakeholders. The NORAD-funded study has promoted political acceptance of school feeding, supported the decision-making process and acted as a lever for the WFP-RF project.

140. The study estimates the cross-sectoral benefits of school meals using a return-on-investment model, and its preliminary results have already had an impact, winning over high political circles that were sceptical of school feeding. The study also appears to have played a role in convincing ministries other than the Ministry of Education to support and adopt the concept of school feeding – which in turn is the entry point for fortification. Evidence of the impact of school feeding appears to have contributed to the recent significant increase in the budget line for school feeding in the Ministry of Finance (from $2.6 million to $6 million in six months). The fact that the senior leadership of the National School Feeding Programme (NSFP) were part of the technical working group that co-developed the study's model played a fundamental role in the effectiveness of strategy to generate evidence.[66]

141. **The innovative nature of the project**: By focusing on fortification, the project has helped to open up a new space in a context where fortification was associated with stigmatization and resistance. Interviews with government representatives indicate that the project's focus on production, i.e. the supply side, was crucial in this regard. The project has helped to create the space for the development of a fortification strategy (being developed by the government with WFP support) as part of the promotion of human capital in the country.

[66] Source: Interview with the management of the NSFP at the Ministry of Education.

142. **The project has thus contributed to the country being on the road to fortification without pursuing an explicit advocacy strategy. However, the scenario outlined in the Burundi Food Systems Model and Pathways to Innovation requires a rethinking of the current approach.** This rethinking would mean moving away from advocacy (activities) anchored in specific projects and considering a shift towards a more structured, systemic, medium to long-term and adequately resourced approach to advocacy.

143. The project objectives focus on the link between school feeding procurement and nutritional outcomes by scaling up the use of FWG maize flour.[67] As mentioned in the Local Economies strategic area, it is not clear whether this is the case. The link is not clear in practice: there are food shortages in schools, and it is not clear whether locally sourced food is nutritious (including FWG maize flour).

144. We hypothesise that this is at least partly because the relationship between procurement and nutritional outcomes depends on variables that go well beyond the scale and scope of the project. These variables are structural and operational factors that require a more holistic, systemic approach to advocacy (as opposed to a project-based, fragmented approach).[68]

145. **The current structural and operational challenges that have led to food shortages and hindered the project scale up may be a call for a food-systems-transformation type of advocacy.** The experience in Burundi shows that food system transformation cannot be influenced by relatively small, fragmented interventions alone (even if they are very effective). The transformation of food systems requires a comprehensive policy dialogue.

146. It also requires thinking about the kinds of capabilities needed. Advocacy approaches that support policy change at the food systems level will most likely require a different skill set and profile than advocacy at the project level, as engagement with government would take place at a more strategic level.

147. Another argument for advocacy approach that transcends projects – which was frequently mentioned in the interviews – is that the momentum generated by advocacy activities is lost when the project ends (e.g. dissemination of evidence stops, dialogue events take place less regularly). The experience in Burundi suggests that systemic challenges require a more advocacy-driven, long-term and continuous approach to supporting policy and practise if the goal is systemic change.

[67] The project proposal (page 7) sets forth as objectives: to scale up FWG maize meal in the SFP by using school feeding procurement as a lever for improved nutritional outcomes, and to scale up FWG in SFP through policy dialogue to advance public procurement of food as a catalyst for food and nutrition security.

[68] These factors are detailed in the Food Systems Model and include fuel shortages and power outages, restrictions on food imports, outer accreditation of food quality or low technical capacity in the agribusiness sector.

LOCAL ECONOMIES

Strategic area description

This are focuses on innovation across the food systems supply and value chain, including market dynamics, commodity selection, and inclusive development.

Priority question

To what extent and how are innovations in the food supply/value chain, including local/institutional procurement, improving local economic development and for whom?

Lead inquiries (*Leads*)

To what extent and how are innovations in procurement of fortified food generating effects on local economies (including increasing the market for nutritious foods)**?**

How does the program address vulnerability, diversity, and inclusion to improve opportunities for rural communities-especially young girls?

To what extent are the selected commodities best suited to achieve the intended outcomes?

148. The experience in Burundi sheds light on various aspects and considerations of the local economic impact of the innovations introduced by the project. A key factor that makes the experience in Burundi particularly interesting is the fact at the time of the country visit, two studies (both funded outside the project) on the local economic impact were in progress. The value-for-money study conducted by Harvard University on the costs and benefits of school feeding, and the **Impact Evaluation** conducted by the World Bank and the WFP, which compares the impact of the (traditional) centralized and decentralized procurement model on value chain actors. The **Value-for-Money study** examines, among other things, the benefits for the agricultural sector, both in terms of job creation and in terms of increasing local production and producers' income. The Impact evaluation looks, among other things, at the effects of the various procurement systems on the local economy. These studies have not yet been completed, but we have already been able to conduct interviews and have had access to initial results.

149. **The experience in Burundi shows that it is difficult to measure the impact of school feeding on the local economy, even when studies are conducted on the subject**. The value-for-money study conducted by the Harvard School of Public Health estimates the cross-sectoral benefits of the return-on-investment model for school feeding. The cross-sectoral benefits include benefits to education, health and nutrition, social protection, and the local economy – the agricultural sector. The study used secondary data available in the country such as household surveys and randomized control trials published in the literature. The study found positive impacts on the agricultural sector. However, the actual impact is difficult to assess due to the limited data available and the volatility of the environment. Data from the agricultural sector, including production capacity, is often not accessible, making it difficult to estimate the actual impact on the local economy.

150. In addition, the sharp devaluation of the Burundian franc in January 2023 led to several shocks in the agricultural sector (fuel shortages, impact on transportation and inputs). The group discussion we conducted with implementing partners working with farmers and cooperatives shows that the results of the value-for-money study (which is based on secondary data) should be treated with caution. While the value-for-money data show benefits to the local economy, farmers are in most cases disadvantage by various barriers such as low prices, storage problems, scarce profits due to high production costs and climate change impacts (e.g. locusts infestation of maize crops).

151. **One of the lead inquiries in the learning framework concerns the link between procurement, nutritious food, and the local economy (including increasing the market for nutritious food). This link is not clear in Burundi**. The impact Evaluation addressing this sequence shows that the decentralized procurement model leads to an increase in the number of school meal days. However, the impact on nutrition is uncertain. It is not known whether local procurement leads to nutritious school meals, as it is unclear whether procurement from local markets includes nutritious foods (such as fortified whole grain maize flour, or high iron beans). It is assumed that the project will have the desired impact if nutritious foods (such as fortified whole grain maize flour) are introduced to the local markets and then procured through the decentralized model – however this does not yet appear to be the case.

152. Farmers in Burundi produce grain, but there is a shortage in the country. The grain for the FWG maize meal is mainly imported from Tanzania and Uganda.[69] The goal and the basic idea of the model (PP4N) is to source from local farmers to improve the value chain, but farmers do not yet have the capacity to do so.

153. **The case for the impact of the project on the local economy assumes integration (as opposed to fragmentation), i.e. interventions that converge in the same areas (boundaries) and have a joint impact on the same population. However, this is not always the case (dilemma 3 in the Food System Model document).** We assume that the decentralized procurement model and the mills (supported by other projects) producing FWG maize flour are not yet connected and that the impact of demand from milling companies on farmers and cooperatives is a possibility, but not yet a fact.

154. The link between cooperatives and milling companies is a prerequisite for the project to have an impact on the local economy in the medium and long term. In this respect, the prospects for impact on the local economy may be greater for the milk value chain than for the FWG maize flour.[70] A formative assessment has recently been conducted as part of the project; the work has just started and directly involves the milk cooperatives (milk quality centres).

155. **The value-for-money study shows promising scenarios for scaling up the project. One of the arguments in favour of scaling up (the PP4N model) is the local economic impact**. However, we believe that scaling up based on the impact of nutritious foods (including fortified whole grain maize flour) on the local economy is only a theoretical possibility (and not yet a fact) unless some of the current structural and operational challenges are addressed (see Burundi Food System Model Report).

[69] East Africa Cross border Trade Bulletin (April 2024, page 5) and interviews with the project coordinator and the WFP procurement officer.

[70] Milk and high iron beans, together with FWG maize four are the three nutritious foods included in the WFP-RF project. Work is more advanced for the FWG maize meal.

GENDER LENS

Priority question
To what extent and how is the programme integrating gender-responsive and gender-transformative measures/elements?
Lead inquiries (*Leads*)
What are the enabling and inhibiting factors playing a role in incorporating a gender lens, and what could be done to enhance the possibilities of success?
To what extent and how is the project affecting women's economic empowerment in a way that shifts the gender dynamics in their households and communities?

156. **A gender approach was not incorporated in the project design. However, the project has clear potential for gender impact, both positive and negative, so the inclusion of a gender perspective is crucial.** Stakeholders interviewed[71] largely agreed that the WFP-RF project has significant potential to influence gender aspects, from the impact of nutritious food on girls to the gender dynamics of value chains, in a country where women are involved in different parts of the food value chains (from farming to processing).[72] The school feeding programme also creates employment opportunities for women, in a context where the cooperatives are predominantly made up of women.

157. **At the same time, it is unclear how intensive participation in the value chain can change, reinforce, or reshape gender dynamics and requires detailed analysis.** We found that there are different views and assumptions about how women benefit from food value chains. Some voices argue that it is about strengthening the role of women in participating in value chains and assume that they automatically benefit because they are members of cooperatives, farmers and caterers in schools. Others point out that their participation in value chains does not necessarily automatically lead to positive effects but can have positive or negative effects depending on the prevailing power dynamics. The role of women in families and the social norms, roles, and relationships when it comes to risk-taking, entrepreneurship or resource allocation determine how and in what way they can benefit. For those who hold this view, traceability of the impact of value chains on Burundian women is essential (as is monitoring and evaluation). This would require not just recording the numbers and percentages of women involved, or assuming that they benefit because they participate.

158. **The main discussion therefore revolves around the question of how gender can be incorporated into the intervention (value chain) in a gender-responsive and gender-transformative way. The prospects are promising, as initial work has already taken place.**

159. At the time of the country mission, the focal point for social protection and gender had started developing a concept note for girls, the school feeding programme and value chains. The focal point also participated in an inter-agency dialogue with UNFPA, UNICEF and UN Women. In addition, linkages with the Ministry of National Solidarity, Social Affairs, Human Rights and Gender had just started. The ministry staff interviewed stated that the institution sees great potential in the WFP-RF project for working on gender in value chains.

160. Although the process of integrating gender-responsive elements is still in its early stages, by the end of the project, the experience in Burundi could provide valuable insights into the

[71] All interviews included at least one question on gender.

[72] Source: Interview with milling companies, WFP implementing partners (including the Local Producers Federation)

facilitating and hindering factors for integrating a gender lens and improving the chances of success. These two elements are the core of the first lead inquiry in the gender strategic learning area.

GHANA LEARNING BRIEF

PARTNERSHIPS

Strategic area description

This area focuses on the optimal relationships between WFP, the government and the Private Sector (including RF), including stakeholder engagement, operational integration and donors' contribution.

Priority question

To what extent and in what ways is the current approach/strategy for working with government and other key stakeholders appropriate to ensure scaling-up and sustainability?

Lead inquiries (*Leads*)

How does WFP's role and approach to interacting with food systems affect programme implementation and results?

How can the project best balance the dynamics of stakeholders at different levels (Rockefeller Foundation, governments, private sector), including potential contextual factors?

161. As mentioned in Ghana's country strategic plan 2024-2018, WFP continues to transition from direct implementation to an enabling role, supporting government systems through capacity strengthening and technical assistance. In the area of school feeding, the WFP handed over the National School Feeding Programme (NSFP) to the Government already in 2015 and has since assumed the role of a technical advisor and partner.[73]

162. In this context, project activities are implemented by a variety of government partners in a wide range of thematic areas (see Keyfinding#2), and the current approach to working with government partners leads to several insights, which we summarize below in several key findings.

163. **Key finding#1. Within the project framework, the Country Office (CO) works with a wide range of partners who recognize and value its role as an enabler and facilitator.**

164. It is clear from the interviews that WFP is seen as an important partner in nutrition in the country and is highly regarded for its role in rice fortification efforts, particularly as a provider of evidence for the development of the rice fortification framework. WFP is perceived positively by all stakeholders, has a wide network of connections and is seen as a convener.[74]

165. We observed strong stakeholder commitment and engagement in the project. There is a clear sense of eagerness and enthusiasm about the potential of rice fortification in the country, especially as rice consumption continues to rise steadily.[75]

166. As part of the project, WFP has supported the Ghana Health Service (GHS) in reactivating the National Food Fortification Alliance (NFFA), a collaborative platform that brings together

[73] Source: Ghana CSP 2024-2028 (executive summary and paragraph 28).

[74] Source: This was present in one way or another in all interviews. In some it was more explicit that in others such as in the interviews with GHS, WIAD, GES, GSFP, and AGI.

[75] Source: Enthusiasm with the possibilities was expressed, among others, in interviews with GHS, GES, the Association of Ghana Industries (AGI) and the Food & Beverages Association of Ghana (FABAG). The increase in rice consumption is mentioned on "The study on landscape analysis and potential fortification in Ghana" (June, 2023; page 30) and Agricultural media in the region also report the increase.

various stakeholders from government, the private sector (including several food processors), non-governmental organisations and development partners to address food fortification issues in the country. [76] The NFFA, which is co-chaired by the GHS and FDA, had been inactive for several years. [77] Most stakeholders interviewed during the country mission appreciated the enabling and convening role of WFP, especially in a context where this alliance is critical to addressing micronutrient deficiencies in the country.

167. **Key finding#2. In a context where WFP is not a direct implementer, the engagement of multiple partners and different levels represents a high degree of complexity. At times, this complexity has led to communication gaps and confusion.**

168. At least seven government partners are directly involved in the implementation of various project activities. [78] Interaction between and within these partners takes place at central, district and local levels, which adds to the complexity of communication and coordination of the project.

169. The interviews revealed information gaps, a lack of awareness of the project activities and some confusion about the next steps. For example, NAFCO and GSFP were unaware of the reactivation of the NFFA, although they were particularly interested in it. Both the GSFP and the GES were unclear about the upcoming project activities. The GES expected to receive the recipe guides after training the caterers but was unsure about the timeline and the procedure to be followed.

170. When we visited the primary and secondary high school (SHS) in Tolon district, [79] they were confused about the project status and had not heard from the project since the caterers training in October 2023 (nine months ago). Both schools did not know about the project delays and had been waiting for the pilot for months.[80] At the SHS this was apparently due to miscommunication between the central (GES), district (DES) and local (SHS) levels. In the primary school, it was not clear why no one had informed them.[81] We found that, if not addressed, this communication gaps could lead to risks in decreasing ownership and disengagement with partners at the local level.

171. WFP meets regularly with each partner, but these meetings are usually activity-based. As a result, project partners do not always receive the same information or updates on project status. The lack of joint meetings where all partners are informed about the overall implementation has led to confusion about the work plan. In addition, the project's reporting lines, and communication requirements are not clearly defined and there is no specific Memorandum of Understanding setting out the partners' commitments or the communication mechanisms at all levels. This issue was highlighted during the DevEv plenary debriefing meeting with the CO team on June 28, where possible remedial actions were discussed.

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[76] Sources: interview with the GHS; Reliefweb Ghana country brief.

[77] Source: Stakeholders Engagement Reactivation of the National Food Fortification Alliance (NFFA). Activity report, July 2023.

[78] Ghana Education Service (GES), Ghana Health Service (GHS), Ghana School Feeding Programme (GSFP), Ghana Standards Authority (GSA), Food and Drugs Authority of Ghana (FDA), National Food Buffer Stock Company (NAFCO), and the Women in Agricultural Development (WIAD) directorate of the Ministry of Food and Agriculture (MOFA).

[79] Woribogu Kukuo Ahmadiya Primary School in Tolon, and the Senior High School in Tolon.

[80] Caterer Training and Cooking Demonstration. Period: Oct- Dec 2023. Venues: Navrongo, Tolon, Ejisu and Asutuare.

[81] The school feeding programme in primary schools is managed by the GSFP Secretariate under the Ministry of Gender, Children and Social Protection (MoGCSP)

172. **Key finding#3. Engaging with multiple partners across different levels (central, district, local) adds complexity and impacts internal coordination.**

173. Several CO units and areas are involved in the project, [82] each working with different government counterparts. WFP-RF project activities are discussed and coordinated in meetings between these units. So far, however, there have been no specific project meetings focused on coordinating the work plan of all units involved.

174. During the plenary debriefing session at the end of the DevEv mission (June 28), the problems highlighted in Key Finding No. 2 were discussed. The country office suggested introducing regular (e.g. monthly) meetings based on the work plan to ensure that all partners are aligned on the project. It was also suggested to hold similar project-related meetings internally, involving all relevant units working on the WFP-RF project.

175. The further the implementation of the pilot projects in the 12 selected schools progresses, the more necessary internal project meetings will become, as most of the WFP units will be involved.

176. **Key finding#4. The CO jointly manages and coordinates several rice fortification projects and deliberately links them with other non-fortification projects. This integrated approach creates synergies and optimizes resources.**

177. The country office has established a Technical Working Group (TWG) to oversee both the DSM-Firmenich and WFP-RF rice fortification projects.[83] The TWG enables discussions and decisions to be made on the two projects and their budget lines.[84] The usefulness of the TWG was mentioned in several interviews (e.g. with GHS, GSFP and FDA).

178. During the country mission, the CO was preparing to incorporate a contribution from the FCDO (Foreign, Commonwealth & Development Office) which included fortification equipment. The CO decided to use the fortification equipment procured under the WFP-RF and DSM projects, allowing the FCDO to use the funds to obtain higher targets. One option considered was for the FCDO project to involve the four rice processors selected for the WFP-RF project in activities that support governance and organizational aspects, such as developing business plans and conducting due diligence.[85]

179. The CO also makes deliberate links between the Mastercard project and the WFP-RF project. [86] The Mastercard project works with SHF women in the rice value chain and plans to link them to the WFP-RF project (see key finding #2 in the gender section). The rice processors selected for the WFP-RF pilot can benefit from Mastercard's training on digitalization and modernization of the agricultural sector. Additionally, the Mastercard project, in partnership with MOFA, has set up a price monitoring system for agricultural commodities in major markets across the country. The caterers from the 12 schools involved in the WFP-RF project are included in this scheme and can access pricing information relevant to WFP-RF project locations. [87]

[82] Nutrition, social protection/school feeding, gender, FSQ team, procurement, M&E, Knowledge Management, and food systems.
[83] The WFP-RF projects is located in Noth Ghana and focuses on the fortification of parboiled unpolished local rice (PUR). The DSM-Firmenich project is located in South Ghana and focuses on the fortification of polished local rice.
[84] Source: initial interview with the CO team.
[85] Source: initial interview with the CO team.
[86] The Mastercard project is called "Strengthening Food Systems to Empower Smallholder Farmers and Young People program"
[87] Source: interview with WFP CO team member.

180. **Key finding#5. The CO collaborates with the private sector as one of the main actors of the project. As the role of the private sector in scaling up and sustainability increases, more engagement from the WFP may be required.**

181. In discussions with government officials, the involvement of the private sector was emphasised as critical to scale-up and sustainability, as the sector plays a key role in the implementation of large-scale food fortification.[88] The creation of incentives for the food processing industry (rice processors) is seen by several key stakeholders as a central element for the scaling up and sustainability of rice fortification (see paragraphs 55-72).

182. The WFP-RF project has been working with private sector actors under the NFFA, and project staff are increasingly in contact with the selected rice processors (millers) as the pilot progresses. In addition, the CO has already considered a sustainable funding mechanism for the NFFA so that it does not end with the RF project. To this end, it intends to leverage partnerships, including with the private sector. [89]

183. In the procurement of equipment (see paragraphs 40-41), it has already been shown that closer cooperation with the private sector to identify its needs would be extremely useful. In this context, it seems appropriate to consider more direct and regular opportunities for cooperation with the private sector. The involvement of product or sector specialists to bring in the market and industry perspective (for rice processing and marketing) is one possibility that has been identified by the CO management.[90]

[88] Source: Interview with the GHS.
[89] Source: initial interview with the CO team.

[90] Interviews with senior management at the CO.

SUSTAINABILITY

Strategic area description

This area addresses the time horizon for implementing innovations, its effects and scaling up, with a particular focus on the context and impacts of climate change.

Priority question

How might the WFP adapt and operate differently so that WFP-RF project innovations can be implemented on a larger scale and in a sustainable manner?

Lead inquiries (*Leads*)

How can WFP become an enabler/convener for wider systems change without compromising identity?

How do current Rockefeller Fund interventions contribute to the intended/unintended effects/influences of climate change?

184. The key question in this area examines how WFP can adapt to ensure that project innovations are scaled up sustainably. The project in Ghana provides valuable insights into factors that may impact the pilot's implementation and highlights critical factors for successful scaling up and sustainability. The findings in this section are organized according to the sequence of pilot implementation, scale-up, and sustainability.

185. Rice fortification is entirely new in Ghana, but the country has experience with large-scale food fortification since 1996. Past initiatives have included universal salt iodization and the fortification of vegetable oil and wheat flour.[91] The lessons learned from these experiences can be integrated into the current project.

IMPLEMENTATION OF THE PILOT

186. As mentioned in the project proposal, the project combines direct implementation to scale up interventions with parallel work towards knowledge and evidence creation, testing of metrics and advocacy for changes in healthier diets.[92] This results in two streams of evidence. One stream resulting mainly from research and technical studies,[93] and another stream where insights are gained through the direct implementation of a pilot project. The pilot project is based on the results of the first year's studies.

187. **Key finding#1. Knowledge and evidence generation through studies have progressed as expected. However, delays in preparing the pilot have occurred, primarily due to the procurement of equipment and the selection process of rice processors. These delays provide valuable lessons for the future.**

188. In the first year of the project, evidence was created through research and studies. Studies produced include the 'Fill the Nutrient Gap Ghana' report (May 2023), the 'The Study on Landscape Analysis and Potential Fortification in Ghana' report (June 2023), and the formative assessment and baseline survey for the project (April 2024), which includes key findings from the social behavior change (SBC) component.

189. During the first year, direct field implementation was limited to the 'Recipe Development, Caterer Training, and Cooking Demonstration' conducted in October and December 2023.[94]

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[91] Source: Food and Nutrition Bulletin, vol. 33, no. 4 (supplement), 2012, The United Nations University.
[92] Source: Project proposal, June 2022, page 1.
[93] This corresponds to the "evidence/measurement outputs" part of the project's theory of change.
[94] https://ourhomelandghana.com/general/wfp-commended-for-supporting-caterer-trainings-and-cooking-demonstrations/

These demonstrations focused on local parboiled unpolished rice (PUR), a nutritious food that is also the type of rice to be fortified as part of the project's innovation.[95] The next step would have been the provision of fortified PUR to the pilot schools. However, by early July, at the time of the country mission, this had not yet occurred for two main reasons:

190. **The first reason for the delay was the procurement of fortification equipment for the selected rice processors.** Interviews with senior management and procurement staff at the CO revealed that these delays stemmed from oversights in the preparatory work rather than the procurement process itself. According to these interviews, the CO identified three key lessons:

191. First, there was a lack of clear parameters and technical specifications for developing the tender requirements, which delayed the equipment purchasing decision. The time needed to develop these specifications was not accounted for in the project's timeline. Second, rice processors should have been involved in the purchasing decision from the beginning, participating in the development of technical specifications to ensure their buy-in. Third, the procurement of specialized equipment coincided with other competing priorities, which further slowed down the process. Future procurement timelines should account for these factors.

192. **The second reason is that preparing the four selected rice processors to use the equipment is taking longer than expected.** The key insight here is that certain aspects of the selection process were not anticipated.

193. NAFCO and the FDA identified four local rice processors for the pilot, one in each pilot region. Some of these processors either did not have their products registered with the FDA or had outdated licenses. As a result, the processors had to undergo FDA training on food safety and quality control. Following the training, the FDA would guide them through the process of obtaining their licenses. Additionally, the FDA decided that the rice processors' facilities needed FDA certification before they could receive the equipment. This decision required the FDA, supported by WFP, to provide further training so the processors could obtain certification and begin fortifying rice for the pilot.[96]

194. In this context, it's important to note that the FDA's recent requirement that water used for parboiling must be fluoride-free could further delay the pilot's implementation. This unexpected requirement means that water quality tests will need to be conducted to ensure the parboiling water meets the necessary standards.[97]

195. **Key finding#2. The empirical evidence from the pilot serves as a leverage point, as most stakeholders view it as a timely and relevant contribution to developing a framework for rice fortification in the country.** [98]

[95] The pilot innovation focuses on the introduction of fortified parboiled unpolished rice (FPUR) in 12 schools in four regions –North Upper East and Northen regions in the north, and Ashanti region and Eastern region in the south. Half of the schools are primary and half secondary high schools (SHS). The focus on PUR responds also to the project requirement (page 18 of the Project Proposal) the project would use fortified rice and *other nutritious commodities* in the school meal programme.

[96] Sources: interviews with the FDA, the NAFCO and WFP-RF project staff.

[97] Source: remote validation meeting with the Ghana country office on July 23 (three weeks after the debriefing)

[98] A leverage point is a place within a system where a small change or intervention can lead to significant improvements or outcomes. It is a point of high impact where efforts can be concentrated to achieve significant effects on the overall system.

196. Most stakeholders interviewed believe that the current priority is to gather evidence to support the case for rice fortification. The results of the pilot in the 12 selected schools are seen as crucial for this purpose. [99] The GHS emphasized that while support for scaling up might be necessary, the expansion will occur through government systems (NAFCO and Caterers). They noted that the most critical support needed now is in generating evidence through the implementation of the rice fortification pilots, with the WFP-RF project being one of these key pilots.

197. This issue was mentioned in several interviews. Some stakeholders had general questions about the type of evidence the pilot would generate and the questions that evidence would address. Others had specific expectations regarding the kind of evidence they anticipated. Box 1 highlights some of these expectations and the specific questions the pilot's evidence is expected to answer.[100]

Box 1. Expectations about the evidence to be generated by the pilot (in the 12 schools)	
Association of Ghana Industries (AGI)	Is the fortified parboiled unpolished rice up to standards? Does it address micronutrient deficiencies?
Amsig Resources (rice processor)	Can we prove that fortified PUR has impact on nutrition so that then we can start shifting values? How much of the nutritional problem we are trying to address is solved with fortified rice?
Food and Drugs Authority (FDA)	Will the fortified parboiled unpolished rice retain the nutrients?
FABAG	What kind of scientific evidence will the pilot produce?
NAFCO	What will be tested in the pilot? (Will the pilot collect evidence on the supply model e.g. appropriateness of the processors size and capacity, links with local producers of rice) How will the WFP-RF project baseline be used in the pilot?
AGI, GHS, and FABAG	What are the productions costs for the fortified parboiled unpolished rice?

SCALE UP

198. In the interviews, we repeatedly asked about the prerequisites and conditions required for scaling up. It was frequently emphasised that the effectiveness of the caterer model (Key finding#3) and the need to create incentives for the food processing industry (Key finding#4) are decisive factors. In this context, private sector actors often referred to the lessons of previous fortification initiatives in Ghana, which provide valuable insights into the enablers and barriers to scaling up. These lessons are discussed in more detail under Key finding #4.

[99] This was mentioned in interviews with the GHS, NAFCO, the Association of Ghana Industries (AGI), the Food & Beverages Association of Ghana (FABAG), the District Education Service (DES) in Tolon, Savanna Agricultural Research Institute (SARI) in Tamale SARI (Research), and the University of Ghana.

[100] Note: these questions and expectations emerged during the interviews. There was not intended questions on the expectations about the pilot in the interview protocols.

199. **Key finding#3. To successfully expand the pilot projects in primary schools, the caterers' model must function effectively. However, the model is currently facing structural challenges that are jeopardizing the scaling process.**

200. In the Ghana School Feeding Programme (GSFP), the provision of food for primary and junior secondary schools involves different systems. In primary schools, meals are provided by caterers contracted by the GSFP. [101] These caterers are responsible for sourcing ingredients, preparing meals, and serving them to students in public primary schools. They receive a grant per child (GHS 1.20 per child per day) and are paid by the government through the Ministry of Gender, Children, and Social Protection. [102] The WFP-RF pilot for primary schools is based on this caterer model, which is currently facing several challenges that may jeopardize the pilot's scaling up.

201. At the time of the country mission, the school feeding program was in crisis due **to unpaid arrears to caterers** for three academic terms (September 2023 - June 2024). [103] As a result, caterers were not attending schools to prepare meals.

202. **The current food grant of GHS 1.20 per child per day is insufficient to provide a nutritious meal.** [104] The District Education Office in Tolon pointed out that this limitation leads to children receiving low-quality food in small quantities. This concern is also recognized in the CSP, which acknowledges that the quality and quantity of school meals remains inadequate. This deficit makes the feasibility of scaling up fortified PUR more difficult, unless the fortified rice is subsidized. Even before fortification, the use of unfortified PUR was not a viable option for caterers. According to the GSFP, the demonstration training for caterers using PUR revealed that the current grant is not sufficient to cover the cost of the ingredients for unfortified PUR.

203. According to the GSFP**, it is important to educate caterers that fortificants are not harmful to health**. There are deep-rooted misconceptions among caterers that need to be corrected; otherwise, they may choose not to buy fortified PUR even if it is available. [105]

204. There are structural **water problems** in the district of Tolon during the dry season. Adequate water supply is essential for the caterers and matrons (in the SHS) to cook the food. This could pose a risk to the expansion of the pilot project. [106]

205. **Key finding#4. Incentivizing the food processing industry, particularly rice processors, is essential for scaling up. However, several challenges and uncertainties need to be addressed. The following factors, identified through interviews, either facilitate or hinder the scaling process: the limited capacity of local rice processors, the cost of fortificants, additional production adjustment costs, the need for a clear regulatory framework, and the challenge of balancing fortification with the scale of processors.**

206. **Key finding#4.1. The limited capacity of local rice processors poses a significant challenge to scaling up**. Interviews with GHS and NAFCO revealed that the success of rice

[101] In the project's pilot there are 6 primary schools and 6 senior high schools.
[102] Source: interviews with the GSFP, the WFP-RF project coordinator, the WFP SP unit and the CSP 2024-2028 (paragraph 11).
[103] https://www.modernghana.com/videonews/CitiTV/5/433091/
[104] Source: this aspect was mentioned in the interview with the University of Ghana, the District Education Office in Tolon, and the GSFP. It was also validated by the Interview with a primary school caterer in Tolon, and it is also acknowledged in the Ghana CSP 2024-2018 (paragraph 11).

[105] Source: presentations of challenges made by the GSFP in the interview held with them during the country mission.
[106] Source: this was mentioned in the interview with the DES in Tolon and in the group meeting we conducted at the SHS in Tolon. However, we understand that it may affect primary schools as well as SHS.

fortification largely depends on the private sector's ability to ensure a consistent supply. GHS expressed concerns about whether there will be enough rice processors capable of producing the necessary quantities for scaling up. Meanwhile, NAFCO pointed out that the technical knowledge and capacity of rice processors are currently insufficient, highlighting the need for continuous support.

207. Ghana has extensive experience in large-scale food fortification, including universal salt iodization and the fortification of vegetable oil and wheat flour. Another significant food fortification initiative in Ghana, in which the private sector is heavily involved, is the Obassima seal. [107] We conducted interviews with the Association of Ghana Industries (AGI), the Food & Beverages Association of Ghana (FABAG) and UNICEF who played a key role in these experiences. These discussions highlighted factors that could either facilitate or hinder the scale-up of rice fortification pilot projects. We summarize them below:

208. **Key finding#4.2. The cost of fortificants is another critical factor that can either hinder or facilitate scaling up.**

209. Both the private sector and government organizations have recognized this as an important factor.[108] Fortificants need to be imported, and if they become too costly, it discourages processors from using them. According to AGI, FABAG and UNICEF, this has been a problem with wheat flour and salt. Under the WFP-RF pilot project, equipment and fortificants are currently subsidized. However, if this support ends and fortificant prices increase, this could discourage rice processors from fortifying rice.

210. UNICEF's experience with the iodization of salt shows that the pilot model was not sustainable.[109] According to an interview with UNICEF, iodine for salt fortification was initially subsidized, but when the subsidies ran out, processors stopped production due to the increased costs.

211. Stakeholders interviewed, including CO staff, agree that scaling up and sustainability of unpolished parboiled rice fortification requires a robust model for fortificants.[110] The Ghanaian CO is aware of the risk associated with reliance on an external supply chain for fortificants and is exploring options to source fortified rice kernels domestically, with contacts already established with universities. The key question remains whether the economies of scale and demand will be sufficient to support private sector kernel manufacturers.[111]

212. **Key finding#4.3. The additional costs of adjusting production lines to accommodate fortification could also discourage local rice processors.**

213. The production processes need to be realigned to incorporate fortification, which requires the purchase of new equipment (subsidised during the pilot project) and adjusting the production line to effectively integrate this equipment. These adjustments, as well as the investment costs for fortification, could discourage new local rice processors from participating in the scaling-up process.

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[107] https://obaasimaghana.com/food.php. The seal is a certification mark in Ghana that identifies food products fortified with 18 essential micronutrients specifically designed to meet the nutritional needs of women of reproductive age.

[108] This aspect was also pointed out in interviews with the GHS, the GSFP, and the FDA.

[109] Source: Brighter Futures: Protecting early brain development through salt iodization. The UNICEF-GAIN partnership project (2018) (page 52).

[110] GHS, the GSFP, the FDA, AGI, FABAG, UNICEF and the WFP CO.

[111] Source: mentioned by CO staff in the Developmental Evaluation plenary debriefing meeting on June 28 in Ghana.

214. The landscape analysis and potential fortification study in Ghana (June 2023), supported by the project, suggests that further research is needed to determine the profitability of local rice fortification. Additionally, the study indicates a mismatch between the investment that processors are willing to make and the price they can realistically charge per kilogram of fortified rice, compared to the current market price. [112]

215. **Key finding#4.4. The private sector stakeholders interviewed are predominantly of the opinion that a clear regulatory framework for rice fortification should be created. The decision on whether rice fortification should be mandatory or voluntary has significant implications for both scaling up and sustainability.**

216. AGI and FABAG emphasized the importance of an enabling policy environment to make food fortification attractive for processors, drawing on lessons from previous fortification initiatives. A conducive regulatory framework should include measures to reduce cost burdens and expand market opportunities. For example, granting tax exemptions on the import of fortificants to lower costs or incentivizing local production of fortificants by supporting domestic processors.

217. AGI and FABAG also emphasized the need to make rice fortification mandatory, at least for the school feeding program during the scale-up. This would secure the institutional school market for local rice processors, helping them to recoup their investments. They emphasized that for the requirement to fortify rice in the SFP to serve as an effective incentive, it must be backed by legislation to prevent the risk of policy changes when the government changes.

218. The coexistence of fortified and non-fortified rice was cited as a significant risk of non-mandatory fortification. Non-mandatory fortification would lead to competition between fortified and unfortified rice. In this scenario, if fortified local rice is more expensive, unfortified imported rice could displace it, undermining the very purpose of fortification, which is large-scale mass fortification using rice as a vehicle. According to the AGI, this problem occurred with the Obaasima initiative.

219. Given the structure of the rice market in Ghana, [113] mandatory fortification could have a significant impact on trade and the local industry. Rice production is a priority for Ghana, [114] but despite increasing consumption,[115] the country still imports 55% of the rice it consumes. [116] This raises the question of whether imported rice should also be fortified or only local rice. Some stakeholders have pointed out that, given current consumer preferences, it would be problematic if imported rice were cheaper than fortified local rice.[117]

220. SARI, the authors of the study on landscape analysis and potential fortification in Ghana, point out that the price of locally produced rice is already high even without fortificants, primarily due to production costs. Fertilizers and pesticides account for 50% of these costs, and post-harvest losses are significant.[118] SARI researchers also emphasized that without government flagship programs such as Planting for Food and Jobs, the incentives for local rice production would be low.

[112] See page 44 of the study.
[113] Source: interview with the GHS.
[114] Source: https://mofa.gov.gh/site/publications/agricultural-articles/393-rice-production-a-priority-to-ghana.
[115] https://www.agricinafrica.com/2022/05/urgent-call-for-strategic-investments-in-the-seed-systems-of-six-staple-crops-in-Ghana.html
[116] Sources: The Conversation (media)
[117] Sources: interviews with AGI and with the University of Ghana.
[118] Source: interview with the Savanna Agricultural Research Institute (SARI), Tamale.

221. **Key finding#4.5 The balance between fortification and the scale of processors should be carefully considered.**

222. Discussions with UNICEF and FABAG revealed that fortification at the artisanal and small-scale processor level did not work effectively in the iodization of salt. The only viable approach was salt aggregation (pooling it together) and work with cooperatives. Given the limited capacity of small local rice producers, there is concern that fortification may not be successful even among small and medium rice producers if fortification is not done at a centralised fortification site. This concern is also expressed in a UNICEF report, which states that due to the complexity of small-scale production in Ghana, it is difficult to achieve a household supply of sufficient iodized salt of more than 90.[119]

SUSTAINABILITY CONSIDERATIONS

223. We also explored the factors necessary to sustain the fortification of parboiled unpolished rice after scaling up. Sustainability was a central theme during our interviews, as it was one of the main concerns expressed by the CO during the preparation of the country mission. Below, we present the key findings on this strategic learning area.

224. **Key finding#5. The sustainability of rice fortification in the school feeding program depends on the financial viability of the NSFP itself.**

225. The financial sustainability of the NSFP remains a challenge. As mentioned in the Ghana CSP 2024-2028, the adoption of the school feeding policy in 2016 was a significant improvement. However, further action is needed to achieve financial sustainability, including enacting the policy into law to secure direct budgetary support for the program. [120]

226. On the other hand, Ghana is part of the Sustainable Financing Initiative for School Health and Nutrition (SFI), an initiative of the School Meals Coalition. This involvement offers promising prospects for overcoming the current financial viability challenges. A consultant is reportedly working on a landscape analysis to identify funding sources beyond government funds. The consultant's report will include recommendations on sustainable financing for the Ghana NSFP.[121]

227. The financial viability of the NSFP, including an increase in the grant per child, is essential for sustainability. The landscape analysis and fortification study indicates that even with an estimated fortification cost increase of only 2-6%, caterers will not be able to procure fortified rice without a sustainable funding mechanism.[122]

228. **Key finding#6. Long-term sustainability requires expanding the market for rice fortification beyond the school feeding program.**

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[119] Source: Brighter Futures: Protecting early brain development through salt iodization. The UNICEF-GAIN partnership project (2018) (page 53).

[120] Source: Ghana CSP 2024-2028, paragraph 38.
[121] Source: initial interview with the CO team.
[122] Source: Report on "The study on landscape analysis and potential fortification in Ghana" (June 2023) (Page 44)

229. Several interviews revealed that the sustainability of rice fortification requires thinking beyond the school market. [123] Since sustainability requires expansion beyond the institutional market of the School Feeding Program (SFP), AGI and SARI emphasized the need for a nationwide market research study to assess the demand for locally fortified rice in both institutional and commercial markets. In an interview with GES, it was noted that the acceptability of the product (fortified PUR) ultimately depends on its availability in the wider market and not just in schools.

230. In this context, several stakeholders emphasized the importance and urgency of Social and Behaviour Change Communication (SBCC) for rice fortification, particularly for the fortification of PUR.

231. **Key finding#7. Since fortified rice is new in the country, SBCC is considered essential for developing demand for fortified parboiled unpolished rice in a way that supports sustainable scale-up.**

232. Several stakeholders noted that the benefits of fortified rice are not yet sufficiently well known. [124] This lack of awareness is at odds with the need to expand the market for fortified rice beyond the school feeding program to ensure sustainability. In this context, SBCC appears to be essential for achieving sustainability.

233. In the meeting with the GSFP, the progress of the project to date was discussed and several recommendations were made. One of their main suggestions was to carry out an analysis of consumer preferences. They found that while there is a positive enthusiasm in the community for parboiled unpolished rice, there is also a strong preference for white polished rice, which is associated with status. [125]

234. This was confirmed during a group interview we conducted in Tolon (Northern Region) with SHFs, aggregators and parboilers. They noted that PUR is considered a traditional household food, while polished rice is considered a new product. They also observed a preference for polished rice and expressed their interest in polishing their own rice to capitalize on this market trend.

235. Both the GSFP and the GES emphasized the importance of expanding the reach of SBCC by involving local leaders, chiefs, influential mothers (champions), caterers, parents, and local rice processors. [126]

236. The coherence of *messaging* emerged as an important aspect in several interviews. The DSM-Firmenich project supports the fortification of parboiled polished rice in the South, while the WFP-RF project focuses on parboiled unpolished rice in both the North and South. There are different opinions within the country office as to whether the messages of these two projects complement or contradict each other. [127]

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[123] Source: Interviews with senior management at the CO, AGI, FABAG and the SARI.

[124] This was explicitly mentioned in interviews with NAFCO, WIAD, SARI, GSFP and WFP CO staff.

[125] The GSFP pointed at the need to demystify white polished rice, which is associated with higher status, while PUR is associated with poor households.

[126] The GSFP mentioned the illustrative example of a kid mentioning after one of the demonstrations in October that he loved PUR, but that when he grew old, he would eat polished rice. The GSFP pointed that TV ads on polished rice are recurrent.

[127] Source: initial interview with the CO team.

237. In addition, the formative study and most of the interviews indicate that the northern part of Ghana has a stronger preference for PUR. [128] While the study also indicates that the taste of PUR is not a concern in the south (especially in the Ashanti region), opinions on the issue vary. Several stakeholders pointed to a clear preference for polished rice in the south. [129]

238. **Key finding#8. The National Food Fortification Alliance (NFFA) plays a key role in advocating to ensure that sustainability factors are in place.**

239. The NFFA serves as a major advocacy mechanism to the government and is strongly committed to making food fortification a national priority again. [130] The NFFA plays a crucial role in achieving this goal. During the country mission, the intention was expressed to form subcommittees within the NFFA to focus on areas such as research, SBC, enforcement and standard harmonization. [131] Insights from the salt iodization effort underscore the critical role of the NFFA in advocating for legislation mandating fortification. [132]

240. Given the NFFA's important role in advocacy, there are concerns that the platform is heavily dependent on donor support. When this support ends, the Alliance often becomes inactive and needs to be reactivated. Currently, the NFFA is financially supported by WFP. The operational costs of the Alliance do not appear to be included in the GHS/FDA budget lines. [133] We interviewed the consultant responsible for developing the Terms of Reference (ToRs) for the NFFA. The plan is for joint activities, such as plenary meetings and workshops, to be funded by industry and donors, while individual activities are to be included in the annual budgets of the government agencies involved in the NFFA.

241. **Key finding#9. Enforcing fortification standards for rice is crucial for sustainability and should not be underestimated.**

242. Setting and enforcing standards for fortified rice is critical to provide the right incentives for private rice processors to invest in fortification. [134] The risk of abuses and unfair competition, such as companies falsely marketing unfortified rice as fortified, could be a significant disincentive. [135]

243. The role of the FDA is crucial in this regard. FDA must conduct quality control testing of fortified rice in both mills and schools. In addition, FDA will need to verify compliance for rice fortification kernels if the fortificants are produced domestically.

244. The experience with the iodized salt initiative shows that the FDA was only involved to a limited extent. [136] In the interview, FDA pointed out the challenge of integrating the fortification initiative (the pilot project) into its routine activities. FDA staff also mentioned that the organization lacks the capacity to conduct micronutrient analysis, which is essential for enforcement of the initiative and requires rapid test kits. UNICEF provides the kits for salt, and

[128] In the north of Ghana there is less humidity and rice can break. This makes parboiling a better alternative (Source: interviews with WFP CO staff, interview with SARI).
[129] Source: interviews with NAFCO, WIAD, GES, GSFP, FDA, SARI and University of Ghana.
[130] Source: interview with the GHS, co-chair of the NFFA.
[131] Source: interviews with the GHS and with the FDA (the two co-chairs of the NFFA)
[132] Source: interview with the AGI and the FABAG.

[133] Source: interviews with the AGI and the FABAG.
[134] Source: interview with the GHS.
[135] Source: interview with the AGI.
[136] Source: Brighter Futures: Protecting early brain development through salt iodization. The UNICEF-GAIN partnership project (2018). On page 52 it says: "While the programme mobilized local and national political partners, enforcement by the Ghana Food and Drugs Authority remained limited (...)".

Catholic Relief Services (CRS) helps with kits for vegetable oil and wheat flour. These considerations also apply to rice fortification.

245. For the FDA to fulfil its role effectively, a national standard for rice fortification must be established. Currently, there is no such standard in Ghana. WFP has initiated discussions with the Ghana Standards Authority to support the development of this process.

246. **Key finding#10. One key finding for future similar interventions is that the time frame of the project is not sufficient to achieve the objectives and meet the operational requirements.**

247. The project aims to address critical leverage points in value chains and food systems. Engaging and involving new actors, such as local rice processors, is important but time-consuming. In addition, some aspects of scaling up and ensuring sustainability may go beyond the scope of the project (as mentioned in the previous key finding). While the project acts as a catalyst, it is crucial to allow sufficient time to consolidate efforts in areas such as developing national standards, establishing business models for fortificants, enhancing FDA enforcement capacity, improving the capabilities of local rice processors, and ensuring the viability of the caterer model.

248. On the other hand, the operational requirements and preparatory work needed to get the pilot project up and running also take time and were not included in the project duration. In Ghana, this includes the procurement of equipment for rice fortification (see paragraphs 40-41) and the selection and certification of rice processing companies (see paragraphs 42-43).

LOCAL ECONOMIES

Strategic area description

This are focuses on innovation across the food systems supply and value chain, including market dynamics, commodity selection, and inclusive development.

Priority question

To what extent and how are innovations in the food supply/value chain, including local/institutional procurement, improving local economic development and for whom?

Lead inquiries (*Leads*)

To what extent and how are innovations in procurement of fortified food generating effects on local economies (including increasing the market for nutritious foods)**?**

How does the program address vulnerability, diversity, and inclusion to improve opportunities for rural communities-especially young girls?

To what extent are the selected commodities best suited to achieve the intended outcomes?

249. The WFP-RF project builds on the model of the school feeding program and includes several elements aimed at strengthening local economies. However, the impact of the project on the local economy remains limited for two main reasons. Firstly, implementation is still in the early stages due to delays. Secondly, there are structural problems with some elements of the model that could have a positive impact on the local economy. We explore these issues in more detail in Key Findings 1 and 2 below.

250. **Key finding#1. The caterer system in the school feeding program is designed to positively impact local economies.**

251. In the Ghana School Feeding Programme (GSFP), the provision of food for primary and junior secondary schools involves different systems. In primary Schools meals are provided through caterers who are contracted by the GSFP. As mentioned in paragraph 50, these caterers are responsible for sourcing ingredients, preparing meals, and serving them to students in public primary schools. In this way, program aims to support local farmers by sourcing food locally, thereby boosting the local economy and ensuring that children receive nutritious meals (GES interview). The focus of the GSFP on local economies is also explicitly stated by the MoGCSP when stating the short-term objectives of the programme.

252. In the Ghana School Feeding Programme (GSFP), the provision of food for primary and junior secondary schools operates through different systems. In primary schools, meals are provided by caterers contracted by the GSFP.[137] As mentioned in paragraph 50, these caterers are responsible for sourcing ingredients, preparing meals, and serving them to students in public primary schools. The program aims to support local farmers by sourcing food locally, thus boosting the local economy while ensuring that children receive nutritious meals.[138] The focus on local economies is also explicitly stated by the Ministry of Gender, Children, and Social Protection (MoGCSP) in the short-term objectives of the school feeding programme.[139]

[137] In the project's pilot there are 6 primary schools and 6 senior high schools.
[138] Source: interview with the GES.
[139] https://www.mogcsp.gov.gh/ghana-school-feeding-programme-gsfp/

253. The caterers are mothers who live in the communities where the schools are located. They buy the products from their locality and thus act as multipliers for the local economies. [140]

254. **Key finding#2. However, several factors limit the substantial potential impact that the caterer's model could have on local economies: inadequate funding, delayed payments, limited access to credit, weak linkages between caterers and smallholder farmers (including parboilers)**

255. **Inadequate funding:** The grant per child per day (GHS 1.20) that caterers receive under the national school feeding programme is insufficient to cover 30 percent of the daily calorie intake recommended for a daily nutritious meal. This finding was confirmed by the "Fill the Nutrient Gap analysis". [141]

256. **Delayed payments:** There have been significant delays in reimbursing caterers for their costs. At the time of the country visit, caterers were protesting in some parts of the country due to unpaid arrears spanning three academic terms (September 2023 to June 2024). [142] As a result, caterers were unable to provide school meals. In the primary school we visited in Tolon, school meals had not been provided for two academic terms because of this situation.

257. **Limited access to credit for caterers**: Caterers are required to pre-finance 60-65 cooking days, [143] despite facing significant difficulties in accessing credit. This challenge is highlighted in the CSP 2024-2028 and was confirmed by the caterer we interviewed in Tolon.

258. **Weak linkages between caterers and smallholder farmers** were highlighted in several interviews and acknowledged in the CSP. [144] This issue was further confirmed in our interview with smallholder farmers in the Tolon District. Some reasons for this weak linkage include the fact that caterers cannot provide credit to smallholder farmers, who need funds to start production, and that caterers cannot pay upfront because they are reimbursed by the government, and payments often come late.

259. One final finding about local economies is that the project has prioritized local small and medium-sized processors.

260. **Key finding#3. NAFCO has adapted its purchasing model for the project pilots, increasing the likelihood of positively impacting local economies through small and medium-sized enterprise (SME) processors.**

261. For secondary schools, the National Food Buffer Stock Company (NAFCO) supplies staple food items, ensuring a consistent and reliable supply at stable prices. Schools use these supplies to prepare meals for their students. The government, through the Ministry of Education, pays the food providers via NAFCO, but these payments are often delayed. [145]

262. In this context, NAFCO noted in the interview, that local small and medium processors were reluctant to participate in the pilot due to the risk of receiving late payments. To address this issue, the payment sequence has been adjusted for the pilot. It has been agreed that once the processor delivers the rice to NAFCO, NAFCO will pay them directly, taking on the risk, so the processor does not have to wait for payment from the Ministry of Education.

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[140] Source: Meeting with the GSFP (this point was part of their PowerPoint presentation)

[141] Source: Ghana CSP 2024-2028 (paragraph 11).

[142] https://www.modernghana.com/videonews/CitiTV/5/433091/

[143] Source: Interview with the GSFP.

[144] Source: GES interview, GSFP interview), and Ghana CSP 2024-2028 (paragraph 11).

[145] Source: Interview with NAFCO.

GENDER LENS

Priority question

To what extent and how is the programme integrating gender-responsive and gender-transformative measures/elements?

Lead inquiries (*Leads*)

What are the enabling and inhibiting factors playing a role in incorporating a gender lens, and what could be done to enhance the possibilities of success?

To what extent and how is the project affecting women's economic empowerment in a way that shifts the gender dynamics in their households and communities?

263. Preparatory activities for the gender component of the project have been carried out, although the actual implementation has not yet begun. The proposed approach seems to be suitable for achieving gender-related outcomes. However, the limited remaining timeframe of the project poses a challenge, especially given the desire to integrate gender-transformative actions. This is discussed in more detail in the key findings below.

264. **Key finding#1. The gender component of the project is deliberately geared towards the inclusion of transformative actions.**

265. The gender component of the project aims to integrate the gender lens in a way that has an impact on social norms (i.e. a transformative approach). This intention is reflected in the methodology chosen for the WFP-RF project. The plan is to use the Gender Action Learning System (GALS) methodology,[146] a community-led, gender transformative tool, where the community the challenges (e.g. access to markets) and social factors that hinder women's empowerment.[147] This tool was used by IFAD in Ghana years ago.[148]

266. The group interview in Tolon with smallholder farmers (SHF), including both men and women, revealed that involving women SHFs and linking them with caterers, even if successful, might not automatically lead to economic empowerment. This is because the land is usually owned by men and women often engage in farming to support their husbands. In this context, the GALS methodology appears to be quite appropriate.

267. **Finding#2. Although gender-related activities for the WFP-RF project have not yet begun, significant preparatory work has already been done through the Mastercard project.**

268. One of the key elements of the gender component of the WFP-RF project is its aim to establish a connection between female smallholder rice farmers and female caterers in the primary schools selected for the WFP-RF pilots. Although the women SHFs have not yet been identified, the project has recently begun exploring the feasibility of this link. In this context, the WFP-RF project builds on the efforts of the 'Strengthening Food Systems to Empower Smallholder Farmers and Young People' program, funded by Mastercard.

[146] GALS has been developed under Oxfam Novib's Women's Empowerment Mainstreaming and Networking Programme since 2008 with local partners and Linda Mayoux.

[147] Source: interview with the programme office on gender and youth inclusion.

[148] Case study: Gender Action Learning System in Ghana, Nigeria, Rwanda, Sierra Leone and Uganda (2014)

269. The Mastercard project has provided training of trainers in smallholder farming (SHF) and value chains for the Ministry of Gender (MoGSP) and the Women in Agricultural Development Directorate (WIAD) of the Ministry of Food and Agriculture (MOFA), both of which are implementing partners in the WFP-RF project. In addition, the CO is conducting a gender analysis in all regions of Ghana as part of Mastercard's financial inclusion efforts. This analysis shows that access to finance and ownership of a bank account are major challenges for women SHFs. Ensuring financial inclusion of women SHFs is a critical component of the expected linkage between caterers and women SHFs under the WFP-RF project. Although some internal consultations with the Mastercard project had occurred by the time of the country mission, consultations with smallholder farmers (SHFs) and caterers had not yet taken place.[149]

270. **Key finding #3. There are signs that technology risks displacing parboiling women. If this is the case, it would be an unintended negative consequence that should be carefully examined and mitigated.**

271. According to staff interviewed at the Women in Agricultural Development (WIAD) directorate, the rice value chain is highly gender-sensitive, with distinct roles assigned to men and women. Women are involved in rice farming, retailing, and, most prominently, in parboiling rice. [150] In processing, large-scale operations are typically male dominated, while micro-scale processing is often led by women, with parboiling being a clear example, as most women in rice processing are parboilers. Furthermore, WIAD has learned from previous work on parboiled unpolished rice that women tend to work in groups, which enables them to benefit from extension services and empowers them as a collective. [151]

272. In this context, members of the WFP-RF project team have recently met with rice processors interested in using machines for parboiling, which could potentially displace women from their current roles. [152] If this risk materializes, the introduction of technology might result in an unintended negative displacement effect. Further investigation is needed, with the participation of the Gender Officer, to analyse the risks and explore opportunities for women in the production of parboiled unpolished fortified rice.

[149] Source: interview with the WFP CO
[150] While they may also be men farmers and men retailers, parboiling is fully performed by women.
[151] Source: interview with staff at the Women in Agricultural Development directorate of the MOFA.
[152] Source: remote validation meeting with the Ghana country office on July 23 (three weeks after the debriefing)

RWANDA LEARNING BRIEF

PARTNERSHIPS

Strategic area description

This area focuses on the optimal relationships between WFP, the government and the Private Sector (including RF), including stakeholder engagement, operational integration and donors' contribution.

Priority question

To what extent and in what ways is the current approach/strategy for working with government and other key stakeholders appropriate to ensure scaling-up and sustainability?

Lead inquiries (*Leads*)

How does WFP's role and approach to interacting with food systems affect programme implementation and results?

How can the project best balance the dynamics of stakeholders at different levels (Rockefeller Foundation, governments, private sector), including potential contextual factors?

273. The project experience in Rwanda offers very relevant and rich insights into partnerships, particularly the nature and development of the partnership between WFP and the Rockefeller Foundation (RF). There are two main reasons for this. The first reason is that the partnership between RF and WFP began in 2020 with a pilot project in Rwanda under the Power of Procurement for Nutrition (PP4N) initiative. The subsequent regional project "Scaling up fortified whole meals in school feeding programs in Rwanda and Burundi and supporting an innovation hub in Kenya" built on the results of the pilot project in Rwanda, and the current global project is a further extension of the opportunities offered by the partnership between RF and WFP. The second reason is that the partnership between WFP and RF in Rwanda has taken place in a context that has made it particularly complex. We believe that this complexity leads to insights that can be of relevance and interest to the Strategic Learning Community and to WFP and RF as they further develop their partnership approach.

274. **The innovative nature of the partnership brings considerable added value for the WFP. The experience in Rwanda clearly shows the benefits that the innovative nature of the partnership can have for a country office.** The fact that it was the first food system-oriented grant that used fortified foods in school feeding as an entry point had a transformative effect on the country office. It has helped to integrate nutrition sensitivity into school feeding, it has enabled the CO to work with the country's food processing industry, and it has encouraged a different way of working within WFP: It is the first project to provide funding directly to different units within the same intervention (i.e. school feeding, nutrition, procurement). In addition, the project experience has enabled the country office to be involved in the development of in-country standards for fortified whole grain maize meal (FWG) and has fostered collaboration with corporate and philanthropic foundations beyond the traditional donor base.[153]

[153] Source: group interview with members of the WFP CO. While other school feeding projects have funded multiple units, funding was channeled through the school feeding unit.

275. **The WFP-RF partnership in Rwanda was not only innovative, but also characterized by a high degree of complexity.**[154] We have identified four elements that made the partnership particularly complex: It is a multi-level partnership within WFP (HQ, RO, CO), requiring a high degree of internal coordination; several elements made the governance of the partnership particularly challenging; and the fact that it posed several dilemmas in approaches due to different views arising from different organizational mandates and perspectives.

276. **The partnership is a multi-level partnership (1).** The partnership between the World Food Program and Rockefeller takes place at different levels of the organization - headquarters, regional offices and country offices. Depending on the level, the nature of the partnership can be more or less strategic/transformative or more or less instrumental/transactional. The case of Rwanda sheds light on the forces that can lead to the partnership being more instrumental – and less strategic. We believe that an important lesson is to be deliberate about what the country office wants to achieve with the partnership and to develop and implement it accordingly.

277. **The partnership requires a high degree of internal coordination (2)**. The project is a food system-oriented grant with a cross-cutting character. Work on the value chain spans many WFP units, e.g. School Feeding, Nutrition, SAMS (Smallholder Agricultural Market Support Unit), Supply Chain - Procurement. This has made management challenging in a context where projects are managed by units (vertically rather than horizontally). As each CO unit works with different government partners (e.g. the Ministries of Education, Agriculture and Health, the National Child Development Agency (NCDA) and the Rwanda Standardisation Board), this often leads to information gaps, missed opportunities and inefficiencies.

278. To solve this issue, a WFP-RF project coordinator, who is part of the School Feeding Programme (SFP) team, has been talking to all units involved since March 2023 and ensuring a certain degree of integration.

279. The approaches being explored by Burundi – a coordinator across fortification projects and the possibility of setting up a *task force for food system transformation* - could also be of interest to Rwanda.

280. **Managing the partnership governance proved to be difficult (3),** as the organizational boundaries and working methods were not always clear in a context characterized by the interaction of multiple partners of very different nature. Several organizations were involved in the partnership in Rwanda: the RF, Vanguard Economics (VE) – another partner of the RF and grant recipient – and the WFP. The partnership was also indirectly influenced by decisions of the regional offices (RF, WFP) and developments in the Fortified Whole Grain Alliance (FWGA). In this environment, roles and responsibilities as well as institutional representation were sometimes diluted and ambiguous (e.g. the boundary between VE and RF was unclear). The fact that the relationship between the WFP and the RF was a grant maker – recipient relationship at country level and a high-level strategic relationship at the headquarters added to the complexity.

281. **The different nature of the various partners, a key innovative feature of the partnership, also added to the complexity**: a private philanthropy (RF), an entrepreneurial organization and consulting firm (VE), and a multilateral public sector organization (WFP). As a result, solution-oriented, innovation-driven, flexible and agile management methods had to

[154] We use the term 'complex' here to denote that it consists of many different and interconnected parts that interact with each other in dynamic ways. We do not use the term in the sense of confusing or problematic.

be combined with more formal, structured and organized methods (often confined to agreements and memoranda of understanding with government agencies). Although all organizations openly acknowledge the added value of their diversity, these differences have sometimes led to different speeds, inefficiencies, bypasses, and overlaps, resulting in tensions due to the reputational risks of institutional bypasses (e.g. contacting government partners without informing the WFP) and missed opportunities (see paragraph 40).

282. Regarding the added value of their diversity, interviews with VE and RF staff in Rwanda indicate that they perceive the WFP as the partner to navigate how to engage with the government and as a gateway to the government-led technical committees. The WFP is also perceived as a valuable partner because it brings the country's donor landscape and the right stakeholders to the table. WFP also opens an institutional channel (the school feeding programme) for the FWG and provides links with the School Meals Coalition. Interviews with staff from various WFP units revealed that the VE is seen as an important player in the process of harmonizing standards and plays a key role in sample analysis and laboratory testing. VE is also appreciated for specializing in FWG maize meal and being a very agile player in the food processing industry.

283. There were solid attempts to coordinate meetings and activities and to keep each other informed, but without a clear governance structure and a common, coordinated agenda, the result was that of two grantees from the same funder rather than a partnership based on a common strategy. **In hindsight, these transaction costs to the partnership could have been avoided if the boundaries had been clearly defined from the outset in a joint agreement and joint protocols**.

284. **Dilemmas due to different perspectives also made the partnership complex (4)**. The aspects that make the partnership innovative (two very different types of organizations) are the same aspects that lead to dilemmas in the approaches. This is because each partner organization (WFP, RF, VE) has a specific angle on the core aspects based on their organizational mandates and perspectives (how, when, at what pace and with what strategies should the FWG maize meal pilot be scaled up). The different perspectives presented below are based on the interviews we conducted with VE and RF staff in Rwanda (for the RF/VE perspectives) and interviews with WFP CO staff (for the WFP perspectives):

285. **Different perspectives on the pace of scaling up:** accelerating impact through the rapid scalability of FWG maize meal (a product) that can quickly address micronutrient deficiencies and malnutrition (RF, VE) versus focusing on ensuring quality and safety as a long-term goal for NSFP sustainability (WFP). From this perspective, FWG is one of several ways to achieve a nutritious school meal.

286. **Different perspectives on combating nutritional deficiencies**: A dietary diversity approach (WFP) versus industrialized fortification based on food processors (RF/VE). In a way, the messages around nutrition clash, as WFP supports fortification in the context of a balanced diet and RF/VE emphasizes the high effectiveness of FWG against malnutrition, which puts pressure on the problem they want to solve.

287. **Different perspectives on the selection of commodities**: WFP does not promote single products, while RF/VE focus on one main product, FWG maize meal. WFP has a conflict of interest in promoting individual products and values FWG as an additional opportunity for the NSFP. For RF/VE, it is mainly about the product and the solution it provides. In addition, WFP's supply chain approach is based on open public procurement processes and the current RE/VE

strategy with FWG is to support specific food processors. In summary, WFP's role as a facilitator of food systems convener is at times at odds with promoting the scale up a single commodity.

288. Again, in hindsight, we found that setting boundaries, explicitly identifying dilemmas (which are often elephants in the room) and delineating the boundaries of each organization would have spared the project some of the tensions it experienced. These dilemmas led to tensions, but creative tensions (as opposed to negative/eroding tensions) - because the end goal of the two organizations is the same: better nutrition outcomes and food and nutrition security. The dilemmas simply represent different organizational perspectives and views on how to achieve this goal given the mission and nature of each organization.

289. **The partnership is very innovative, but it is implemented according to the traditional project approach.** There is broad agreement that, in hindsight, this is an innovative partnership of strategic value. However, there was an inherent tension throughout as the partnership was implemented as a conventional project-based intervention by donor and implementer. The relationship was governed by the negotiation of work to be undertaken based on work plans, output indicators and logframes. We found that beyond the coordination meetings, there were no common objectives and no common partnership strategy between the WFP, the RF and Vanguard Economics (VE).[155] The RF played the role of a donor, while the WFP acted as a co-recipient (and implementer) of the RF grant in-country. In retrospect, discussions at partner level and an exchange on strategic aspects such as approaching government partners (as a partnership) or discussions to understand how each partner works, their portfolios and joint governance would have been helpful.

290. For the WFP, this meant a new approach: In a context where WFP is used to ensure collaboration and monitoring the activities of implementing partners funded by a donor, it acted as a joint grantee with VE. At country level, the WFP-RF project was part of a larger RF project for fortified wholegrain (FWG).

291. **This dichotomy between the role of a strategic partner (at headquarters and regional level) and that of an implementer at country level has led to tensions**. It meant combining the conventional work plan-based approach with the more unconventional approach of catalytic funding, which is quite new for WFP, which is used to providing funds for the purchase of food through traditional donors (WFP mandate). The combination of catalytic funding and a conventional approach with a high intensity of requests has sometimes emphasized the transaction costs of the partnership over its tangible strategic benefits.

292. **The experience in Rwanda shows how important it is to place the partnership between the WFP and RF in the specific context of each country**. The findings outlined in paragraphs 20 - 27 suggest that the implementation of the partnership could have benefited from a case-by-case decision based on the specific context of each country office, rather than a standard approach based on a common project proposal – which was the case.[156] One of the lessons from the Rwandan experience, in our view, is that the partnership could have been tailored to the specific context from the outset, i.e. asking what makes this partnership strategically valuable for the country office and how it should be implemented (rules of engagement) to optimize opportunities for the country office. A direct consequence of this is that the country office's perspective could have been incorporated into the negotiation of the

[155] Source: Interviews with VE staff and WFP CO staff. These two aspects (common objectives, partnership strategy) were addressed during these discussions. This finding in paragraph 25 was presented and confirmed during the debriefing in plenary on the last day of the country mission.

[156] This point also came up during the debriefing in plenary on the last day of the country mission.

partnership terms and arrangements, in a way that would have ensured that the design of the partnership was inclusive from the outset.

293. **The experience in Rwanda also sheds light on which partnerships should be strengthened in order to positively influence the nutritional sensitivity of value chains.**

294. The WFP Nutrition Division is working with the National Child Development Agency (NCDA) and MINEDUC to find ways to integrate nutrition data in a way that improves the nutrition sensitivity of government systems. According to the NCDA, there are currently limitations because teachers are overburdened. This means that a few indicators can be collected (whether a meal is offered, attendance), but there is no anthropometric data.

295. Another observation that the NCDA pointed out is that the current focus on food availability, without necessarily focusing on nutrition, may mean that there are districts where food is plentiful but where there is still chronic malnutrition, emphasising the importance of fortification.

296. In this context, the NCDA emphasised that the food systems approach adopted in the WFP-RF project helps to integrate nutrition into every step of the food system, rather than considering it as an afterthought. In this context, the NCDA sees working with cooperatives and smallholder farmers as crucial to meeting nutritional needs. For example, by encouraging farmers to grow gardens alongside maize to better feed their families.

SUSTAINABILITY

Strategic area description

This area addresses the time horizon for implementing innovations, its effects and scaling up, with a particular focus on the context and impacts of climate change.

Priority question

How might the WFP adapt and operate differently so that WFP-RF project innovations can be implemented on a larger scale and in a sustainable manner?

Lead inquiries (*Leads*)

How can WFP become an enabler/convener for wider systems change without compromising identity?

How do current Rockefeller Fund interventions contribute to the intended/unintended effects/influences of climate change?

SCALE UP

297. The answers to the priority question of how the WFP may need to adapt or work differently in order to scale up project innovations will depend on how the WFP decides to address the dilemmas described under partnerships. In the Pathways to Innovation document, we propose an approach to this process. Since the NSFP in Rwanda is fully managed by the government, the scaling of FWG maize meal in the country's schools ultimately depends on the Ministry of Education and the development of the new procurement model. This process can be influenced by the technical support provided by the WFP and the advocacy work done by Vanguard Economics.

298. **In addition, the scaling up of FWG maize meal in the school feeding programme in Rwanda depends on several key factors, some of which are still uncertain at present. In our view, these factors are as follows:**

299. **The enabling policy and regulatory environment, which is highly conducive**. Food fortification is mandatory in Rwanda and food fortification regulations have been in place since January 2020. A comprehensive national school feeding policy was adopted in 2019, a national school feeding programme is currently being implemented by the government, and the operational guidelines for school feeding (2021) incorporate the possibilities of FWG maize meal.

300. **In this context, the biggest obstacle to scaling up is the volume of production.** It is estimated that very few SMEs produce fortified maize flour and only one company, Minimex, is product-certified and FDA-approved.[157] The 18-month WFP-RF pilot program in Rwanda has proven that FWG maize meal is in demand in schools and has a high level of acceptance.[158] The challenge now is to match demand with supply, and expanding production depends on growing the number of FDA-approved processors. VE is working on this front, building the capacity of processors to be FDA-approved. At the same time, WFP is well positioned in the School Feeding Technical Working Group and plays an important convening role in the food safety and quality ecosystem (e.g. with close links with the National Child Development Agency and the Rwanda Standards Board). The VE and WFP work streams complement each other.

[157] Source: interviews with Vanguard Economics (VE), Minimex Ltd, and the Rwanda Standards Board (RSB).

[158] The interview with the NCDA confirmed that this is still the case.

Unfortunately, we found that there is no clear joint, coordinated strategy between VE and WFP in this area. For example, mill assessments for processors other than Minimex are conducted separately.

301. **Another variable that determines the chance and extent of the scaling up is the price of FWG maize meal.** The price is quite volatile, with a tendency to increase, given that fortificants are imported from other countries and the cost have risen due to inflation caused by the war in Ukraine.[159] In some interviews it was mentioned that government funding for the NSFP is limited and unlikely to be increased in the near future.[160] This poses risks for the scaling up.

302. **The short shelf life of FWG maize meal is another obstacle**. WFP and VE are working together in this area and a research study is underway. Some experts believe that that the minimum shelf life should be six months to be on the safe side. Standards for moisture content and acidity are currently being investigated to achieve a shelf life of four and a half months. With the current shelf life of three months, there is a risk that the stocks will not be used and, if they are used, will lead to food safety issues, which would be a major problem for the government.[161]

303. **The low level of awareness among the general public and school procurement committees is another potential obstacle** to scaling up FWG maize meal in a context where there are no mechanisms to enforce that schools purchase fortified products. Schools can choose to purchase unfortified maize flour.

304. Two key variables for scaling up that both the VE and WFP are working on are the **certification** of new FWG maize meal producers (VE focus) and **food safety standards** (WFP focus). It should be noted that there have been missed opportunities between WFP and VE to coordinate dialogue on fortification standards, certification and enforcement.

305. **A crucial element in the scaling up is how fortification is integrated into the new procurement model**. In the new procurement model (currently being piloted), it is not yet clear whether schools (through districts) will purchase from Minimex – the only certified manufacturer.

SUSTAINABLE SCALE UP

306. **Once the prerequisites for scaling the model and its geographical expansion are in place, several aspects should be fulfilled in order to sustain the model in the long term**:

307. There is great interest in fortification in Rwanda and all stakeholders consulted are aware of the impact on nutrition. However, the fortification of whole grain maize meal

[159] Source: interview with Minimex Ltd., Vanguard Economics, and discussions with the WFP School Feeding Programme team.

[160] Source: discussions with the WFP CO team.

[161] Source: This issue was raised in discussions with the WFP Nutrition Team, the WFP Food Technologist, the WFP Food Safety and Quality officer, the WFP School Feeding Programme team, Minimex Ltd., the NCDA, and the Ministry of Education HGSF project specialist.

requires significant investment in upgrading and adaptation of production facilities and the purchase of fortifying agents, which must be imported.

308. Long-term sustainability depends on the availability of FWG maize meal on the local market and not only in schools.

309. The fact that there are a few mills capable of fortifying whole grain maize meal (currently only Minimex is FDA approved)[162] may be a bottleneck for district procurement in the long term. This also has supply-side implications. If FWG maize meal is only used in school feeding, the market may not be large enough for small and medium enterprises (SMEs) to make a profit.

310. Timely payments are reportedly a problem in the government.[163] This could reduce incentives for food processors to enter the school feeding segment with FWG maize meal.

311. Fortified food markets are largely subsidized markets – supported by government and donor-funded programs.[164] In this context, it is not clear whether sustainability through local market demand can be a viable path in the near future

312. Insights from Minimex show that capacity utilization is still low because the product is not yet sold in the local market - SBCC will be crucial for sustainability in this regard. In addition, price is seen as a crucial factor as people expect to buy a cheap product and the switching costs for consumers are still low.

313. **We have noted that there are several risks to scaling up, particularly for the WFP.** While the RF, VE and the Fortified Whole Grain Alliance (FWGA) are convinced that FWG maize meal is the right product for scaling up, the WFP sees certain risks. We believe that these risks are reasonable and mainly related to the points mentioned on the previous page: the uncertainty about the inclusion of FWG maize meal in the new procurement model, the limited shelf life combined with the fact that the government has not put in place monitoring systems to avoid the risk of shelf life issues; and budgetary constraints of the government in a context where the price of FWG is still volatile (production costs are significant).

314. **Outsourcing of sample testing**. Samples must be sent to Kenyan laboratories (product testing services for certification to ensure compliance with food standards). Rwanda Standards Board (RSB) – has received a grant from WFP to resume testing services in Rwanda – WFP is increasing its capacity for testing fortified foods (funded by RF). This is to ensure that WFP testing is carried out in the country's supply chain. In the interest of long-term sustainability, sample testing should not depend on external service providers.

[162] Source: interviews with Vanguard Economics (VE), Minimex Ltd, and the Rwanda Standards Board (RSB).

[163] Source: mentioned in the interview with the WFP procurement and FSQ officers.

[164] Source: aspect mentioned in the interview with the Rwanda Standards Board.

LOCAL ECONOMIES

Strategic area description

This are focuses on innovation across the food systems supply and value chain, including market dynamics, commodity selection, and inclusive development.

Priority question

To what extent and how are innovations in the food supply/value chain, including local/institutional procurement, improving local economic development and for whom?

Lead inquiries (*Leads*)

To what extent and how are innovations in procurement of fortified food generating effects on local economies (including increasing the market for nutritious foods)**?**

How does the program address vulnerability, diversity, and inclusion to improve opportunities for rural communities-especially young girls?

To what extent are the selected commodities best suited to achieve the intended outcomes?

315. **The link between fortified food and the local economy is very present at WFP in Rwanda**, which is part of the Farm to Market Alliance. This involves supporting cooperatives and smallholder farmers, including those producing fortified whole grain (FWG). Concerns about the impact on the local economy also apply to other WFP-supported fortified foods, such as fortified iron beans, which WFP purchases from cooperatives.

316. **The FWG maize meal pilot project had an economic impact as participating farmers had a direct marketing channel**. Through the pilot, farmers were sensitised to fortified whole grains (FWG) and the WFP bought the products from them, which were then processed by Minimex, the only certified FWG maize flour producer in the country.

317. **In the new national model for school feeding procurement (in place since September 2023), a link is made on paper between local procurement and its impact on the local economy:** WFP-trained farmer cooperatives sell to food processors (millers), who in turn sell to the district level of the Ministry of Education. The link is there, but it is not yet clear whether the districts will decide to buy FWG maize meal from the millers, who in turn buy from the farmer cooperatives in the district. Indeed, one motivation for developing the new procurement model was that it would benefit the cooperatives and have an impact on the local economy. For this reason, local cooperatives are the district authorities' preferred sources of supply for non-perishable goods (for perishable goods, procurement from local cooperatives is mandatory). The district's new procurement model for school meals is currently in the pilot phase. The model gives priority to cooperatives and farmers, but it remains to be seen whether schools will source FWG maize meal through district procurement.

318. It also remains to be seen how shelf life will affect demand and to what extent the FWG maize meal sold by the district mills comes from raw material from local cooperatives. There are currently no certified medium-sized mills that can produce FWG maize flour.[165]

319. A review of the experience gained from the pilot project is provisionally planned for September 2024 (a review of lessons learned). By then, the project in Rwanda will be in a much better position to answer the question of how the innovations in nutritious food (including

[165] The only FDA-approved mill is Minimex Ltd, which is considered a large company by Rwanda standards. Source: interviews with Vanguard Economics (VE), Minimex Ltd, and the Rwanda Standards Board (RSB).

FWG maize meal) procurement impact the local economy (including increasing the market for nutritious food).

320. **Ultimately, the impact of scaling up FWG maize meal on the local economy will depend on the success of the new procurement model** (see paragraph 53) **and the development of the approach favoured by RF and VE, which is a demand-driven approach in which large mills produce large quantities to address micronutrient deficiencies.** In this approach, the impact on the local economy is a desirable side effect, whereas in the new procurement model, the impact on the local economy is a key aspect. In VE/RF's view, institutional nutrition requires large volumes and consistent supply, and although smallholder farmers are seen as critical to the Rwanda economy, they are not seen as critical to scaling up the model at this stage (but later). The VE/RF perspective is that the model requires a large (to feed four million children four times a day), consistent supply, even out of season, which requires collaboration with traders and large-scale farmers who can secure the supply chain.[166]

321. **We found that there is an intense debate in Rwanda about which commodities are best suited to achieve the desired goals of food and nutrition security (regional WFP-RF project) and transforming the local economies by strengthening local food supply chains and creating income opportunities (global WFP-RF project).** Some stakeholders argue that while FWGs have high nutritional value, they are less sensitive to local economic impacts than other commodities. There is a trade-off. Another debate is the extent to which too much emphasis on fortified whole grain maize meal may lead to undermining other nutritious food, which could be an issue for the WFP. The National Child Development Agency (NCDA) officials interviewed consider FWG flour to be an important nutrient. However, they also express concern that its short shelf life is a problem and that it competes with fortified, refined maize flour, which is readily available at a lower price. According to the NCDA, fortified products such as Irish sweet potatoes and fortified iron beans are also used as a remedy for stunting, micronutrient deficiencies and iron anaemia.

[166] Source: Interviews with VE and RF staff in Rwanda and interviews with WFP CO

ADVOCACY

Strategic area description

This area focuses on convening and influencing for better nutrition and healthy diets at the national and international levels, with an emphasis on institutional procurement.

Priority question

5. Which specific advocacy approaches are working well for systems change and which do not? And why?

Lead inquiries (*Leads*)

5.1 To what extent and how does the current engagement strategy effectively influence government and other relevant actors?

5.2 How can the Rockefeller Fund act as a catalyst for change to influence policy at the national level?

322. **In Rwanda there is no formal advocacy strategy for the intervention.[167] However, there is ample evidence that the WFP-RF project has had tangible effects at policy and institutional level.** The country office takes a piecemeal approach based on technical support and advice during joint work with the Ministry of Education on school feeding.

323. WFP co-chairs the National Steering Committee on School Feeding and the Technical Working Group on School Feeding and has played an important supporting role in the development of the Rwanda School Feeding Operational Guidelines (2021), which explicitly mentions the FWG maize meal.

324. **The new procurement model for school feeding is the result of a proposal developed by the procurement officer of the school feeding programe with the support of the WFP-RF project.** Following the same approach, technical assistance and advice from a procurement officer supported by the WFP-RF project has led to the adoption (September 2023) of a new procurement model for the Ministry of Education's national school feeding programme. The new model is expected to result in significant cost savings for the national school feeding programme as non-perishable food items will be procured at the district level rather than by individual schools through their purchasing departments.[168] The model was adopted after an analysis of the inefficiencies of the previous model conducted by the WFP procurement expert. The analysis concluded with a proposal to revise and change the model.

325. **In addition, through these technical assistance-based interventions, the country office can support, propose and recommend (advocate for) public procurement of food in a way that favours the local economy.** One of the motivations for the new procurement model – besides cost efficiency - was that the model would benefit agricultural cooperatives and have an impact on the local economy of the district.

[167] This is also the case in Burundi, the other country in the regional project.

[168] Source: Interviews with WFP CO team, and the Ministry of Education.

GENDER LENS

Priority question
To what extent and how is the programme integrating gender-responsive and gender-transformative measures/elements?
Lead inquiries (*Leads*)
What are the enabling and inhibiting factors playing a role in incorporating a gender lens, and what could be done to enhance the possibilities of success?
To what extent and how is the project affecting women's economic empowerment in a way that shifts the gender dynamics in their households and communities?

326. **The regional project did not include a deliberate gender approach from the outset, but there is clear potential for gender impact (both positive and negative), and therefore the inclusion of gender is crucial.** We raised gender issues in most of the interviews and there was broad agreement that the intervention has significant potential to influence gender aspects. As in Burundi, this is due to the nutritional implications of fortified foods on school-age girls and the gender sensitivity of value chains in a country where women are strongly represented in many parts of the food value chains. However, many important questions remained unanswered, such as what the gender dynamics in the food industry are and the extent to which the selected foods have a gender impact.

327. Anecdotal evidence from interviews shows that food value chains around school feeding create employment opportunities for women in a context where cooperatives are predominantly made up of women. However, a common observation we made is that the fact that the project was not strategically designed with a gender lens may mean that even if women benefit, that may not bring about changes in gender dynamics, as no conscious effort was made to influence men's mindsets and power structures. The Rockefeller Foundation is planning an evaluation of the FWG project and is looking at gender-specific indicators to determine the impact of FWG on gender, even if this was not intended. FWG maize meal is thought to have an impact on girls' nutrition, as the fortified products contain high levels of micronutrients,[169] in a context where research data shows that women and girls are more exposed to hunger and malnutrition than boys.[170]

The country office has begun work on this, with the programme policy officer holding discussions across the country portfolio to explore how gender protocols can be integrated into the country portfolio. The WFP-RF project includes several units (e.g. school feeding, SAMS, nutrition and supply chain, including procurement). At the time of the country mission gender has not yet been integrated into the specific activities of these units.[171] As a result, the implementing partners' reporting templates do not include placeholders for reporting on gender-specific changes, let alone gender transformative aspects. During the plenary debriefing discussions on the last day of the country mission, the possibility of exploring gender across the value chain and holding a joint session (with the WFP-RF project units) to look at the project's work plan from a gender perspective was raised.

[169] The national school feeding programme in Rwanda: a case study (Draft)

[170] Gender Assessment, Home grown School Feeding Programme (WFP Rwanda, December 2021)

[171] Source: Interview with WFP CO staff

328. **We believe that the question at this point is: what gender-sensitive elements could be easily integrated into the WFP-RF project as part of the cost extension that would not require additional funding and could be quickly incorporated?**

329. In discussions with the country office staff in Rwanda, several considerations were made in this regard. One of them is that gender mainstreaming in the value chain is a new approach and therefore interaction should start as soon as possible, e.g. by conducting a screening of the WFP-RF project work plan and identifying entry points. Two other considerations were to explore and identify partners who could work on food value chains and gender and to provide an "induction into value chains" for the gender programme officer to give a deep insight into the possibilities of gender responsiveness and gender transformative approaches in the different stages of food value chains.

330. **Beyond the WFP-RF project and in the context of the new Country Strategic Plan, the main discussion revolves around how gender can be integrated into the school feeding programme and all relevant food value chains in a way that is gender responsive and, where possible, gender transformative.**

BENIN FOOD SYSTEMS MODEL

Figure 1: Food value chain

Stakeholder	1. Producers	2. Processors	3. Distributors	4. Consumers
Role	• Research and development • Farming • Ranching • Trading	• Harvesting • Butchering • Processing • Value add processing • Manufacturing • Marketing and sales	• Distributing • Retailing	• Shopping • Consuming
Key issues	• Mangement capabilities (e.g., brand and risk management, skill gaps) • Strategy (e.g., market strategy, M&A for scale) • Financial issues (e.g., input and sale price volatility)	• Strategy (e.g., going global, regulatory • Achieving scale (e.g., M&A) • Supply chain strategy (e.g., vertical integration, security, safety)	• Strategy (e.g., consumer) • Supply chain strategy (e.g., vertical integration, traceability)	• Food prices (e.g., high prices, price volatility) • Food security (e.g., availability) • Food safety (e.g., traceability) • Health and wellness (e.g., obesity)
Stakeholder	5. Goverments/NGOs/Regulators			
	• Public health and safety • Public policy			
	• Food and product safety • Security (e.g., resource, land and food availability and allocation) • Policy and support			

What to find in this report?

- The **context overview** that frames the food system model in Benin.
- The **food system analysis** of the current school-based **project value chain** on nutritious foods. This includes the focus analysis on challenges, gaps and potential leverage points in the **current semi-industrial model**
- The **food system analysis** on the aspirational school-based **project value chain** taking into account the **new local model**. This includes the focus analysis on capacity and evidence gaps, and the strategic decisions around key questions to be made for the design of pilots.
- **Questions** to stimulate further discussion.

How to use this report?

1. This report is aimed at **sparking the discussion** for improving the WFP-RF project at:
    a. **Local level**: to be used by WFP CO team and related stakeholders.
    b. **Global level**: to be used by the project's Strategic Learning Community with the agreement of the CO.

2. Note: the information in this report is a result of the data collected during the Benin country mission, including interviews and focus groups with key stakeholders, school visit and secondary data.

Context overview

Country overview[1]

3. The Republic of Benin, located in the Gulf of Guinea, is a low-middle income economy, with a GDP per capita of USD 1,435 (current USD, 2023), ranking the #146 poorest country in the world.

4. The agricultural sector, predominantly small farms with low yields, employs around 30% of the working population and contributes 27% of the country's GDP.

5. The economy in 2023 remained resilient with 5.8% growth, despite shocks like the closure of the border with Niger and macroeconomic difficulties in Nigeria.

6. The main drivers for growth were the beverage industries (up 14.7%) and telecommunications (up 9.2%) on the supply side and public and private investment (up 16%) on the demand side. Inflation keeps below 3%.

7. The economy is dependent on the export of unprocessed agricultural products (cotton and cashew nuts) and the reexport of imported goods and commodities (e.g., secondhand cars and rice) to Nigeria.

8. Informal economy is high in the country, with almost 85% of the population's income depending on it.

9. The population is 13.4 million people (2023), predominantly rural and young as 65% of the population is under age 20; with a fertility rate of 5.7 children per woman and a life expectancy of 61.2 years.

10. The country's score on the UN Human Development Index (HDI) remains low (0.525), ranking 166th out of 191 countries in 2020. This is mostly a result of its low life expectancy at birth (59.8 years) and low expected and average years of schooling (10.8 years and 4.4 years, respectively).

11. Benin was ranked 138th out of 148 countries on the 2022 Gender Inequality Index, which indicates the need for much improvement in this area.

12. Benin is a politically stable country and has achieved successive democratic transitions. On January 8, 2023, the parties supporting President Patrice Talon won

[1] Source: World Bank, WFP Benin Annual Country Report 2023, African Development Bank

the legislative elections, securing 81 of the 109 parliamentary seats in the National Assembly.

Operational Context[2]

13. Benin's budget devoted to social sectors increased from 41 percent in 2022 to 47 percent in 2023. This investment was supported by new policies and strategies, such as the "Vision Benin 2060".

14. Despite advancements in health and education, women, girls, and other marginalized populations often experience disproportionate barriers to food security.

15. The latest AGVSAN-SA study published in 2022 showed that the proportion of people experiencing food and nutrition insecurity increased in Benin from 9.6% in 2017 to 25.5% in 2022.

16. Around 412,140 people were acutely food insecure and living in Crisis (IPC 3) or Emergency (IPC 4) situations during the 2023 June-August lean season. In general, these populations had food consumption deficits that resulted in high acute malnutrition and could only meet their minimum food needs by adopting harmful "crisis" or "emergency" consumption strategies (children and women being the most severely affected populations).

17. According to the Notre Dame Global Adaptation Initiative (ND-GAIN) Country Index, Benin is highly vulnerable to climate change, ranking 152 out of 181 countries in 2022.

18. The population also faced unpredictable climate-induced weather conditions that hampered agricultural production. The price of food and fuel increased due to global supply chain disruptions. In 2023, Beninese people in Alibori and Atacora (in the north of the country) witnessed intensified conflicts and increased levels of displacement (64,577 people were assisted by WFP through unconditional resource transfers.

National School Feeding overview[3]

19. The National School Feeding Program (Programme National d'Alimentation Scolaire Intégré, PNASI in French) has been operational since 2017 with the aim to facilitate

[2] Source: WFP Benin Annual Country Report 2023

[3] Source: interviews with key stakeholders and WFP Benin Annual Country Report 2023, Experience of local procurement within the scope of the Beninese school canteens programme (2024), Fill the Nutrient Gap Analysis (2023)

access and retention of children in school. The PNASI is also a tool for integrated community development, taking into account agriculture, small-scale livestock farming, health and hygiene around school canteens.

20. The program, up to date, is implemented by WFP, being one of the largest school feeding programs worldwide, with 5,536 schools and 1.3 million children under the program (representing 75% of total coverage).

21. The program is supporting a homegrown school feeding approach, based on incentivizing local value chains.

22. In 2023, WFP facilitated access to the school canteen market for 30 smallholder farmer organizations from which 9,301 smallholder farmers sold over 7,622 MT of produce, generating an estimated revenue of USD 3.6 million. This marked an astounding 800 percent surge in purchases from local smallholders compared to 2022.

23. The National Agency for Food and Nutrition (Agence Nationale de l'Alimentation et de la Nutrition ANAN in French) was created in July 2023. The Agency's mission is to guarantee food and nutritional security, public health and food quality, by promoting a healthy diet, improving the nutritional status of the population and preventing diseases linked to food. WFP is currently transferring the implementation of the PNASI to ANAN, in a short period of 9 month (January to September 2024).

24. WFP is also assisting the government in developing a school feeding law. On April 2023, the government initiated a bill to kickstart the legislative process of adopting a school feeding legislation.

25. In Benin, fortification of wheat flour, refined vegetables oil and iodized salt has been mandatory, and there is a good opportunity to fortify maize and rice given their high level of consumption and industrial processing.

26. Benin is part of the School Meals Coalition since 2021.

WFP-RF achievements and positioning in the food system

Highlights

Achievement 1

27. School feeding is the main area of WFP's work in Benin, where they manage one of the largest school feeding programs worldwide4. In this context, WFP has a solid positioning in the school-based food system, being the fundamental partner and leader in this area.

28. In particular, the **WFP-RF project** has been instrumental for implementing some of the recommendations of the country evaluation of PNASI, such us strengthening the local supply chain for the provision of nutritious foods and the generation of evidence on nutrition (Fill the Nutrient Gap (FNG) analysis), fortification (Feasibility of Fortification study), gender (Gender in value chains study) and acceptability (Study of schoolchildren's acceptance of locally produced whole grain meals).

Achievement 2

29. The local procurement strategy implemented by WFP in 2021 has been a success as local purchases grew by +2400% in two years (study February 2024). The WFP-RF leverages on this strategy to strengthen the local procurement capacity to supply nutritious foods.[5]

Achievement 3

30. There is a perception that the focus on local procurement of nutritious food is creating a stable demand for farmers and processors, securing higher volumes, early payments and easing the access to microcredits. It is, at the same time, contributing to raise the quality of the products.[6]

Achievement 4

31. The capacity development carried out with women farmers' cooperatives and processors has some positive effects on gender across the supply chain by expanding

[4] Source: interviews with WFP CO management
[5] Interviews WFP CO staff + study on local procurement
[6] Interviews with WFP CO staff + SHF cooperatives and processor field visit

income opportunities for women and sensitizing other community members on the value of women's economic empowerment.[7]

Achievement 5

32. To date, there is a perception that the WFP-RF project has been catalytic in preparing the school-based food system for more nutritious school feeding. This has been done through strengthening the supply chain (identification and capacity building of suppliers) and better understanding the food system by conducting studies on nutrition, fortification, gender and SBCC by local research institutions.[8]

Achievement 6

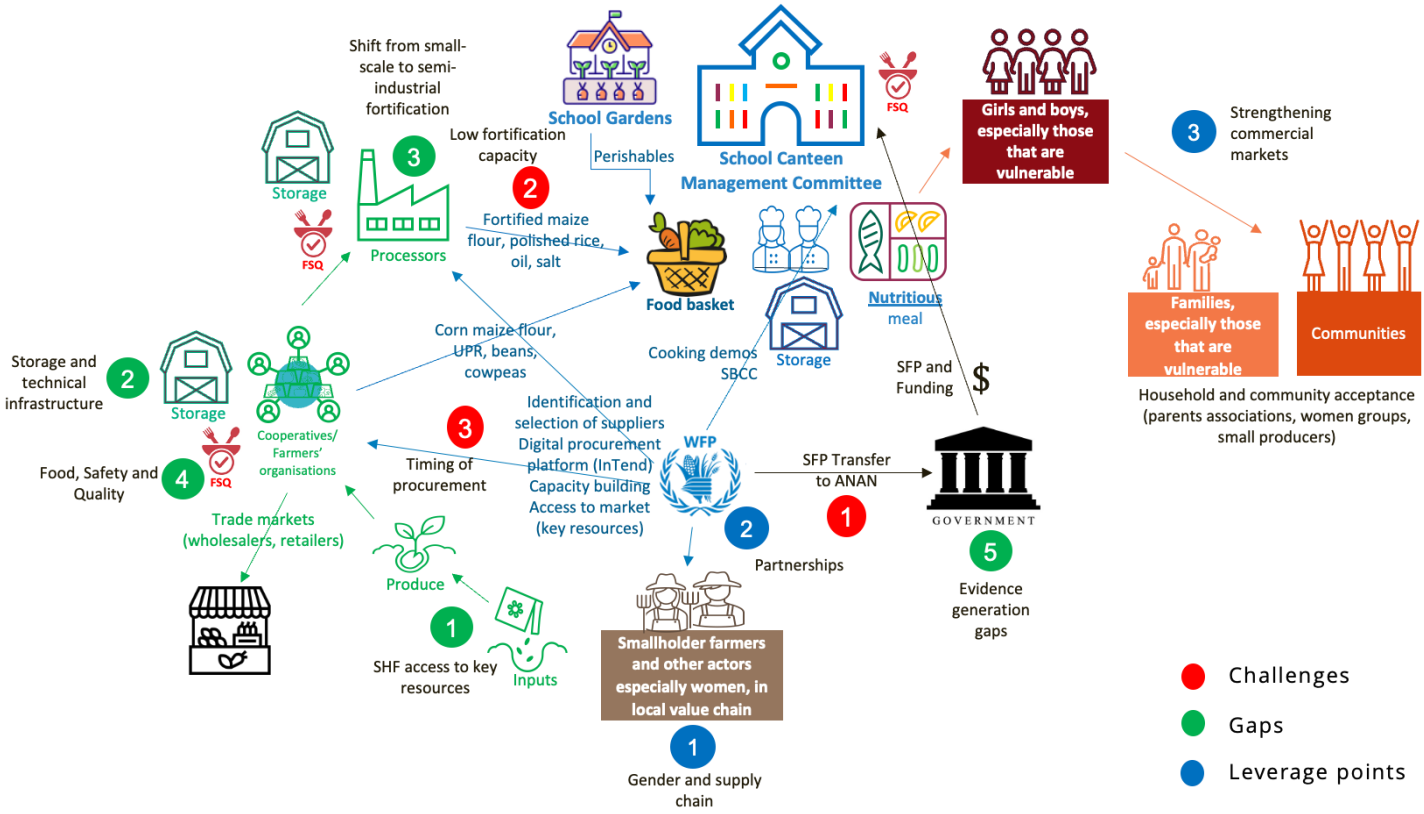
33. The ongoing fast transfer of PNASI from WFP to ANAN generates a space for learning from innovations. This means that the WFP-RF project is placed at the right time to test and implement new approaches within the transition.[9]

Benin School-based Nutritious Food System: the semi-industrial model (current)

Highlights

34. WFP is presently immersed in transferring the implementation of the SFP to ANAN. The current approach to strengthening nutritious food is the so-called **semi-industrial model** (according to the 'Feasibility of fortification foods study'). It is called semi-industrial because it combines localization of the procurement process to school districts, especially perishable foods, with the procurement of nutritious grains such as maize and rice that, to make them available, require purchasing from larger industrial processors. This rich picture illustrates and explains this semi-industrial model.

[7] Interviews with WFP CO staff and women's cooperative and ngo
[8] Interviews with WFP CO staff + SHF coops and processors
[9] Interviews with WFP CO staff



Focus 1: contextual challenges

35. The WFP-RF project, aimed to test innovations for strengthening nutritious foods and therefore improving health through school feeding, is being conditioned by three main challenges that are timely affecting the school food system model: 1) The quick transfer of PNASI to ANAN; 2) the low fortification capacity in the country for maize flour and rice; and 3) the effects of the procurement process on the supply chain. They are explained as follows:

PNASI transfer to ANAN[10]

36. A major challenge that is conditioning the work of WFP in Benin is the transfer of the SFP, one of the largest programs for WFP in the world (5.536 schools with 75% coverage), to ANAN, the new government agency in charge of School Feeding that was created in July 2023. ANAN communicated to WFP the intention to take implementation of the program in December 2023, with the objective to start taking over in September 2024 and becoming fully operational before the upcoming

[10] Interviews WFP CO Staff

elections in 2026. According to the CO, this is the first time that such a large program is transferred in such a short period of time.

37. This situation has several implications for the CO. First, it pushes the office to prioritize the work related to the speed transfer. This work mostly hinges upon four areas: 1) assisting ANAN in creating a regulatory framework on school feeding; 2) transferring WFP accumulated know-how and key resources; 3) building the capacity of ANAN to manage the school feeding program; and 4) assisting ANAN with the creation of systems and the transfer of existing data to the new government systems. Second, it implies a realignment for WFP CO, including the relocation of WFP staff to the governmental agency. And third, it implies the revision of WFP role in Benin, with a strong emphasis on testing innovations for improving the SFP with a number of schools that will remain under WFP implementation for a period of time (around 800 schools in 8 districts). This last point is an opportunity for the RF project, aimed at testing innovations.

How can the WFP-RF project leverage on the transfer to ANAN in order to be relevant for the government in this new scenario?

Low fortification capacity in the country, especially for rice and maize[11]

38. Fortification of commodities such as oil and iodized salt is mandatory in Benin, but fortification of maize flour is incipient and fortification of rice, non-existent. Although there is a strong potential for the fortification of maize and rice, according to the "Feasibility study of the fortification of foodstuffs, from whole grains, locally produced and intended for school canteens in Benin" (interim report, June 2024), and the preparation work that the WFP-RF project has done in identifying suppliers and strengthening their capacity, it has not yet been able to start piloting fortified maize and rice for school feeding. For fortified maize flour, a pilot was ready to kickstart with large processor SOCIA Benin, but a problem with a major client made the factory close. For rice fortification, the main bottleneck is the lack of specialized equipment for fortification, along with the associated capacity building and accreditation of processors. The short time before the RF project ends (May 2025) makes it challenging for the CO team to test maize flour and rice fortification in the pilots.

[11] Fortification feasibility study + FNG study + Interviews WFP CO staff

How can the WFP-RF project engage processors to be ready for testing maize flour and rice fortification in nutritious school feeding pilots?

Timing of the small scale-based procurement process[12]

39. The implementation of the local procurement strategy by WFP, focused primarily on maize and rice, helped increase local purchases from 300 MT in 2021 to over 7600 MT in 2023, an increase of over 2400%. Stakeholders interviewed perceived this increase as a success. This growth comes with an increase in the number of local cooperatives receiving support from 2 to more than 70, and the increase of locally sourcing from 24% of total purchases in 2021 to 65% in 2023 (study "Experience of local procurement").

40. Despite this, the small scale-based procurement process generates a series of steps that enlarge the process, such as the use of an online platform that hampers direct accessibility for suppliers and the slow pace of quality control and equipment limitations. Being part of the school feeding program is a strong incentive for suppliers as it generates a steady demand for their foods, but it comes with an opportunity cost. To capitalize on the investment required to participate in institutional markets, suppliers request WFP to anticipate the signing of contracts - before the farmers' harvest of paddy rice- so that rice parboilers and processors can use the contract as proof of collateral to access microcredits and start their purchase of paddy rice from farmers. Anticipating purchases is also a recommendation from the report "Experience of local procurement" to ensure continuous supply.

41. An additional challenge to this is the fact that without the anticipation of contracts, rice parboilers and processors may find that farmers have already sold their production (paddy rice) to commercial traders, such as Nigerian brokers, that offer them to buy their production earlier at an interesting price while paying cash without any quality requirement and control.

How can the WFP-RF project support local suppliers by anticipating local purchases so that production volumes and prices can be fully leveraged upon the school feeding program?

[12] Study on experience of local procurement + Interviews with Women coop. DASSA

Focus 2: gaps

42. The school-based food system is also experiencing a series of **capacity gaps** or operational challenges across the supply chain. They hinder the overall capacity of the WFP-RF project to deliver on its expected results.

Smallholder farmers' access to key resources[13]

43. The food system in Benin relies mostly on the production of food by subsistence-based smallholder farmers (SHF). Increasing the supply of nutritious food to schools requires supporting SHF technically and financially. The WFP-RF project has identified and supported some Agricultural Producer Organizations (farmers cooperatives), such as the Women Union of Cooperatives visited in Dassa. SHF have difficulties accessing key resources such as fertilizers, technical equipment, and credit. Some of the technical equipment mentioned in our field visit highlight the need for weight scales, rice cleaning facilities and more space for drying. Access to these key resources is harder for women, as they lack the land titling that would allow them to have the required financial means to access resources.

44. As regards of fortified grains, the only method used is the addition of premixes (a mixture of micronutrients used as fortificant). The study assessing the feasibility of fortification in Benin showed that at the national level there is a lack of standards and regulatory texts on fortification of wholegrain maize flour and rice.

What can the WFP-RF project do to support SHF access in accessing key resources and developing standards for fortification?

Storage and technical infrastructure[14]

45. SHF suffer from limited and proper storage capacity. This is especially apparent when food production is aggregated at the cooperative level, and when the perishable foods are collected, respectively. Limitations on storage reduce the production and distribution capacity, as well as the productivity of SHF. Thereby, optimizing storage and distribution is mentioned as a recommendation for improving the local procurement system. (study "Experience of local procurement").

[13] Interviews with SHF coops + study on fortification
[14] Interviews with SHF coops + MAEP

How can the WFP-RF enable and strengthen the storage infrastructure of SHF cooperatives?

Shift from small-scale to semi-industrial fortification[15]

46. A major takeaway from the study on the Feasibility of Fortification in Benin, as mentioned during the CO team meeting interviews, is the shift from small-scale to semi-industrial fortification. The small-scale approach, also called the 'community' approach, initially made sense as it was aligned with the government policy and will to strengthen home-grown school feeding, but the low capacity for food fortification, especially maize and rice, at the local level made this approach less feasible in the short and medium term.

47. For the short term, the option of importing pre-fortified rice to mix with white or parboiled rice is proposed as the most rapid and efficient way to bring fortified rice to populations, particularly school-age children. This was not initially the preferred option as importing foods departs from the objective of fostering the local supply chain. For maize, supporting semi-modern processing structures are encouraged, closely working with larger processors such as SOCIA Benin, UBETA, or NAJY SARL.

How can the WFP-RF project accelerate semi-industrial fortification while supporting the small-scale approach at the community level?

Food Safety and Quality (FSQ)[16]

48. FSQ is one of the most recurrent gaps mentioned during our interviews when it comes to barriers on advancing food fortification in Benin, especially for maize and rice. There is insufficient local capacity and infrastructure for testing, which leads to outsource the testing of food samples abroad. This is, in turn, delays the testing and therefore the stock approval and distribution of food. A major factor limiting the local capacity for testing is the lack of national standards and regulatory texts for the fortification of flour and rice in Benin as well as lack of capacity of national lab to test micronutrients in foodstuffs.

49. On the other hand, WFP's work on supporting suppliers for the school feeding program largely contribute to raise FSQ standards in the country. This is especially

[1515] Interviews WFP CO team + University of Agriculture + study on fortification

[16] Interviews WFP CO team + National University of Agriculture + study on fortification + interviews with coops

the case for the identification and selection of potential maize processors for undertaking fortification and unpolished parboiled rice producers.

How can the WFP-RF contribute to increase the local capacity for testing and accreditation, and at the same time accelerate the development of national standards on the fortification of maize and rice?

Evidence generation[17]

50. The RF project activities so far (at the time of the DevEv mission in early July 2024) have been focused on 1) strengthening the supply chain for nutritious food; and on 2) commissioning the required studies for advancing nutritious school feeding approaches with the contribution of local academic institutions. Among them, the FNG analysis, the Feasibility of Food Fortification in Benin, the SBCC and acceptability strategy, and the gender in value chains analysis are largely contributing to have an evidence-based understanding of the school feeding food system in Benin and its potential for testing innovative approaches on nutritious foods.

51. While the project has successfully generated evidence through the studies above, it has not yet started testing new approaches, such as integrating micro-milling machines in schools, to strengthening nutritious food in schools through the implementation of pilots. Therefore, it cannot generate the empirical evidence needed for ANAN to strengthen policy and technical support to advancing and scaling nutritious foods, including fortified maize and rice, in the national school feeding program. According to interviews with MAEP (Ministry of Agriculture, Livestock and Fisheries) and with WFP CO staff, innovations in nutritious foods is one of the weakest areas of ANAN, and as such, an area willing to be supported by WFP and the RF project.

How can the WFP-RF project do in order to accelerate the pilot design and testing of innovative nutritious foods approaches?

[17] Interviews WFP CO staff + MAEP

Focus 3: Potential leverage points

52. **Leverage points** are points in the food system model where **changes and improvements are already happening at the moment**. They represent trending early innovations that could be leveraged further by the WFP-RF project intervention.

Gender effects around strengthening the supply chain[18]

53. Supporting access to resources and economic opportunities for women in agricultural cooperatives helps to improve their involvement and leadership in value chains of interest, as well as their empowerment,, as explained in the Gender section of the Learning Brief. There are specific commodities and activities such as gardening, food collection, rice cleaning and the processing of certain products (cassava, parboiled rice or fish, for example) present greater opportunities for improving women's economic empowerment. Strongly strengthening and deliberately supporting women's participation in these activities across the supply chain is a way for the CO to foster gender equality in the local economies.

How can the WFP-RF project contribute to integrate gender responsive and transformative practices across the school feeding supply chain?

Potential for mobilizing partnerships[19]

54. The project inception work on nutritious foods, including fortification of maize and rice, has allowed WFP to start collaborating with like-minded partners, such as Global Alliance for Improved Nutrition (GAIN) and the Netherlands' Foreign Embassy in Benin. GAIN and WFP common interest lies on strengthening the suppliers' capacity to undertake fortification. However, there is a mismatch of expectations and trust between the partners. For example, GAIN would expect an equal level of responsibilities with WFP, whereas WFP expects a higher role as they have more experience and expertise in Benin. Nonetheless, there are potential synergies to be developed in the area of food fortification, being WFP the entry point to school feeding and GAIN the entry point to shorten technological capacity gaps with suppliers. The fact that the Dutch Foreign Embassy is a common donor can contribute

[18] Interviews WFP women coop in Dassa + ANAFEA + Division of Gender and Environment + interviews with CO staff

[1919] Interviews with WFP staff, GAIN and the Dutch Foreign Embassy

to capitalize on this synergy. Exploring these types of synergies by working more openly and collaboratively with each other may open the door to strengthening the local support to SMEs through the work GAIN is doing with the SUN Business Network.

55. International collaborations were in place with a social-impact focused advisory firm INTELLECAP managing The Good Food Innovation Fund (GFIF), The Fortified Whole Grain Alliance (FWGA), and AGSOL which is a start-up manufacturing leading-edge, solar-powered mills for wholegrain maize processing machines. Some WFP suppliers got GFIF while other are considered as key actors in FWGA work in Benin. WFP would like to pilot AGSOL solar mills in some school and is looking for options to combine AGSOL mills with fortification blender developed by FWGA[20] in order to conduct some trials on small-scale wholegrain maize flour fortification at school level.

How can the WFP-RF project align and deepen the partnerships that contribute to strengthen the capacity of local suppliers for the provision of more nutritious foods?

Strengthening commercial markets[21]

56. The fact that food fortification is not new in the country and that the two commodities targeted, maize and rice, are the two most widespread grains with strong growth potential (especially rice) make it conducive for WFP to also develop commercial markets to incentivize SMEs in order to adopt fortification activities for a new market segment for them. For example, WPF could help suppliers -farmers and processors- to strengthen its marketing capacity -research, product development and market access- to develop their business into commercial wholesale and retail markets. This incentive should come with strong support from WFP and its partners, especially to overcome market entry barriers such as the adoption of new technologies, capacity building and technical know-how. The stability generated by the school feeding market (steady income source, raising FSQ standards and continuous supply) can be leveraged upon the business development in new commercial markets.

How can the WFP-RF explore the synergy between strengthening institutional markers with the development of commercial markets?

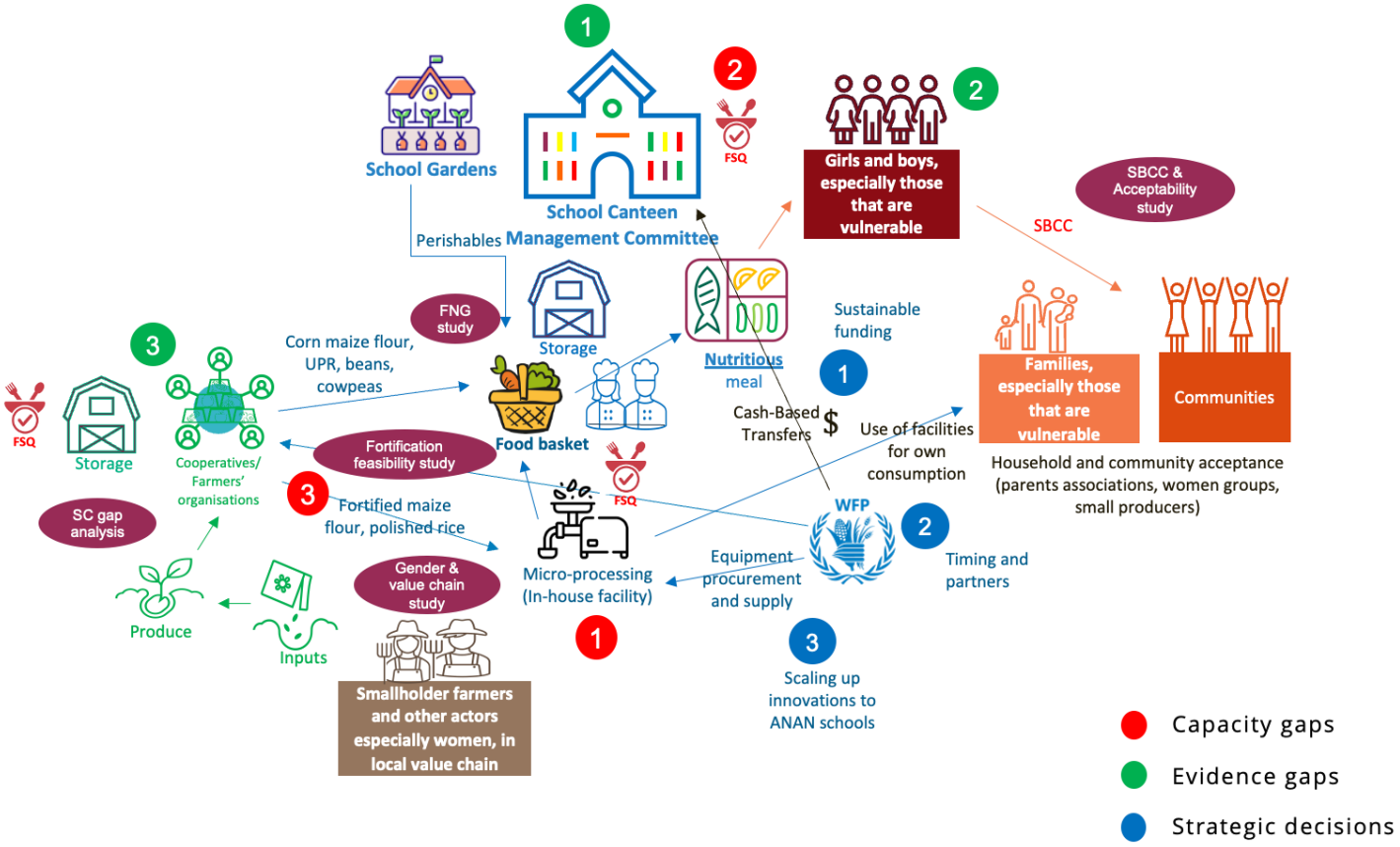
[20] This option has been discuss with FWGA team during their mission in August in Benin
[21] Interviews with WFP staff + National University of Agriculture + Fortification study

Benin School-based Nutritious Food System: piloting the local model (aspirational)

Highlights

57. In the context of WFP managing its own schools besides the transfer of most schools to the Government, its main task is **testing the new local model**. The local model **implies a shift in the school food system**, as illustrated here in the value chain.

58. Innovations introduced during the pilots are aimed at **strengthening nutritious meals** through procuring diverse commodities at the community level, and thereby empowering the local supply chain as a means to generate **more gains in the local economy**.



Focus 1: capacity gaps

59. The shift to the local model in the school's food system requires developing three levels of capacity at the schools that will be selected to test the new model through a pilot. These three levels of capacity are the following:

Building the internal capacity of school canteens to undertake micro-processing activities[22]

60. A major innovation for the local model is the internalization of the fortification process in school canteens. This entails supplying schools with the required micro-processing equipment. With this equipment, schools have more flexibility and autonomy to contextualize and diversify the food basket according to the food available in the community, which is one of the main objectives of the local model, compared to the semi-industrial model, from a nutritional point of view. Supporting the fortification at the school level also allows the project to test direct cash transfers to school as financial enablers to support the school flexibility and autonomy to procure foods locally.

61. This equipment consists of adding a pre-mixer for micronutrients and a micro-doser to the micro-milling machines. According to GAIN, this local model is already working in communities and schools in Tanzania and Kenya, as also mentioned by the "RBD FSQA Technical Mission to support potential suppliers in Benin".

62. Besides the procurement of the equipment, this process also implies training school staff in the use and maintenance of the equipment. According to interviews with GAIN, WFP has already procured some micro-milling machines to some schools, and GAIN is working in providing the pre-mixers and micro-dosers.

How can the WFP-RF integrate micro-processing activities in selected schools, and build the capacity for testing this local approach? What are the implications?

[22] Interviews with GAIN, WFP CO staff and analysis of RBD FSQA Technical Mission to support potential suppliers in Benin

Managing the risk of weakening FSQ standards[23]

63. Internalizing micro-processing activities in schools means that FSQ standards rely entirely on schools. Therefore, testing the local model in selected schools also imply internalizing the FSQ testing capacity in schools. One of the implications is that risks in delays for testing and certification and for not meeting the quality standards depend on schools. To mitigate this risk, WFP should ensure that schools have the capacity to conduct quality tests at the production level, regular quality inspections on site (including production, storage and preparation of meals) and spot checks during preparation of meals.

How can the WFP-RF project pilots help schools in building the FSQ testing capacity, meeting WFP requirements and mitigating the associated risks?

Ensuring a continuous provision of SHF's nutritious food commodities to schools[24]

64. Testing the local model in selected schools implies a redesign of the supply chain, which includes redefining the support that WFP is providing to the cooperatives of SHF. As building the capacity for food processing is moving to schools in this new scenario, what is the kind of support that SHF need from WFP? In order to ensure a continuous provision of high quality nutritious commodities from SHF to schools in all areas, what is the role that WFP will play? How the SHF support required for the current semi-industrial model will coexist and complement with the local model?

How can the WFP-RF project adjust the type of capacity development required for SHF in view of the new local model (to be piloted) coexisting with the current model (transferred to ANAN)?

Focus 2: evidence gaps

65. The design of the pilots is aimed at testing the local model (schools managed by WFP) so that evidence is generated on the effects of this new model in comparison to the current model (with schools that will be soon under ANAN management). As the pilots are not designed yet, we consider, based on the interviews we had with WFP CO staff

[23] Interviews with GAIN, WFP CO staff and CT-SAGSSA
[24] Interviews with WFP CO staff

and other countries that conducted pilots in the frame of the RF project (i.e. Rwanda), that the following are areas to include in the evidence that should be generated during the pilots:

Effect of the local model on the availability of nutritious meals in schools

66. The main assumption of the local model is that schools will have greater autonomy and therefore more flexibility to customize their own food baskets so that they are diversified by being more context-specific, adapting the procurement to the most nutritious foods available in the school communities or local ecosystem. The pilot has the chance to test this assumption, by providing evidence on whether this change in the school food system will improve access and availability of nutritious meals to schools.

How can the WFP-RF project design the pilot in such a way that allows collecting and monitoring this evidence?

Effect of the local model on schoolchildren health, school attendance and learning outcomes

67. Another evidence gap that the pilot aims to address is the extent to which the local model improves schoolchildren's health, which is the ultimate goal of the project. In doing so, the pilot also aims to test the assumption (and validate other research available for other countries) that the improvement of schoolchildren's health through nutritious school meals is also positively correlated to higher attendance rates and achievement of learning outcomes in schools' educational programs. Furthermore, including disaggregated data on gender can contribute to generate evidence on the degree to which the local model is more or less gender-sensitive than the current model.

How can the WFP-RF project design the pilot in such a way that allows collecting and monitoring this evidence?

Impact of the local model on the local economy's supply chain and ecosystem

68. The local model redefines the supply chain in such a way that the focus on food processing is done in schools instead of SME's and larger processors. Another assumption of the model is, as a result of this shift, the local model will mobilize more local resources and stakeholders, such as SHF and communities. The pilot has the chance to test this assumption by assessing how the local model is impacting, either positively or negatively, intentionally and non-intentionally, the local economy's supply chain in the community-based ecosystem. Given the close links between gender and local economies in Benin, collecting data on how the shift to the local model is generating more positive or negative effects on gender is an opportunity to integrate the gender lenses across the supply chain.

How can the WFP-RF project design the pilot in such a way that allows collecting and monitoring this evidence?

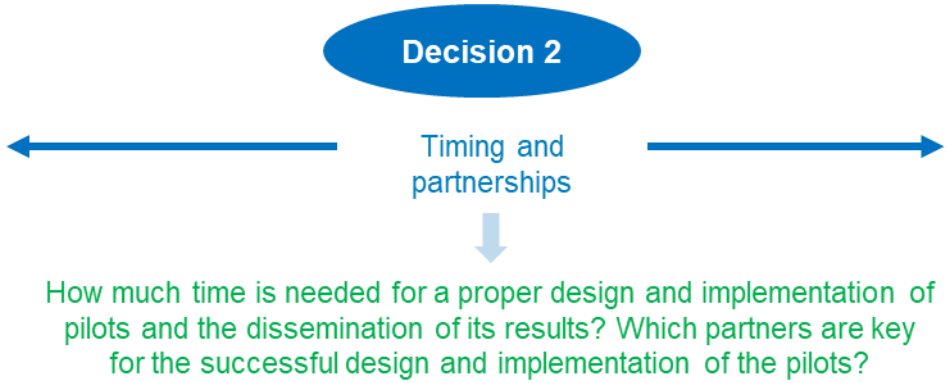
Strategic decisions around key questions

69. The **most critical issue** at the time of the DevEv mission was whether the RF project would be able to design and implement pilots that generate the empirical evidence required for a further scaling up of the innovations tested to all schools under the school feeding program. Addressing this critical issue requires reflecting on some strategic questions for making decisions around the following topics:

75) The pilot will test cash-based transfers (CBT) to schools so that they can financially manage the local procurement process on their own. CBT have been tried in the context of humanitarian emergencies, and Senegal CO has used CBT for their SFP.

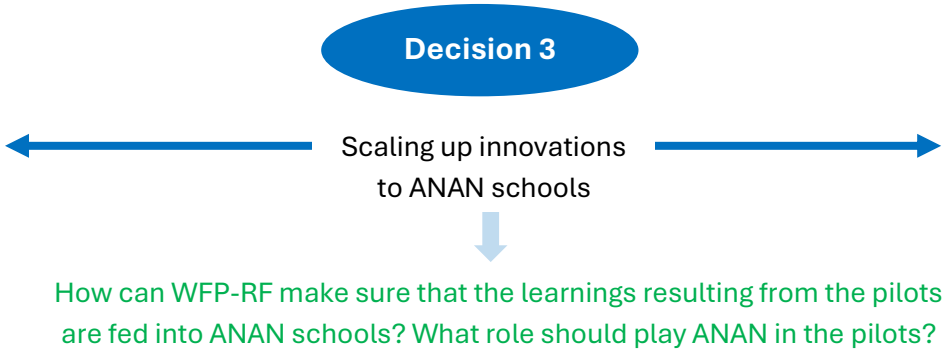
76) The Dutch Foreign Embassy has explicitly mentioned its interest in funding the local model, exploring synergies with other partners (i.e. ACMA project, GAIN, UNICEF). The pilot should consider sustainable funding beyond the scope of the RF project time frame.

77) Time is definitely a constraint for the effectiveness and sustainability of the project. A major decision is whether to fit the pilot within the RF project time frame or extend it beyond the actual deadline.



78) In the case of a potential extension of the project, a question is how this extension should look like. Is it a cost-extension, or non-cost extension? Which partners can bring resources and expertise in order to successfully conduct and accelerate pilots results?

79) One of the objectives for testing the local model is to scale the benefits observed to the whole school feeding program. ANAN, according to interviews with WFP CO staff, is interested in learning from these innovations.



80) ANAN's current focus on taking over the implementation role of WFP in the SFP is preventing them from experimenting with new approaches in piloting nutritious foods. In this situation, it will require WFP to play the role of the innovator for the continuous improvement of the SFP.

February 2024

BURUNDI FOOD SYSTEM MODEL

Catalyzing Good Food Through School Feeding Programmes & Institutional Procurement

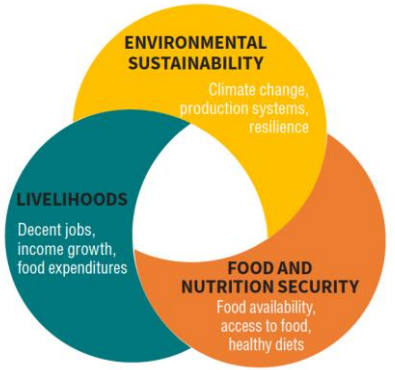
DEVELOPMENTAL EVALUATION

WFP
World Food Programme
SAVING LIVES
CHANGING LIVES

The ROCKEFELLER FOUNDATION

On food systems: background

The **food system** is a **complex web of activities** involving the production, processing, transport, and consumption. Issues concerning the food system include the governance and economics of food production, its sustainability, the degree to which we waste food, how food production affects the natural environment and the impact of food on individual and population health (University of Oxford).

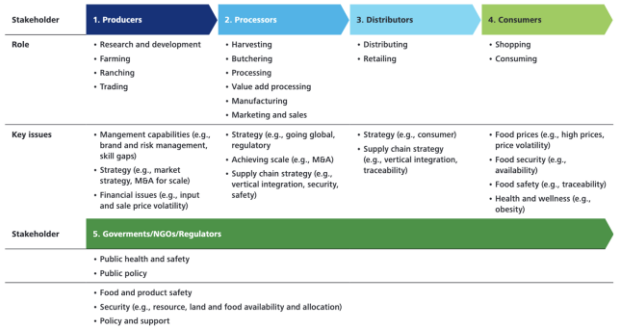


Source: OECD (2021); Figure: © SWAC/OECD.

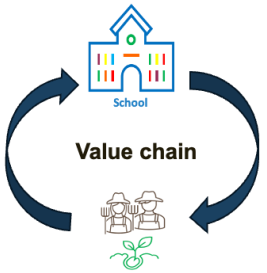
Thus, the term "food systems" refers to all the elements and activities related to producing and consuming food, and their effects, including economic, health, and environmental outcomes (OECD).

In a nutshell, it encompasses everything from 'farm to fork'— it's about having a broader picture of how we literally produce, transport, process and consume food (WFP).

The activities involved in the food system can be mapped and analyzed through **food value chains**. The food value chain is the network of stakeholders involved in growing, processing, and selling the food that consumers eat—from farm to table.



Stakeholder	1. Producers	2. Processors	3. Distributors	4. Consumers
Role	• Research and development • Farming • Ranching • Trading	• Harvesting • Butchering • Processing • Value add processing • Manufacturing • Marketing and sales	• Distributing • Retailing	• Shopping • Consuming
Key issues	• Mangement capabilities (e.g., brand and risk management, skill gaps) • Strategy (e.g., market strategy, MBA for scale) • Financial issues (e.g., input and sale price volatility)	• Strategy (e.g., going global, regulatory • Achieving scale (e.g., MBA) • Supply chain strategy (e.g., vertical integration, security, safety)	• Strategy (e.g., consumer) • Supply chain strategy (e.g., vertical integration, traceability)	• Food prices (e.g., high prices, price volatility) • Food security (e.g., availability) • Food safety (e.g., traceability) • Health and wellness (e.g., obesity)
Stakeholder	5. Goverments/NGOs/Regulators			
	• Public health and safety • Public policy			
	• Food and product safety • Security (e.g., resource, land and food availability and allocation) • Policy and support			



This includes (1) the producers that research, grow, and trade food commodities; (2) the processors, both primary and value added, that process, manufacture, and market food products, such as flour and bread; (3) the distributors, including wholesalers and retailers, that market and sell food; (4) the consumers that shop, purchase, and consume food; as well as (5) governments, non-governmental organizations (NGOs), and regulators that monitor and regulate the entire food value chain from producer to consumer (Deloitte).

A **food system model (FSM)** is the way a food system behaves in a given context, namely at the global, regional or national level. It analyses the interdependent system dynamics among the stakeholders involved in the value chain through the quantity and quality of its activities.

In the case of the WFP-RF project, **School Feeding is the platform** that allows to generate **institutional markets** that drive the demand of food and, therefore, incentivizes the entire **supply chain** to produce, process and bring **fortified foods** to feed school children.

What to find in this report?

1. The **context overview** that frames the food system model in Burundi.
2. The 'big picture' analysis of the **WFP-RF project value chain** on fortified foods.
3. The focus analysis on **structural challenges** affecting the project's performance in Burundi.
4. The focus analysis on **operational challenges** (capacity gaps and internal drivers) influencing the capacity to supply fortified food to schools.
5. The focus on **leverage points** in the food system model that represent opportunities and ways forward to improve the system.
6. Analysis of **boundaries** of the RF project **as dilemmas**.
7. **Discussion questions** to stimulate further discussion.

How to use this report?

This report is aimed at **sparking the discussion** for improving the WFP-RF project at:

- **Local level**: to be used by WFP CO team and related stakeholders.
- **Global level**: to be used by the project's Strategic Learning Community with the agreement of the CO.

Note: the information in this report is a result of the data collected during the Burundi country mission, including interviews and focus groups with key stakeholders, school visit and secondary data.

Context overview

Country overview

- C1) Burundi, a land-locked country, is a low-income economy, with a GDP per capita of USD 836 (PPP, 2022), ranking the poorest country in the World.
- C2) 80% of the population is employed in the agricultural sector, mainly through traditional, subsistence-based farming.
- C3) The population is of 12.8 million people (2022), 50.3% of whom are women and 41.5% young people under 15.
- C4) Burundi is one of the most densely populated countries in the world, with a density ratio of 442 people per square kilometer (2020 population projection).
- C5) Burundi has made significant progress in terms of the quality of and access to education. Since the introduction of free primary education in 2005, the Gross Enrolment Rate in primary education reached 118.5% during the 2021/2022 school year without significant variation between provinces, gender, or level of income.
- C6) Burundi is the 162 least corrupt nation out of 180 countries, according to the 2023 Corruption Perceptions Index reported by Transparency International.
- C7) The ruling party, CNDD-FDD, has dominated the political scene since 2005, with a large majority in the National Assembly (87 out of 123 seats) and the Senate (38 out of 39 seats).
- C8) The National Development Plan (NDP) 2018-2027 articulates all development efforts. It is aimed to structurally transform Burundian economy, for robust, sustainable, resilient, and inclusive growth, creating decent jobs for all and leading to improved social welfare.
- C9) Headline inflation accelerated to 26% in July 2023 driven by increases in food and fuel prices.
- C10) The price of basic foodstuffs increased, bringing food inflation to 35.8% in July 2023 compared to 24.5% in July 2022.
- C11) Fuel shortages worsened in June 2023 due to supply disruptions caused by the war in Ukraine.

Source: World Bank (Sept. 2023), Transparency International (2023)

Operational Context

- C12) The humanitarian situation in Burundi remains alarming. Recurring climate-change natural disasters lead to massive internal displacements and impact the livelihood of the rural population.
- C13) The inflation due to the Ukrainian crisis compounded with the trade and market supply disruptions imposed by the COVID-19 has exacerbated the national economic crisis and food insecurity in the country.
- C14) According to the September 2023 IPC survey, during the lean season (October-December 2023) corresponding with the depletion of food reserves in households, 15 percent of the population (1.88 million people) were facing acute food insecurity and required immediate food assistance
- C15) The prevalence of chronic malnutrition among children aged 6-59 months is rated at 55.8 percent, the highest rate in the world.
- C16) Burundi hosts a high number of refugees fleeing violence from the Democratic Republic of Congo (56,000 in five camps). Since September 2023, the number of Burundians repatriating from Tanzania has multiplied by 8, adding strain on scarce resources in vulnerable host communities. WFP has been present in Burundi since 1968.

Source: WFP Burundi Country Brief (October 2023)

National School Feeding overview

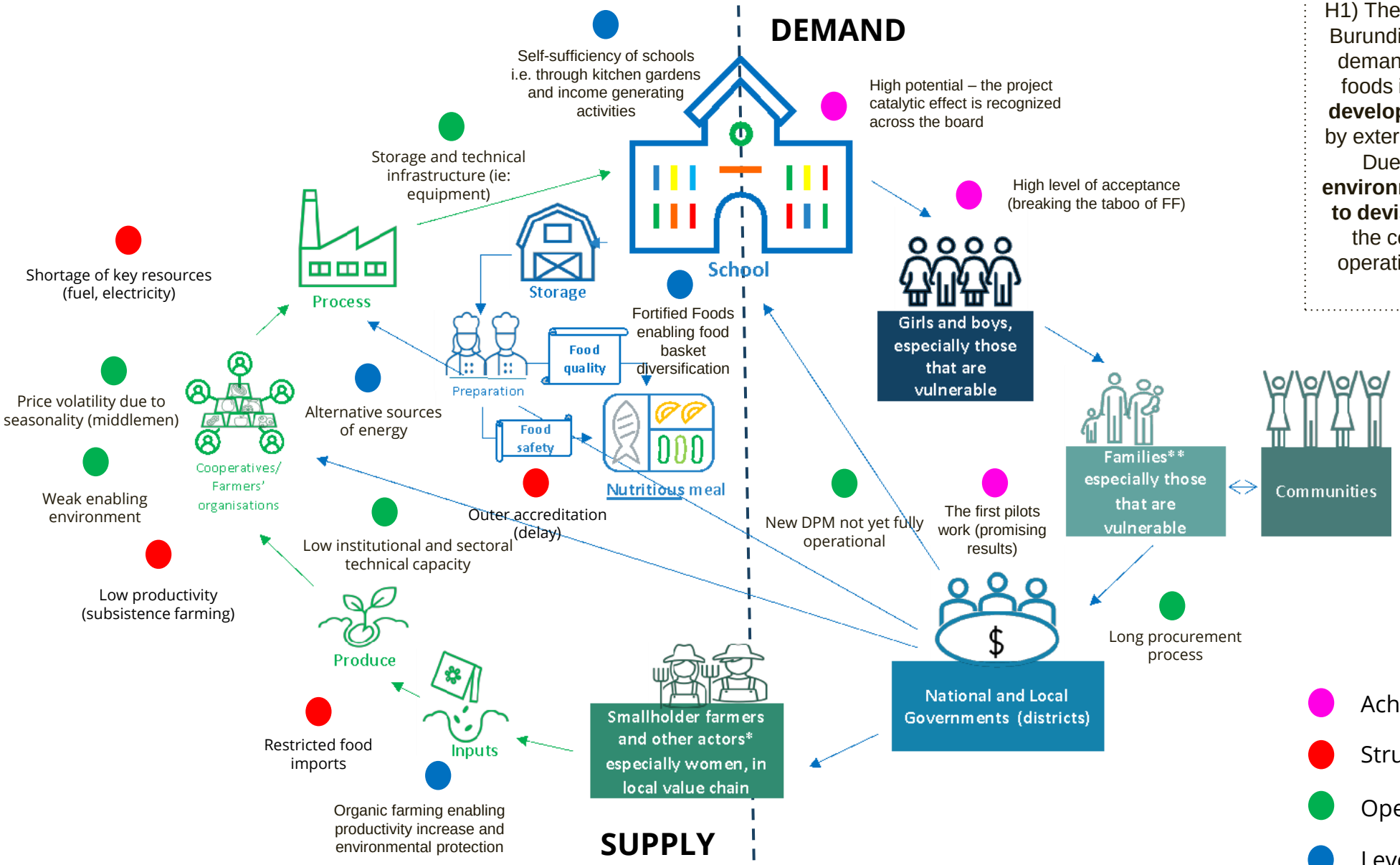
- C17) School feeding started in 2008, as a response to climate change pressures and hunger effects that challenged school attendance.
- C18) Homegrown school feeding started in 2013, with a focus on enabling local production to supply school meals.
- C19) The first school feeding policy was developed in 2018, with the vision of feeding school children through local food and therefore to foster school attendance and quality of learning.
- C20) The SF program budget has increased to USD 6 million (June 2023).
- C21) 25% of the schools in the country are covered by SF, representing 807 schools and 700.000 children overall.
- C22) The introduction of fortified foods was publicly enforced through a decree in March 2015 to strengthen health and education in schools.
- C23) A new Decentralized Procurement Model was introduced in 2022, currently being implemented in 3 provinces as pilots.
- C24) WFP provided daily school meals to 684,773 children in 650 schools distributing a total of 1,412 mt of food, including 69 mt of milk. Around 10 percent of the school canteens were served under the decentralized procurement model through which WFP is transferring the responsibility of local procurement to local authorities. Under this approach, WFP supports local economies and the agricultural sector by purchasing commodities from local smallholder farmers. In October, WFP procured local food from smallholder farmers valued at USD 148,337.
- C25) Burundi is part of the School Meals Coalition since 2021.

Source: interviews with key stakeholders and WFP Burundi Country Brief (October 2023)

Burundi Food System Model: the value chain big picture

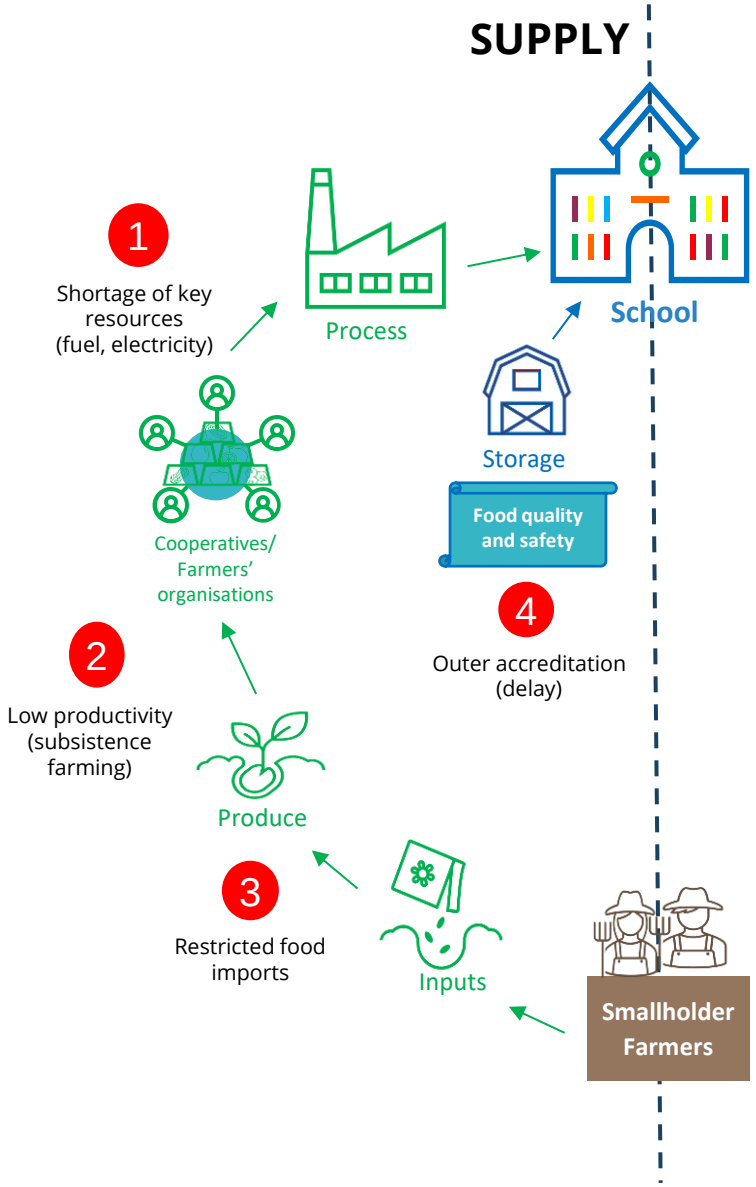
Highlights

H1) The **food system is weak** in Burundi. The value chain for the demand and supply of fortified foods is in its **early stages of development**, severely affected by external structural challenges. Due to this **constraining environment**, it is too **premature to devise a project scale** up in the country if structural and operational challenges are not addressed.



- Achievements
- Structural Challenges
- Operational challenges
- Leverage points

Focus 1: structural challenges



S0) The WFP-RF project is implemented in a **highly constraining environment**. The CO is well aware of these structural challenges. However, it is not clear what to do and how to systemically approach the challenges that are directly affecting the degree to which the project is achieving its intended results.

1 Shortage of key resources

S1) As outlined in the 'Context overview', the country is undergoing through a severe shortage of key resources such as fuel supply and electricity (regular power cuts). Lack of fuel is undermining the capacity of the value chain to secure the provision of inputs and distribute the food to schools. Power cuts are affecting the capacity of farmers and processors to produce food, shortening the food supply overall. Price increases are tensioning the supply chain. Farmers and processors are already studying the feasibility to introduce alternative power supply sources such as renewables energies.

➡ What can the WFP-RF project do in order to diminish the effects of these shortages on the effective provision of FF to schools?

2 Low productivity in the agricultural sector

S2) With 80% of the population (self) employed in a subsistence-driven agricultural sector, 'beyond-the-project' efforts are required in order to increase the capacity of food producers, processors and distributors to supply enough quantity and quality of fortified foods to schools and other trade markets. The modernization of the agri-business industry is already identified as a key lever for food systems transformation in Africa (UN IDTFAA, July 2023).

➡ How can the WFP-RF project bring a holistic approach to address the modernization of the agricultural sector overall?

3 Restricted food imports

S3) The Government, through the Ministry of Trade and Industry, has policies in place to restrict food imports so to protect and help develop the local agricultural industry. However, in times of turmoil and shortage of local food supply, these policies backfire the need to supply food from abroad with a sense of speed and urgency. This situation challenges food security in schools.

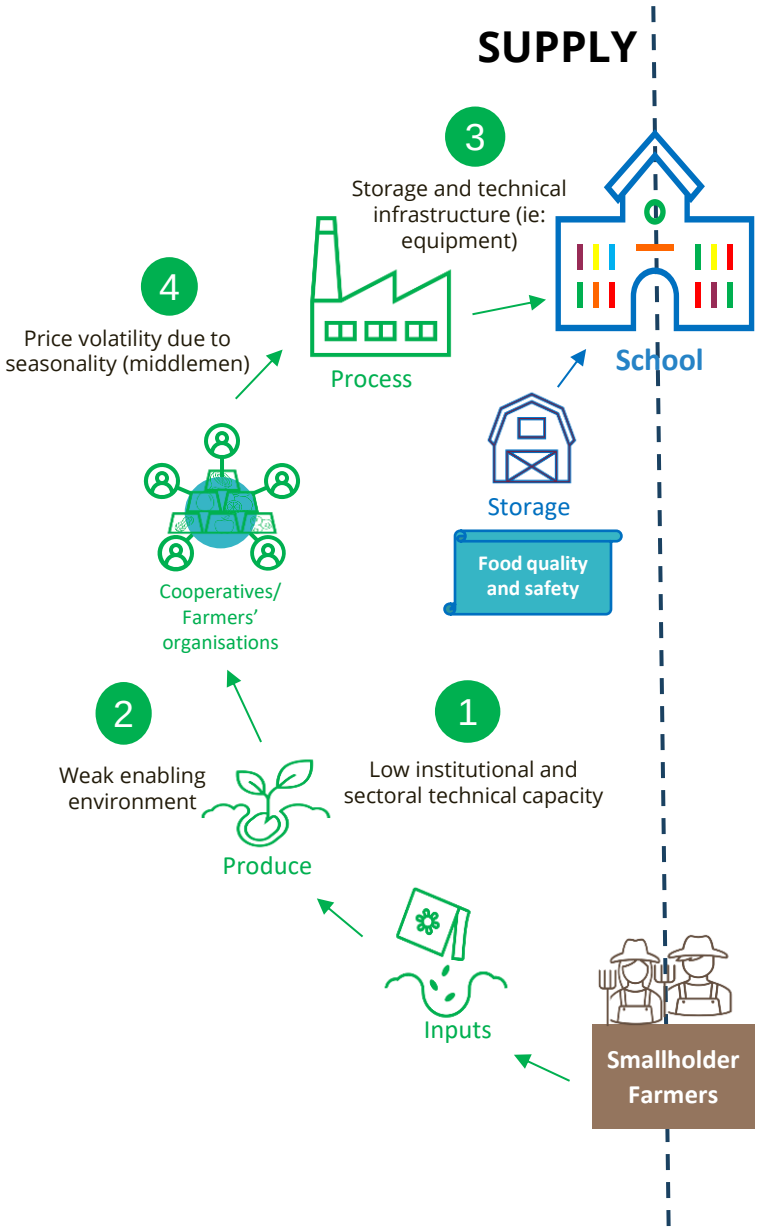
➡ How can the WFP-RF project raise awareness and advocate for more policy coherence among related food system policies?

4 Outer accreditation of food quality

S4) The fact that Burundi does not yet qualify to certify its own food quality and safety standards in-country hampers the agility required to produce and supply fortified foods to schools.

➡ How can the WFP-RF project accelerate the capacity development of the BBN so that accreditation is internalized?

Focus 2: operational challenges (I)



O0A) Overall, the structural challenges undermine the capacity of the food system in Burundi to produce and deliver fortified foods to schools. **Capacity gaps** are found in the form of operational challenges along the supply chain that hamper the capacity of the WFP-RF project to deliver on its expected results.

1 Low institutional and sectoral technical capacity

O1) Availability of fortified foods reaches only 25% of total demand approx., driven by the low capacity at institutional level and agribusiness level. At institutional level, there is a low degree of ownership of the SF legal framework by related public instances. Fortification falls under the Ministry of Industry and Trade, lacking monitoring capacity of the SF program implementation. Certification of fortified food safety and quality is still not in place at the national level. The agribusiness sector is at an inception stage of modernization. Smallholder farmers and coops, and food processors are facing shortages of capacity at technical and financial level, and are severely affected by structural challenges. The WFP-RF is strengthening the capacity of some local cooperatives and processors, but it lacks sufficient financial muscle to compensate the shortages experienced by the supply chain.

➡ What can the WFP-RF project do in order to diminish the effects of these shortages on the effective provision of FF to schools?

2 Weak enabling environment (i.e. access to finance)

O2) The infant agribusiness sector (smallholder farmers, coops and processors) operates in a weak environment. There is a low accessibility to key resources such as training of know-how (business development and technical skills); finance; technology, equipment and maintenance; research and development activities; and infrastructure.

➡ How can the WFP-RF enable and strengthen the operating environment in collaboration with other key stakeholders?

3 Storage and technical infrastructure

O3) Lack of storage capacity and infrastructure by local farmers and processors is one of the critical capacity gaps mentioned by implementing partners, especially at the decentralized level. This is in turn making the supply chain need for storage to rely on middlemen or intermediaries that do have storage capacity, but at the expense of lowering local farmers' bargaining power.

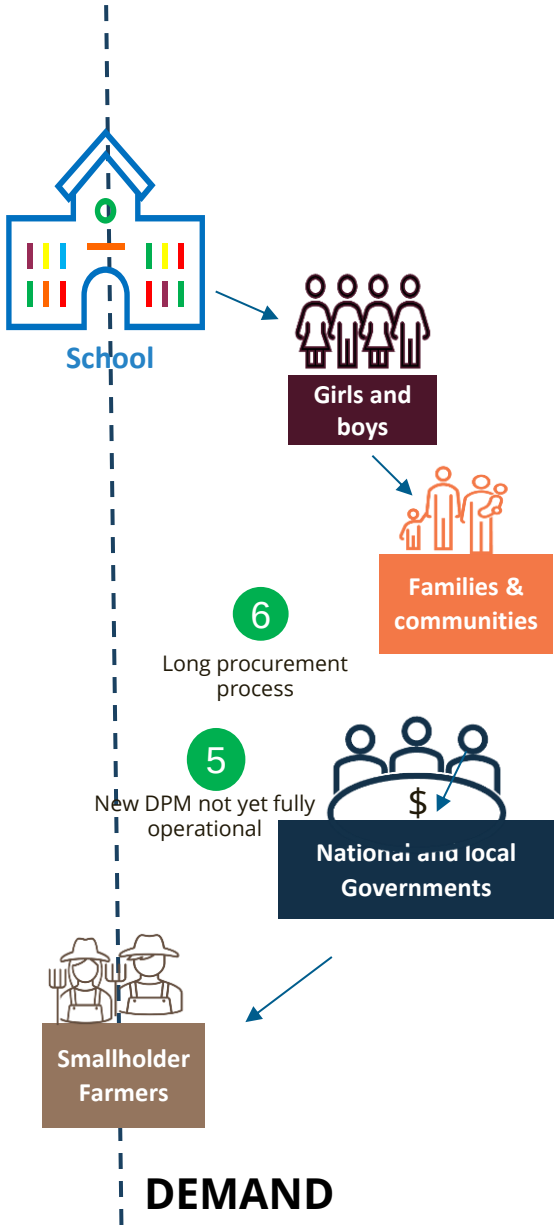
➡ How can the WFP-RF project strengthen the storage capacity, in the context of the new Decentralized Procurement Model?

4 Price volatility

O4) The role played by several intermediaries (middleman) in purchasing food from farmers is tensioning the supply chain in terms of greater price volatility, increase and uncertainty.

➡ How can the WFP-RF contribute to increase local coops storage capacity and bargaining power?

Focus 3: operational challenges (II)



O0B) From the **demand side** of the value chain, there are two operational challenges that are slowing down the capacity of the government to procure nutritious foods to schools, and therefore, to drive **institutional markets' demand** for fortification.

5 New Decentralized Procurement Model (DPM) not yet fully operational

O5) A new Decentralized Procurement Model was introduced in 2022, currently being implemented in 3 provinces as pilots. At the time of the conduction of the country mission, there is a lean impact evaluation assessing the effects of the new DPM compared with the centralized one on school meals quantity, quality and diversity (the new model is based on Commodity Voucher procuring from local cooperatives).

Two major takeaways so far are that (i) the DPM increases overall school feeding days by 76% and that (ii) the new model did not come at the cost of a lower delivery quality (School-based programmes impact evaluation window, preliminary findings, November 2023).

The advantages of the new DPM in securing food provision in schools was also highlighted by several implementing partners. These positive outcomes come with a delay in the implementation of the pilot and further delay in the new model's scale up to other provinces. The main challenge related to the operationalization of the DPM is related to the use of weak government's systems at the provincial level.

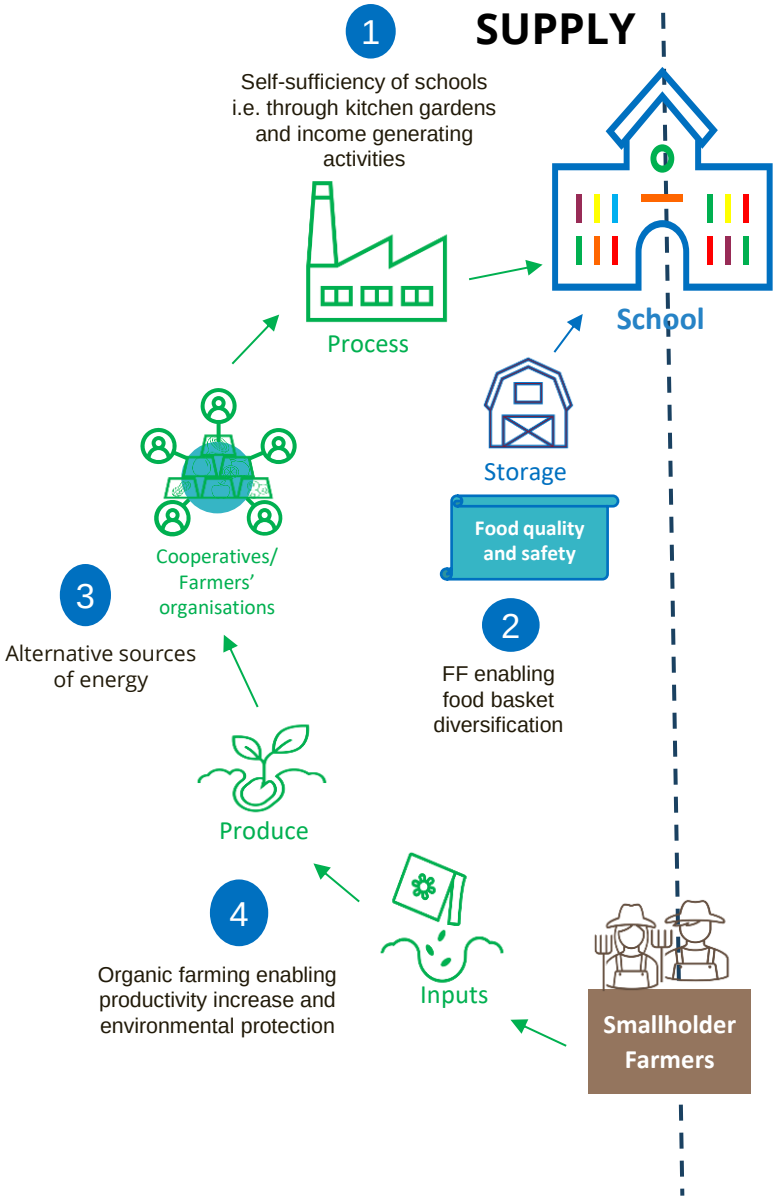
➡ What role can the WFP-RF project play in developing the capacity of implementation and monitoring of the provincial government in operationalizing the DPM?

6 Long procurement process

O6) A major factor hindering the provision of nutritious foods to schools is the long procurement process involved in both the traditional and the new procurement model. This long take hampers a rapid adaptation of the supply given external shocks and circumstances such as structural challenges. Implementing partners advocate for the need to increase storage capacity of local farmers and coops as the new DPM links cooperatives to supply the food directly to schools. Collection centers are, to this aim, a critical enabling element for ensuring proper supply.

➡ How can the WFP-RF project enable a more agile and smarter procurement process?

Focus 3: Potential leverage points (I)



L0) **Leverage points** are points in the food system model where **changes and improvements are already happening at the moment**. They represent trending early innovations that could be leveraged further by the WFP-RF project intervention.

1 Self-sufficiency of schools

L1) The new DPM, whose guidelines were recently developed by WFP, places greater importance to value chain proximity between food supply and demand. Schools therefore can directly supply from farmers' coops and food processors. This is a decisive move for strengthening homegrown school feeding in the country. Given the context of shortage of food supply, the food system, through WFP and other implementing/enabling partners, are advocating the introduction of school grown food in order to reinforce food security for school feeding.

This is done, although at its inception, through the development of kitchen gardens and fruit trees in schools, where schools, with the cooperation of teachers, school children and their families, work in the planting, cultivation and harvest of its own food crops. This food complements fortified foods supplied by farmers and processors, and drive also the creation of a culture to grow food at home through school children families, thereby contributing to strengthen food security and resilience.

→ How can the WFP-RF project enable and strengthen food security in schools through the development of its own self-sufficient food crops' initiatives?

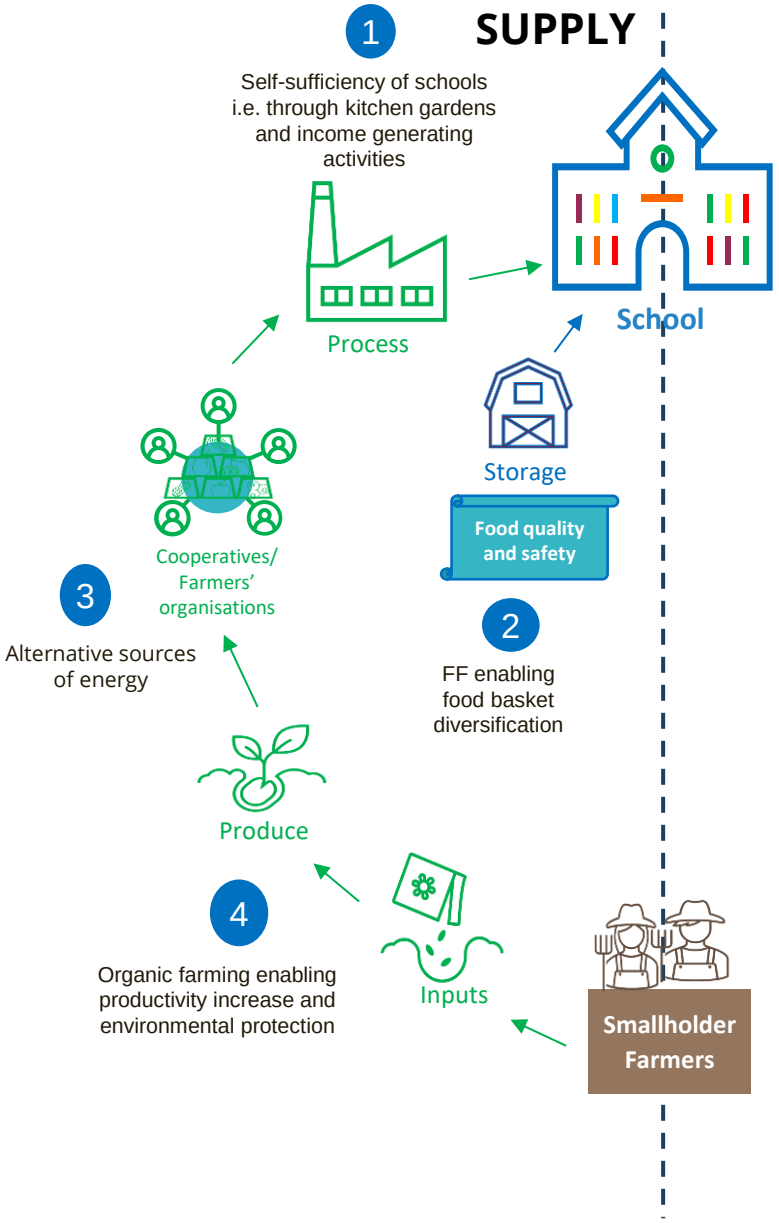
2 Fortified Foods enabling food basket diversification

L2) The introduction of fortified foods in school meals has raised awareness on the importance of healthy diets for increased nutrition and its positive outcomes on school attendance and learning aspects. This is creating an awareness of the need to diversify the food basket as a way to improve healthy diets and nutrition. The new roadmap being currently developed by the Multisectoral Platform will strengthen this aspect of the need to foster food diversification in school feeding.

The WFP-RF project has mostly targeted fortified whole grains, but implementing partners also work in fortifying other commodities such milk, high iron beans, corn, rice, etc.

→ How can the WFP-RF project explore and enable the synergy between the introduction of fortified foods as a way to diversify the nutritious food basket in schools?

Focus 3: Potential leverage points (II)



3 Alternative sources of energy

L3) Unreliable sourcing of electricity, coupled with the shortage and high prices of fuel are severely undermining the food production capacity of farmers and processors, above all (i.e. BFF miller mentioned that this has reduced its production capacity to 60%). These two structural challenges are driving the project to study the feasibility of alternative sources of energy.

Against this backdrop, the WFP-RF Project has leveraged upon the networking power of the RF to bring in new partners to the project. One of them is the prospect of involving the Global Energy Alliance in the partnership, by testing and piloting renewable energy stations –i.e. solar panels -in some food processors.

The integration of renewable energies is also a new strategic component to be strengthened further by RF in upcoming projects and interest in what is called 'regenerative food systems', which are climate resilient and responsive. In order to secure this integration, feasibility studies are required, as well as ensuring food processors have the technical and financial capacity to source and monitor the installation and maintenance of the new equipment.

➡ How can the WFP-RF project help accelerate the adoption of renewable energies to food producers and processors?

4 Organic farming enabling productivity and environmental protection

L4) The intentional move of RF towards regenerative food systems so they become climate resilient and responsive also entails the adoption of organic farming approaches and practices. Beyond RF, some partners are already studying and implementing some organic farming approaches, involving natural fertilizers, local irrigation techniques, food waste management and other agroecological practices. There are, however, some challenges for the adoption of such practices, such as low technical know-how and lack of organic seeds and inputs.

➡ How can the WFP-RF project integrate organic farming in the production of fortified foods in Burundi? Does it make sense at this stage? Or this should be a component for a potential scale up of the initiative?

WFP positioning and achievements

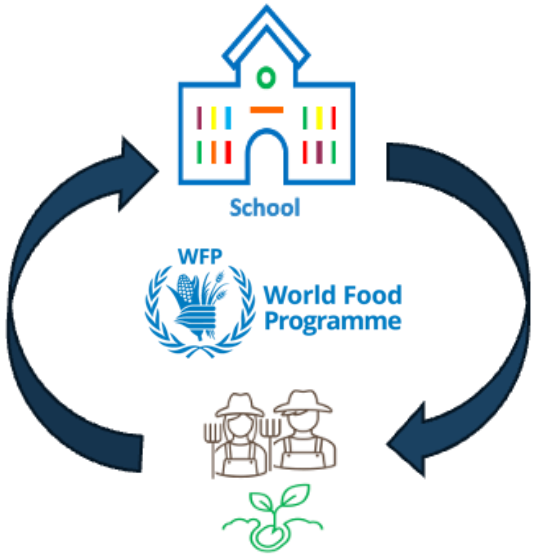
Highlights

H2) WFP has a **sound positioning** in the **food system** in Burundi, playing a critical role. It is widely recognized, by the key stakeholders of Burundi's food system, as the fundamental 'partner' and the **leader in school feeding** in the country.

In particular, the **WFP-RF project** has been the first project funded and implemented by international development partners that addresses **food fortification effectively** in Burundi. Furthermore:

P1) The WFP-RF project has broken the taboo on the adoption of fortified food diets in schools, generating a positive outlook and awareness on healthy diets to teachers, school children and families.

P2) The project is generating sound evidence for policy making and advocacy in the context of the importance to introducing fortified foods for nutritious school feeding.



P3) The project has already generated an increasing demand for nutritious foods through institutional markets, with a focus on decentralized procurement models.

P4) The project is playing a catalytic and pioneering role in the introduction of fortified foods as an innovation in the food system.

P5) The project is also catalytic in attracting (i) new projects for WFP working on food fortification in the country and thereby mobilizing more resources in this area (i.e. Dutch, Swiss, German, French, and American development agencies); and (ii) new partners, such as the Global Energy Alliance.

P6) The project is strengthening the supply chain with technical capacity development of some food producers and processors. Some stories of change are worth highlighting, such as the women leadership played by one of the millers (Unikorn) in fostering, visibilizing and empowering female entrepreneurship as a way to foster gender inclusion and local economic development in the value chain.

WFP-RF project boundaries as dilemmas

D0) Boundaries help reflecting about what aspects of the WFP-RF should be included and which ones should be excluded given the challenges and limitations of the project in fostering food systems transformations in the country. They emerge, in the case of Burundi, as **critical dilemmas**. Questions are proposed to stimulate debate and further discussion.

Dilemma 1

D1A) The weight of structural challenges and external drivers are severely affecting the security of the food system. These effects undermine the capacity of the RF project to yield transformative results

The mosquito effect

D1B) The fact that the WFP-RF project has limited financial capacity to address the capacity gaps and enabling the leverage points, while at the same time RF is a demanding donor setting high expectations

How can WFP renegotiate/rebalance the project expectations with RF to align the given resources with the expected results?

Dilemma 2

D2A) The external drivers constraining the capacity of the food system to secure food requires strong mutlistakeholder coordination, engaging related ministries, development partners and the private sector

Scope of the convening power

D2B) Multisectoral and multistakeholder coordination is led by the Prime Minister's office on PMSAN (Secretariat Executif Permanent de la Plataforme Multisectorielle de Securité Alimentaire et Nutrition)

How can WFP-RF exercise its convening power in order to enable greater leadership and multisectoral coordination of the platform?

Dilemma 3

D3A) The WFP-RF project is aimed at testing innovations on nutritious foods using school feeding as a leverage platform to food systems transformation

Fragmentation or holistic approach

D3B) WFP is managing projects on nutritious foods and fortification through a portfolio-based project management approach, contributing to generate atomization of projects around nutritious foods

How can WFP-RF enable a systemic management approach that is in line of the expected food systems transformation nature of the project?

Burundi Food System Model

DEVELOPMENTAL EVALUATION TEAM

Catalyzing Good Food Through School Feeding Programmes & Institutional Procurement

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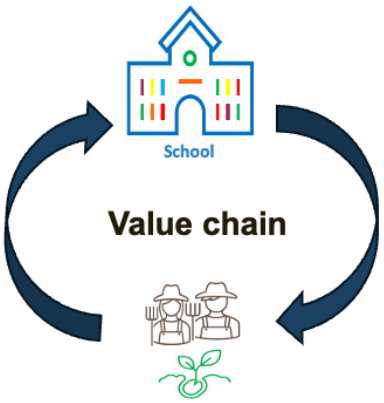
World Food Programme
SAVING LIVES
CHANGING LIVES

The ROCKEFELLER FOUNDATION

Figure 1: Food value chain

Stakeholder	1. Producers	2. Processors	3. Distributors	4. Consumers
Role	• Research and development • Farming • Ranching • Trading	• Harvesting • Butchering • Processing • Value add processing • Manufacturing • Marketing and sales	• Distributing • Retailing	• Shopping • Consuming
Key issues	• Mangement capabilities (e.g., brand and risk management, skill gaps) • Strategy (e.g., market strategy, M&A for scale) • Financial issues (e.g., input and sale price volatility)	• Strategy (e.g., going global, regulatory • Achieving scale (e.g., M&A) • Supply chain strategy (e.g., vertical integration, security, safety)	• Strategy (e.g., consumer) • Supply chain strategy (e.g., vertical integration, traceability)	• Food prices (e.g., high prices, price volatility) • Food security (e.g., availability) • Food safety (e.g., traceability) • Health and wellness (e.g., obesity)
Stakeholder	5. Goverments/NGOs/Regulators			
	• Public health and safety • Public policy			
	• Food and product safety • Security (e.g., resource, land and food availability and allocation) • Policy and support			



6. This includes (1) the producers that research, grow, and trade food commodities; (2) the processors, both primary and value added, that process, manufacture, and market food products, such as flour and bread; (3) the distributors, including wholesalers and retailers, that market and sell food; (4) the consumers that shop, purchase, and consume food; as well as (5) governments, non-governmental organizations (NGOs), and regulators that monitor and regulate the entire food value chain from producer to consumer (Deloitte).

A **food system model (FSM)** is the way a food system behaves in a given context, namely at the global, regional or national level. It analyses the interdependent system dynamics among the stakeholders involved in the value chain through the quantity and quality of its activities.

In the case of the WFP-RF project, **School Feeding is the platform** that allows to generate **institutional markets** that drive the demand of food and, therefore, incentivizes the entire **supply chain** to produce, process and bring **fortified foods** to feed school children.

What to find in this report?

- The **context overview** that frames the food system model in Ghana.
- The **achievement and positioning** of WFP and the RF project in relation to the food system
- The **rich picture**[1] of the food systems model in Ghana visualizing the interrelations of stakeholders across the value chain.
- The **food system analysis** of the current school-based **project value chain** on nutritious foods. This includes the focus analysis on challenges, gaps and potential leverage points in the **current model**
- **Strategic dilemmas** aimed to stimulate further discussion and decision-making.
- **Questions** across findings to stimulate further discussion.

How to use this report?

7. This report is aimed at **sparking the discussion** for improving the WFP-RF project at:
    a. **Local level**: to be used by WFP CO team and related stakeholders.
    b. **Global level**: to be used by the project's Strategic Learning Community with the agreement of the CO.
8. Note: the information in this report is a result of the data collected during the Ghana country mission, including interviews and focus groups with key stakeholders, school visit and secondary data.

2. Context overview

Country overview[2]

9. The Republic of Ghana, located in the Gulf of Guinea, is a lower-middle income economy, with a GDP per capita of USD 2,238 (current USD, 2023), ranking the eleventh richest economy in Africa in terms of GDP.

10. The country's political structure is based on a multi-party system. Ghana ranks in the top three African countries for freedom of speech and press.

[1] A rich picture is a systems thinking tool aimed at visualizing a system: https://health-policy-systems.biomedcentral.com/articles/10.1186/s12961-019-0514-2

[2] Sources: World Bank, African Development Bank, Landscape analysis on fortification in Ghana, Statista, Ministry of Foreign Affairs, UNDP

11. The agricultural sector, largely subsistence-based, contributes almost 20% of the country's GDP and employs more than 50% of the workforce, mostly small land holders. Cocoa and cassava are the main export commodities.

12. Rice importation forms the largest share of the domestic demand for rice, while only 40% of the domestic demand is met through domestic. Any market shocks (price volatility and seasonality of price) in the rice sector can adversely disrupt domestic consumption and may result in high food insecurity.

13. Real GDP growth decreased from 3.8% in 2022 to 2.9% in 2023, mostly to global financial conditions and macroeconomic challenges. The country suffers from high levels of inflation, raising from 31.5% in 2022 to 40.3% in 2023, caused mainly by rising food prices and currency depreciation.

14. The main drivers for growth are the industry on the supply side and the private consumption on the demand side.

15. The country is in debt distress and public debt is unsustainable. In response, the Government has embarked on a comprehensive debt restructuring, a significant fiscal consolidation program, and the implementation of reforms to foster economic stability and resilience.

16. The population is almost 35 million people (2023), predominantly rural and young; population growth is at 1.9% and the life expectancy is 64 years.

17. The country's ranking on the UN Human Development Index (HDI) remains low (0.602), ranking 145th out of 193 countries in 2022. Ghana was ranked 133th out of 148 countries on the 2022 Gender Inequality Index, which indicates the need for much improvement in this area.

Operational Context[3]

18. Ghana exhibits significant disparities between its northern and southern regions, as well as between rural and urban areas. Despite national-level improvements, hunger and malnutrition persist, particularly in northern Ghana and rural communities.

19. Despite advancements in health and education, women, girls, and other marginalized populations often experience disproportionate barriers to food security.

[3] Sources: WFP Benin Annual Country Report 2023, WFP Country Profile February 2024

20. Varying food availability leads to price fluctuations countrywide, impacting affordability, especially considering Ghana's status as a food deficit nation vulnerable to global price spikes, like those of imported rice.

21. In 2023, WFP provided direct cash assistance to 36,000 people in need and indirectly impacted more than 200,000 others.

22. Ghana faces the triple burden of malnutrition, with stunting among children under 5 decreasing nationally but remaining high in the Northern Region. Vitamin and mineral deficiencies, notably anaemia, disproportionately affect women and children, with higher rates in the north.

23. Targeting women directly was considered more effective in addressing food insecurity and malnutrition. Therefore, 60% of people directly supported with cash were women, while 8% were persons with disabilities.

National School Feeding overview[4]

24. The Ghana National School Feeding Programme (GSFP) has been operational since 2005. It started as a pilot project aimed at providing food to schools.

25. The basic concept of the programme is to provide children in public primary schools with one hot nutritious meal, prepared from locally grown foodstuffs, on every school going day. The aim is to spend 80% of the feeding cost in the local economy.

26. Currently led by the Ministry of Gender, Children and Social Protection, the short-term goal of the GSFP is to contribute to an increase in school enrolment, reduce short-term hunger and malnutrition of kindergarten and primary school pupils. In addition, it is to boost domestic food production. For the long-term goal, it seeks to improve food security and reduce poverty.

27. The programme reaches 3.8 million children in 11,000 schools and the government is looking at raising additional funds to cover all 5.1 million students learning in Ghana's 16 regions.

28. School meal procurement is decentralized, and it is based on the caterer model: each school has a local caterer who selects school meal menus and procures ingredients. Each caterer receives a budget allocation of GH₵ 1.5 per student per day, from which they must

[4] Sources: WFP Country Profile February 2024), Fill the Nutrient Gap Analysis (2024), Ghana School Feeding Programme website

purchase ingredients and transport them, provide fuel and water for food preparation, pay cooks, and support their own overheads.

29. The GSFP has developed menus based on local recipes that meet at least 30% of recommended daily allowance for energy and a full range of nutrients (RDA).

30. Ghana is part of the School Meals Coalition since 2024.

3. WFP-RF achievements and positioning in the food system

Highlights

31. WFP enjoys a solid and longstanding positioning in the school-based food system in Ghana, being the fundamental partner and convener in this area[5].

In particular, the **WFP-RF project** has played an important initial role in strengthening the capacity of smallholder farmers and rice processors in the production of nutritious rice (parboiled unpolished rice and fortified rice), in convening with key stakeholder of the food system, and in raising awareness about the health benefits and importance to eat nutritious food at schools.

Achievement 1

32. For the specific context of the country with a growing demand for rice, there is a wide consensus and a sense of momentum amongst stakeholders that rice is the right vehicle commodity for strengthening nutritious food school meals through fortification[6]. Institutional demand can stimulate the production of fortified foods, mainly focused on rice[7].

Achievement 2

33. The strong background on food fortification in the country, exemplified with the legacy of the Obaasima project and the experiences of developing mandatory fortification for salt, flour and vegetable oil, has the potential to leverage the work of WFP the stakeholders across the value chain on fortifying rice as the major food vehicle to catalyze nutritious food in school meals and other institutional and commercial markets[8].

[5] Interviews with government agencies and implementing partners.
[6] Interviews with WFP CO, private sector associations, implementing partners and research institutions
[7] "Fill the Nutrient Gap Ghana", executive summary
[8] Interviews with WFP CO staff, UNICEF, government agencies, and private sector organizations

Achievement 3

34. The WFP CO work on convening with different stakeholders and facilitating a multi-stakeholder and interdisciplinary approach is being recognized by government agencies and implementing partners in Ghana as a critical factor to strengthening nutritious food across the system and generating momentum for further improvement. This nonetheless, there is the perception that the delays in pilot implementation may jeopardize the work done in dynamizing the ecosystem to date[9].

Achievement 4

35. It seems that the social behavior communication campaigns carried out in the frame of the WFP-RF project -such as cooking demonstrations and training of caterers- have contributed to create a wider acceptance of fortified-based nutritious food at schools, improving the positive outlook expressed by teachers, caterers, school children and families[10].

Achievement 5

36. The relaunch of the National Food Fortification Alliance is perceived as an important milestone for strengthening the nutritious component of the food system in Ghana through engagement with all major stakeholders from the system and strong, highly consensual and targeted advocacy to major players, especially the government and the private sector[11].

[9] Interviews with WFP CO staff
[10] Interviews with government agencies, school district and school visit in Tolon.
[11] Interviews with WFP CO staff, private sector organizations, government agencies and research institutions

4. Ghana School-based Nutritious Food System model

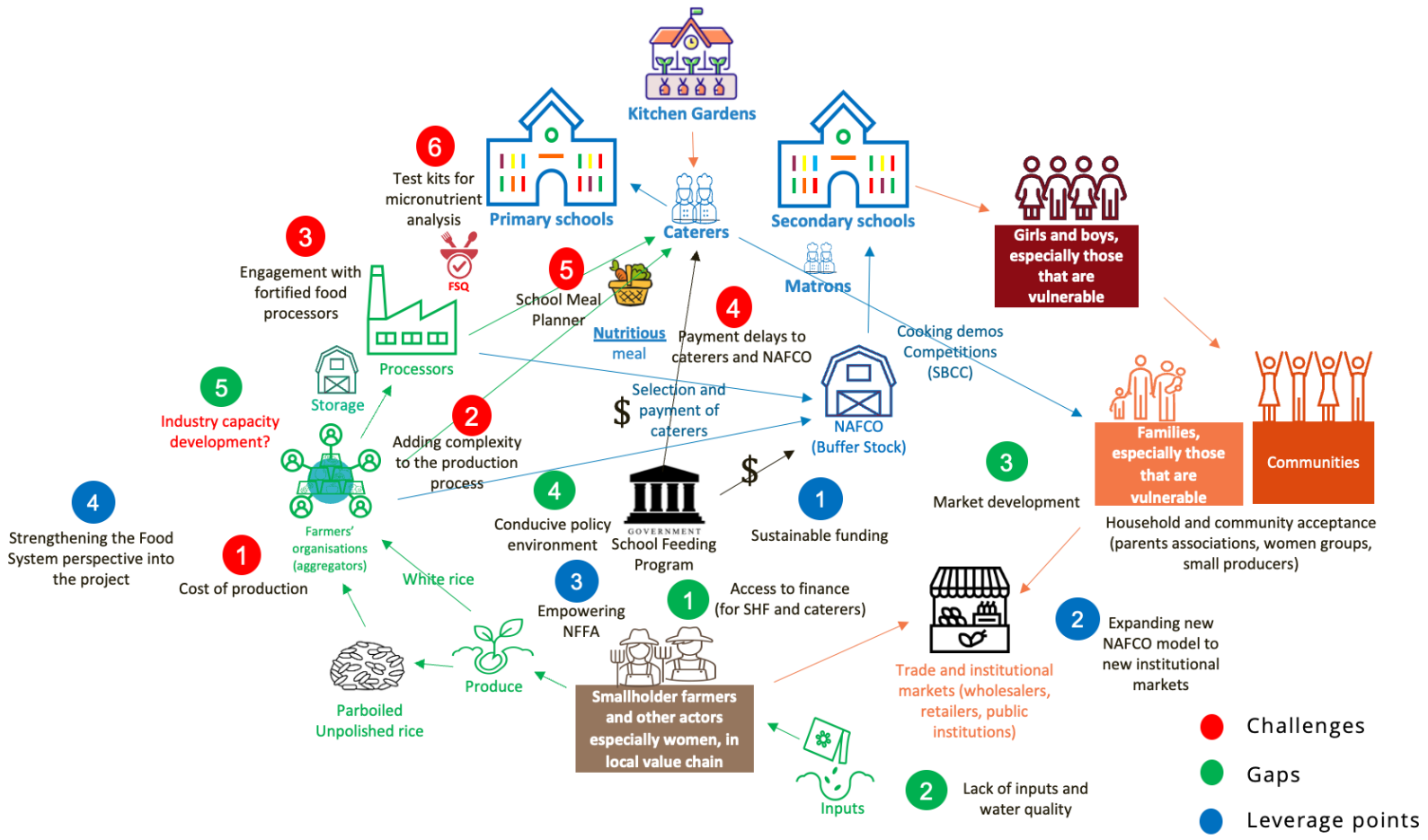
Highlights

37. The school-based food system model in Ghana is a combination of two delivery approaches, one for primary schools and another one for secondary schools. For primary schools, where the levels of malnutrition are more appalling (according to the 'Baseline Survey of the WFP-RF project')[12], the approach is highly decentralized; it hinges upon the government's selection of caterers, who are the ones in charge of supplying the food and preparing the school meals. For secondary schools, the approach is centralized towards NAFCO, the national buffer stock; NAFCO as a purchasing platform buys the food from farmers and processors and then it distributed the food to the secondary schools. In both cases, the strategy to strengthening nutritious meals is based on creating the capacity and demand for rice fortification, taking advantage of rice as the main commodity as the main vehicle for fortification in the country.

The following rich picture illustrates the food system model including the two approaches.

[12] "Baseline survey of the WFP partnership with RF in catalyzing good food through the Ghana School Feeding Programme" (April 2024)

Figure 2: the Ghana School-based Nutritious Food System model (rich picture)



The food system model is aimed at strengthening the provision of nutritious meals in both primary and secondary schools in Ghana. To do so, the RF contributes to developing and strengthening the capacity of two key stakeholders in the supply chain: smallholder farmers (SHF) and food processors. For SHF, the main challenges are access to key inputs such as fertilizers and access to finance, whereas for food processors, the main challenge is engaging them into the process of purchasing the technical equipment required to produce fortified rice. Caterers that work in schools supply the food directly from SHF and food processors. The main challenge they have is delays in their payment, which affects their capacity to purchase and cook the food to schools. Payment delays also affect the capacity of NAFCO to supply food to secondary schools.
For the demand side of the value chain, there is a positive outlook from schoolchildren and their families and communities on the nutritious meals provided. The main challenge on this side is the lack of a comprehensive approach to develop the market beyond schools, so to make nutritious food a more attractive market for food processors. The next sections explain in detail the challenges (contextual and operational) and gaps that undermine the capacity of the food system model to provide nutritious school meals, and it also explores the potential leeway for improvement as outlined in the section entitled 'potential leverage points'.

5. Focus 1: contextual challenges

38. The capacity of the WFP-RF project, aimed at testing innovations for strengthening nutritious foods and therefore improving health through school feeding, is being conditioned by six main challenges that are timely affecting the school food system model: 1) The cost of production of fortified food; 2) the added complexity to the food production process; 3) the difficult engagement with fortified food processors; 4) the recurrent delays in payment to caterers and NAFCO; 5) the issues with the School Meal Planner Plus app; and 6) the need to have more test kits for micronutrient analysis. They are explained as follows:

1) The cost of production of fortified food

39. The high cost of production of food is affecting the whole supply chain, from farmers that produce the food to the processors that buy the food from farmers and sell it to the caterers and the buffer stock[13]. There are two major reasons behind the increase of food prices. The first one is the general price inflation that has severely hit the country in 2021 and 2022, which translated into a sharp increase of the cost of food and healthy diets.

[13] Interviews with food industry associations, smallholder farmers' association, food processors, FDA and WFP CO staff

Nutritious diets cost two to three times more than diets that meet only energy needs, and the rising food prices has decreased the capacity of households to afford their nutritional needs[14].

40. The second reason is the difficulties in purchasing the micronutrients required for fortification, -such as zinc, calcium, iron, manganese and acid folic, among others- and fortified kernels, most of which are imported. There is a high dependency from DSM, the Dutch company that dominates the market of micronutrients for food fortification in West Africa[15].

How can the WFP-RF project reduce the high dependency of food processors on buying imported micronutrients and, therefore, mitigate the risk of the increasing cost of production?

2) The added complexity to the food production process

41. The production of rice fortification, according to food industry associations, requires adding two more processes to the existing production process of rice. One additional process is the need for specialized equipment required to add the micronutrients to the rice (such as mixing, micro-dosing and drying machines). And the other one is the need to have the right infrastructure needed to install and accommodate the new equipment. All in all, entering into the business of rice fortification requires millers a realignment of its production processes, which comes with the need for a proper investment in technology and know-how. In this line AMSIG, a food processor, emphasized that one of the main challenges for producing fortified rice is the lack of capacity to acquire and manage the right equipment for fortification processes.

How can the WFP-RF reduce the entry market barriers to rice food processors by optimally supporting them in the acquisition and adaptation of their production process?

3) The difficult engagement with fortified food processors

42. A major takeaway from the evaluation mission to Ghana was learning about the difficulty of WFP CO in selecting and engaging with the potential rice processors. This difficulty, according to WFP CO units, explains the delay in the implementation of the pilot,

[14] 'Fill the Nutrient Gap in Ghana' report (May 2023)
[15] Interviews with food industry associations

which is aimed at testing the effects of providing fortified-based nutritious meals to primary and secondary schools.

43. There are two main reasons behind the delay in engaging food processors. The first reason is the delay in selecting the millers. Selecting potential rice processors entail mapping and assessing the rice processors in the country, selecting the ones that comply with the requirements, training them in developing their capacity to adopt rice fortification processes with the right quality and quantity, and approving them through official FDA criteria. A major challenge in this regard, according to FDA, was that inspections found metals in the rice after the milling process of selected processors. This finding implied the design and conduction of a tailored training to the processors, which delayed the entire approval process.

44. The second reason behind the overall delay is related to the WFP procurement of the specialized equipment that rice processors need to incorporate into their production process. First, the procurement of equipment for rice fortification lacked clear parameters that could support the purchase decision. Second, processors were not engaged in the purchasing decision, which hampers their engagement and participation not only in the purchasing process but in their implication to the entire rice fortification process. And third, there had been internal competing priorities at WFP CO that have led to prioritize other pressing demands in terms of procurement[16]. These three factors are also contributing to the pilot delay.

45. The fact that the pilot has not yet started is also causing some risks to the project. One of them, as identified by the evaluation mission in the field visit to schools and school districts, is the fact that the project has generated some expectations to stakeholders, but these expectations cannot be met until the pilot is generating some evidence based on its results. The other risk, identified by WFP CO staff, is that the revived National Food Fortification Alliance is waiting for the pilot results to move forward, which may imply losing momentum to advance on the fortification agenda.

What can WFP learn from this experience in engaging processors with the procurement of fortification equipment? How can WFP improve the procurement process based on this learning? How can other CO learn from this experience?

[16] Interviews with WFP CO Procurement Unit

4) The recurrent payment delays from Government to caterers and NAFCO

46. The National School Feeding Program, funded by the Government, generates the demand for school meals by transferring funds to caterers and to NAFCO, the national buffer stock, who buy the food directly from farmers and food processors and deliver it to primary schools and secondary schools, respectively.

47. As mentioned in interviews with caterers, NAFCO staff, and other stakeholders such as WFP CO and academic institutions, the delay of the government's payments to caterers and NAFCO is a major issue that hampers the food delivery to schools.

48. The problem with caterers is that payment delays, which are mentioned being five and six months approximately, have two implications. The first is that caterers stop performing their job, which includes the food supply and preparation of meals in schools. As a consequence, school children have to eat at home or in some cases the quantities they eat at school are smaller[17]; and the farmers do not sell its production to the caterers, thereby losing income revenues. The second implication is that, in some cases, caterers look for alternative sources of credit, such as bootstrapping from family members. In this situation caterers can still keep performing their job at schools, but at a high personal and family cost (the money lent mostly come from savings).

49. In the case of NAFCO, which is a public agency working with the Ministry of Education, payment delays translate into NAFCO's delays in paying their own suppliers. This is undermining their suppliers trust -food processors and farmers associations- who in turn are reluctant to work with NAFCO in the frame of the School Feeding Program[18]. As a result of this challenge, NAFCO is designing an alternative funding mechanism. This is based on creating a targeted fund scheme coming from NAFCO's budget to directly pay the food suppliers that deliver the food to schools (based on school demand), and then issuing the corresponding invoices to the Ministry of Education.

Is there a way that WFP CO, through the RF project, can address and/or mitigate the consequences of the government payment delays to caterers and NAFCO? If so, what can be done?

[17] Interviews with schools
[18] Interviews with NAFCO

5) Ongoing issues with the School Meal Planner Plus tool

50. The School Meal Planner Plus (SMP+) is an app that the project is testing for meal optimization at schools (its use is not official at the time of the evaluation mission). There have been several trainings to stakeholders on the tool, including 62 school feeding zonal and regional representatives, nutrition officers, programme managers from Ghana Health Service, School Health Education Programme teachers, and school caterers[19].

51. Despite the positive interest and reception on behalf of stakeholders, there are several issues, mentioned during interviews with implementing partners, that hamper its use and utility. The first issue is that the app was not always accessible for users due to internet connection problems, so target users recommend using an offline version that is periodically updated. The second issue is the fact that the app should incorporate the Food Composition table developed by the University of Ghana to better reflect the micronutrients needed and used in preparing the meals. And the third and final issue is the incorporation of the information of food prices for the commodities used for meal preparation.

How can the WFP-RF project address the aforementioned issues in order to foster a wider dissemination, adoption and optimal use of the SMP+ app?

6) Test kits for micronutrient analysis

52. Rice fortification is still not mandatory in Ghana, and one challenge that food processors face in their accreditation process is the food quality and safety tests that the rice has to undergo before certifying it. FDA, the food accreditation agency, mentioned in the interview that they still lack the capacity to conduct micronutrient analysis and that this is hampering the approval process of selected rice processors. Other commodities whose fortification is mandatory in the country, such as iodized salt, use test kits provided by UNICEF as a way to certify quality standards, a measure that is recommended also for the case of fortified rice.

How can the WFP-RF project leverage upon UNICEF experience in supplying test kits for iodized micronutrient analysis? Would that be the solution to address this challenge? If not, which alternative would be feasible?

[19] WFP-RF project annual report 2023

6. Focus 2: gaps

53. The school-based food system is also experiencing a series of **capacity gaps** as missing aspects across the value chain. They hinder the overall capacity of the WFP-RF project to deliver on its expected results. These gaps are described as follows:

1) Smallholder farmers and caterers' access to finance

54. Access to finance is a major systemic issue affecting the capacity of smallholder farmers to produce rice and the capacity of caterers to supply and deliver the food to primary schools[20]. In the case of smallholder farmers, as mentioned during the field visit to Tolon's association of farmers, access to finance is hampered by the lack of banking services in the area (there is only one bank in Tolon), the inability of farmers to meet the bank's credit requirements such as collaterals, and the absence of accessible financial options such as microcredits. The farmers lack of finance also affects rice parboilers. In the face of this situation, some rice parboilers decide to advance their payment to farmers so that farmers are able to produce and supply the food to the parboilers. Whereas this partially addresses the problem in the short-term, it also increases the financial stress and risk for parboilers' business.

55. In the case of caterers, the problem of access to finance becomes apparent when they are in need of cash due to the government payment delays. When the caterer does not have an alternative to borrow money from a family member (often the spouse), the community is concerned about their children not being able to eat at schools. In the school visit to Tolon area, parents mentioned during the interview that this is one of their main areas of concern and they asked (to WFP evaluation mission) what they could do to support caterers in this situation.

How can the WFP-RF project do to convene financial institutions to offer targeted and affordable financial products to smallholder farmers and caterers at community level?

2) Lack of farming inputs and water quality

56. The lack of inputs, such as fertilizers and weedicides, and water quality are two issues affecting the quantity and quality of the food production, respectively. Farmers raised the issue of lack of inputs as a major gap in the supply chain[21]. They also appreciated the fact

[20] Interviews with WFP CO staff

[21] This statement is also mentioned in the study "Baseline survey of the WFP partnership with RF in catalyzing good food through the Ghana School Feeding Programme" (April 2024)

that the agriculture extension services provided by the government have really helped them in acquire the know-how needed for the production process, but they emphasized that without inputs the effectiveness of these services is minimized.

57. Some implemented partners mentioned that there is some government support to farmers in accessing inputs through the Planting for Food and Jobs initiative. However, there are some political issues in targeting the right farmers in need of the inputs. According to implementing farmers, some people that are not farmers apply for acquiring the farming inputs and try to sell them into the market, thus reducing the effectiveness of the initiative.

58. Regarding water quality, according to WFP CO staff, food processors and rice parboilers raised the issue of not being able to use clean water for their rice processing activities, posing additional risks to food safety and quality issues.

3) Market development

59. Ghana's food system demand for rice is huge, according to implementing partners, but there is still a low level of awareness on the benefits of eating nutritious fortified rice in the country. Whereas school feeding as an institutional market is acknowledged as an important entry point for shifting eating habits towards more nutritious foods, there is the widespread opinion that there is the need to develop the market further in order to create the demand for fortified food, especially for rice[22].

60. According to some implementing partners interviewed during the mission, market development for fortified rice requires the following two strategies: First, by differentiating local fortified rice from non-fortified rice (either local or imported) by generating evidence and emphasizing the health benefits of eating fortified rice. In that regard, the Savanna Agricultural Research Institute (SARI) mentioned the need to conduct a comprehensive market research study focused on fortified rice, which is missing in the country. The risk of not investing in differentiating fortified rice from non-fortified rice is cannibalization, as white unpolished rice is cheaper and enjoys a wider level of acceptance across the country, especially in the South[23]. Another risk pointed out by implementing partners and rice processors is the fact that some metals and chemicals have been found in the process of parboiling rice, which may deter consumers to buy the product. Therefore, investing in food safety and quality is also paramount for generating more demand for fortified rice.

[22] Interviews with WFP CO senior management and units, and implementing partners including business association and research institutions
[23] Interviews with business associations

61. The SBCC activities carried out in schools in the frame of the WFP-RF project are mentioned effective in terms of generating a positive outlook on behalf of school children, teachers, caterers and families. Among them, cooking demonstrations and training of caterers were highlighted during the evaluation field visit to schools, the school district and caterers in Tolon. This nonetheless, the fact that the pilot has not yet started is causing some uncertainty and losing momentum for some key partner beneficiaries[24].

62. The second strategy is market diversification through the creation and development of more institutional markets, such as public health and social services, and the development of the commercial market for fortified rice.

How can the WFP-RF project support the mitigation of risks from a demand perspective and the development of school feeding complementary markets for fortified rice?

4) Conducive policy environment

63. The Ghana food system has already experience in making food fortification mandatory in the country with the commodities of salt, flour and vegetable oil. The fact that these three products have a legislation backing up its adoption facilitates the wider development of both the industry and the market. The advocacy required to study and bring evidence on the need to fortify these foods came from the Obaasima scheme, developed by the project "Affordable Nutritious Foods for Women" in partnership between the German Development Cooperation and the private sector in Ghana.

64. It was during the interview with one of the private sector partners involved in the Obaasima that mentioned the need for developing a conducive policy environment to make the business and social case for rice fortification. Several policies were recommended to make rice fortification attractive for processors, reducing the cost burden and expanding market opportunities: tax exemption for the import of fortificants, subsidies to farmer for inputs, developing other institutional markets beyond schools, and making rice fortification mandatory in the country.

65. According to research institutions interviewed, this policy support is important as it has been demonstrated in other countries where the agricultural sector is highly subsidized (cases of Burkina Faso and the USA were mentioned). However, these policies should come in parallel to securing the supply of rice for a country that needs to import rice from abroad to meet an increasing local demand.

[24] Interviews with school and school district in Tolon area.

66. In the same line, research institutions also mentioned the need to improve the regulatory environment for nutritious food with supporting policies such as labeling, marketing and the prohibition of unhealthy food purchased with public money.

How can the WFP-RF contribute enable a policy environment that is conducive to strengthening the supply and demand side of the rice fortification value chain?

5) Industry capacity development

67. The local food industry in Ghana, as it has been observed in the cases of Rwanda, Burundi and Benin, is short in terms of capacity, which is hampering the development of the local supply to meet growing demand for rice in the country. The main gaps, mentioned by business associations, research institutions, processors and smallholder farmers, are access to modern farming inputs due to its expensive cost and short availability, high labour costs, lack of farming technology such as machinery ploughs, power tillers and harvesters, and the fact that the national market still prefers imported rice that is cheaper than the local rice. These gaps are also mentioned in the report "The study on landscape analysis and potential fortification in Ghana" (June 2023).

How can the WFP-RF project do in order to fill these industry capacity gaps?

7. Focus 3: Potential leverage points

68. **Leverage points** are points in the food system where **changes and improvements are already happening at the moment**. They represent trending early innovations that could be leveraged further by the WFP-RF project intervention.

1) Sustainable funding

69. Sustainable funding for the implementation of nutritious projects, such as the RF and the DMS projects, is mentioned by WFP CO team as a key factor that is supporting WFP work on strengthening the fortification of food. On that regard, and given the short time span of the RF project, the WFP CO team is planning to conduct a landscape analysis of the investment attraction for nutritious food, supporting the National Food Fortification Alliance Technical Working Group on this matter. The evaluation team considers that supporting this stream of work is fundamental given the fact that the work on food systems transformation requires a long-term perspective to convene and strengthen the partners capacity, generate evidence and demand, and mobilize the resources.

How can the WFP-RF project make sure that there are the financial resources needed to continue the work on nutritious foods beyond the time span of the project?

2) Empowering the National Food Fortification Alliance (NFFA)

70. The relaunch of the NFFA is seen by most stakeholders as the biggest opportunity to advance the advocacy required to strengthen food fortification in Ghana due to its convening power to engage all major and key stakeholders of the food system[25]. The critical aspect, learning from the past failure of the NFFA, is to design a sustainable financial mechanism to make the NFFA self-sustainable. In the past, the alliance was financed on a project basis. This time, as mentioned by food business associations, the food industry intents to become the primary source of income, complemented by some other partners contributions to specific activities.

How can the WFP-RF support the NFFA in terms of sustainable funding? What are the synergies with the current projects and partners?

3) Expanding the new NAFCO model to new institutional markets

71. NAFCO, the National Food Buffer Stock Company, supplies food to secondary schools ensuring a consistent and reliable supply with stable prices, which helps farmers and processors stabilize their work. The challenge mentioned with NAFCO's standards approach was the payment delays from government. To address this challenge, NAFCO has designed a new payment scheme based on paying directly the supplier through its own Fund after the food is delivered. This more decentralized model could be leverage to open up new institutional markets such as hospitals and other social services[26], which would be a way to make nutritious food more attractive to the supply chain stakeholders.

How can the WFP-RF project align and deepen the partnerships that contribute to strengthen the capacity of local suppliers for the provision of more nutritious foods?

4) Strengthening the food system perspective to the project

72. The Food Systems Unit of the CO was not engaged in the RF project. A takeaway from the WFP CO team, which was highlighted during the debriefing meeting the last day of the mission (June 28, 2024), was engaging the food system unit and its corresponding staff in

[25] Interviews with government agencies, WFO CO staff, and implementing partners
[26] This approach was mentioned during interviews with NAFCO and business associations

order to be more intentional in leveraging the RF project as an opportunity to strengthening the food system perspective overall in the CO.

How can the WFP-RF project strengthen the food systems perspective through a more intentional cross-unit collaboration? What role should the Food Systems unit play in the project?

8. Strategic decisions around dilemmas

73. Dilemmas help reflecting about apparently contradictory issues that may create some doubts and confusion about what strategic decisions should be made to move forward, or to identify some future challenges or unintended consequences in the mid-term. The evaluation mission identified the following three strategic dilemmas:

74. Ghana's rapidly growing demand for rice and the insufficient local capacity to meet the overall demand require the food system to rely on large quantities of imported rice.	**Dilemma 1: Local rice or imported rice**[27]	Supporting the local supply chain to be able to increase its capacity of local rice production implies addressing systemic challenges such as higher prices, food and safety issues and industry capacity development
Discussion question: What should be the WFP CO strategic approach to supporting the local capacity of rice farmers and processors in the frame of nutritious foods? What implications should be taken into consideration? What is the ideal mix between imported and local rice production?		
75. Current rice fortification efforts and investment hinge upon making rice more nutritious by polishing it first, taking nutrients out, and then fortifying it through industrial processes for adding the micronutrients.	**Dilemma 2: biofortification or industrial fortification**[28]	Rice biofortification, as a type of biofortification of staple, is a more sustainable approach to alleviating malnutrition, according to the interviews with the University of Ghana.

[27] This dilemma has been mentioned in interviews with private sector organizations and research institutions
[28] This dilemma was raised during the interview with the University of Ghana

Discussion question: What type of fortification strategic approach should WFP CO support in the long-term? How can the WFP-RF project integrate the climate aspect for supporting a fortification approach that avoids unintended consequences by integrating climate mitigation and adaptation criteria and that it is also more cost-efficient in the long-term?		
76. WFP CO staff mentioned some concerns around the potential negative impact of the adoption of technologies (milling machines, for example) for parboiling, and activity mostly done by women. This may imply the risk of losing women jobs.	**Dilemma 3: technology and women**	Women in Agriculture Development (WIAD) mentioned that the deployment of new technologies in parboiling process is not replacing women's jobs but helping them in saving time and therefore, in becoming more productive and efficient.
Discussion question: What type of research and analysis does WFP CO require in order to make informed decisions on the type of support women need in managing technology for increasing their performance in their farming activities?		

February 2024

RWANDA FOOD SYSTEM MODEL

Catalyzing Good Food Through School Feeding Programmes & Institutional Procurement

DEVELOPMENTAL EVALUATION

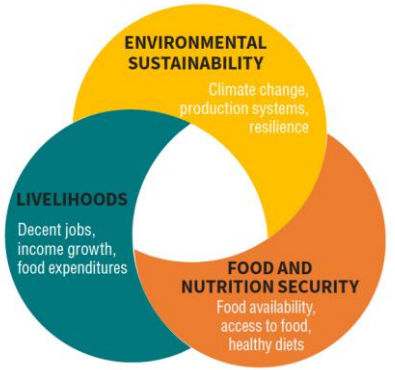
WFP World Food Programme

SAVING LIVES
CHANGING LIVES

The ROCKEFELLER FOUNDATION

On food systems: background

The **food system** is a **complex web of activities** involving the production, processing, transport, and consumption. Issues concerning the food system include the governance and economics of food production, its sustainability, the degree to which we waste food, how food production affects the natural environment and the impact of food on individual and population health (University of Oxford).

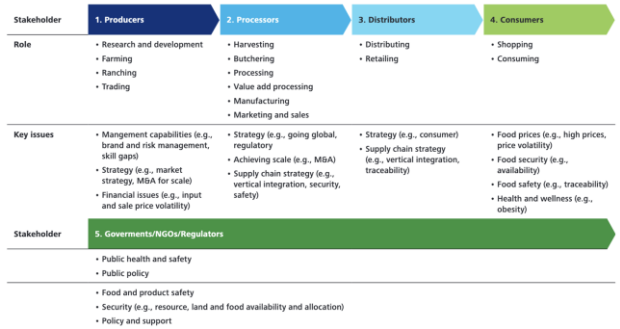


Source: OECD (2021); Figure: © SWAC/OECD.

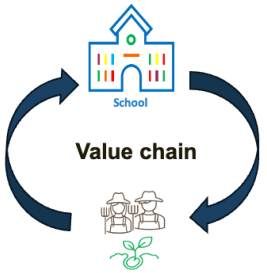
Thus, the term "food systems" refers to all the elements and activities related to producing and consuming food, and their effects, including economic, health, and environmental outcomes (OECD).

In a nutshell, it encompasses everything from 'farm to fork'— it's about having a broader picture of how we literally produce, transport, process and consume food (WFP).

The activities involved in the food system can be mapped and analyzed through **food value chains**. The food value chain is the network of stakeholders involved in growing, processing, and selling the food that consumers eat—from farm to table.



Stakeholder	1. Producers	2. Processors	3. Distributors	4. Consumers
Role	• Research and development • Farming • Ranching • Trading	• Harvesting • Butchering • Processing • Value add processing • Manufacturing • Marketing and sales	• Distributing • Retailing	• Shopping • Consuming
Key issues	• Mangement capabilities (e.g., brand and risk management, skill gaps) • Strategy (e.g., market strategy, MBA for scale) • Financial issues (e.g., input and sale price volatility)	• Strategy (e.g., going global, regulatory • Achieving scale (e.g., MBA) • Supply chain strategy (e.g., vertical integration, security, safety)	• Strategy (e.g., consumer) • Supply chain strategy (e.g., vertical integration, traceability)	• Food prices (e.g., high prices, price volatility) • Food security (e.g., availability) • Food safety (e.g., traceability) • Health and wellness (e.g., obesity)
Stakeholder	5. Goverments/NGOs/Regulators			
	• Public health and safety • Public policy			
	• Food and product safety • Security (e.g., resource, land and food availability and allocation) • Policy and support			



This includes (1) the producers that research, grow, and trade food commodities; (2) the processors, both primary and value added, that process, manufacture, and market food products, such as flour and bread; (3) the distributors, including wholesalers and retailers, that market and sell food; (4) the consumers that shop, purchase, and consume food; as well as (5) governments, non-governmental organizations (NGOs), and regulators that monitor and regulate the entire food value chain from producer to consumer (Deloitte).

A **food system model (FSM)** is the way a food system behaves in a given context, namely at the global, regional or national level. It analyses the interdependent system dynamics among the stakeholders involved in the value chain through the quantity and quality of its activities.

In the case of the WFP-RF project, **School Feeding is the platform** that allows to generate **institutional markets** that drive the demand of food and, therefore, incentivizes the entire **supply chain** to produce, process and bring **fortified foods** to feed school children.

What to find in this report?

1. The **context overview** that frames the food system model in Rwanda.
2. The 'big picture' analysis of the **WFP-RF project value chain** on fortified foods.
3. The focus analysis on the **enabling environment and partnership challenges** underpinning Rwanda's school feeding development.
4. The focus analysis on **operational challenges** influencing the capacity to supply fortified food to schools.
5. The focus on **leverage points** in the food system model that represent opportunities and ways forward to improve the system.
6. Analysis of WFP positioning and **value added** of the project**.**
7. Analysis of **boundaries** of the RF project **as dilemmas**.
8. **Discussion questions** to stimulate further discussion.

How to use this report?

This report is aimed at **sparking the discussion** for improving the WFP-RF project at:

- **Local level**: to be used by WFP CO team and related stakeholders.
- **Global level**: to be used by the project's Strategic Learning Community with the agreement of the CO.

Note: the information in this report is a result of the data collected during the Rwanda country mission, including interviews and focus groups with key stakeholders, school visit and secondary data.

Context overview

Country overview

- C1) Rwanda, a hilly land-locked country, is a fast-growing low income economy, with a GDP per capita of USD 2365 (PPP, 2022); it aspires to become a middle income economy by 2035.
- C2) Growth averaged 7.2% a year over the decade to 2019, while per capita gross domestic product (GDP) grew at 5%.
- C3) Agriculture is the main economic activity in Rwanda, representing around 30% of total GDP and with 70% of the population engaged in the sector.
- C4) Other leading sectors include energy, trade and hospitality, and financial services. The country experienced strong growth in the services sector over the past decade, particularly in construction and tourism.
- C5) The agricultural sector is largely dependent on rainfall, with low levels of irrigation. The sector faces several challenges, such as land degradation and soil erosion, high vulnerability to climate shocks, low level of productivity, and weak processing capacity.
- C6) The population is of 13.8 million people (2022), with an average age of 17 years and a life expectancy of 66 years.
- C7) Strong economic growth was accompanied by substantial improvements in living standards, making Rwanda a development case study in East Africa.
- C8) Inclusive growth remains a key challenge, as the poverty reduction momentum has weakened in recent years.
- C9) Rwanda was one of two countries in Sub-Saharan Africa that achieved all the health Millennium Development Goals (MDGs): Under-five mortality declined sharply between 2000 and 2020 and the maternal mortality ratio also dropped, as did the total fertility rate (from an increase in access to modern contraception).
- C10) Rwanda is the 49 least corrupt nation out of 180 countries, according to the 2023 Corruption Perceptions Index reported by Transparency International.
- C11) Rwanda has guarded its political stability since the 1994 genocide against the Tutsi. President Paul Kagame was re-elected for a 7-year term in August 2018.

Source: World Bank (Sept. 2023), FAO, and Transparency International (2023)

Operational Context

- C12) 38.2 percent of the population live below the poverty line and almost one fifth is food insecure.
- C13) Levels of stunting among young children remain very high (33 percent according to the 2019-2020 Rwanda Demographic and Health Survey).
- C14) Irregular rainfall, drought, floods, and the limited amount of land that is suitable for agriculture, alongside pests and diseases, continue to pose risks to food security.
- C15) According to UNHCR data, as of 31 August 2023 Rwanda hosted 134,519 refugees and asylum seekers, primarily from the Democratic Republic of Congo and Burundi. Many refugees have been in the country for decades and rely almost completely on WFP food assistance.
- C16) The “forgotten crises” in neighbouring countries, where protracted volatility is exacerbated by political instability, may lead to the further arrival of refugees in the coming years.
- C17) WFP provided food and nutrition assistance to 119,179 people, including 104,408 refugees, 14,521 asylum seekers, and 250 Rwandan returnees. This included USD 861,558 of cash-based transfers, allowing eligible refugees to purchase food of their choice.

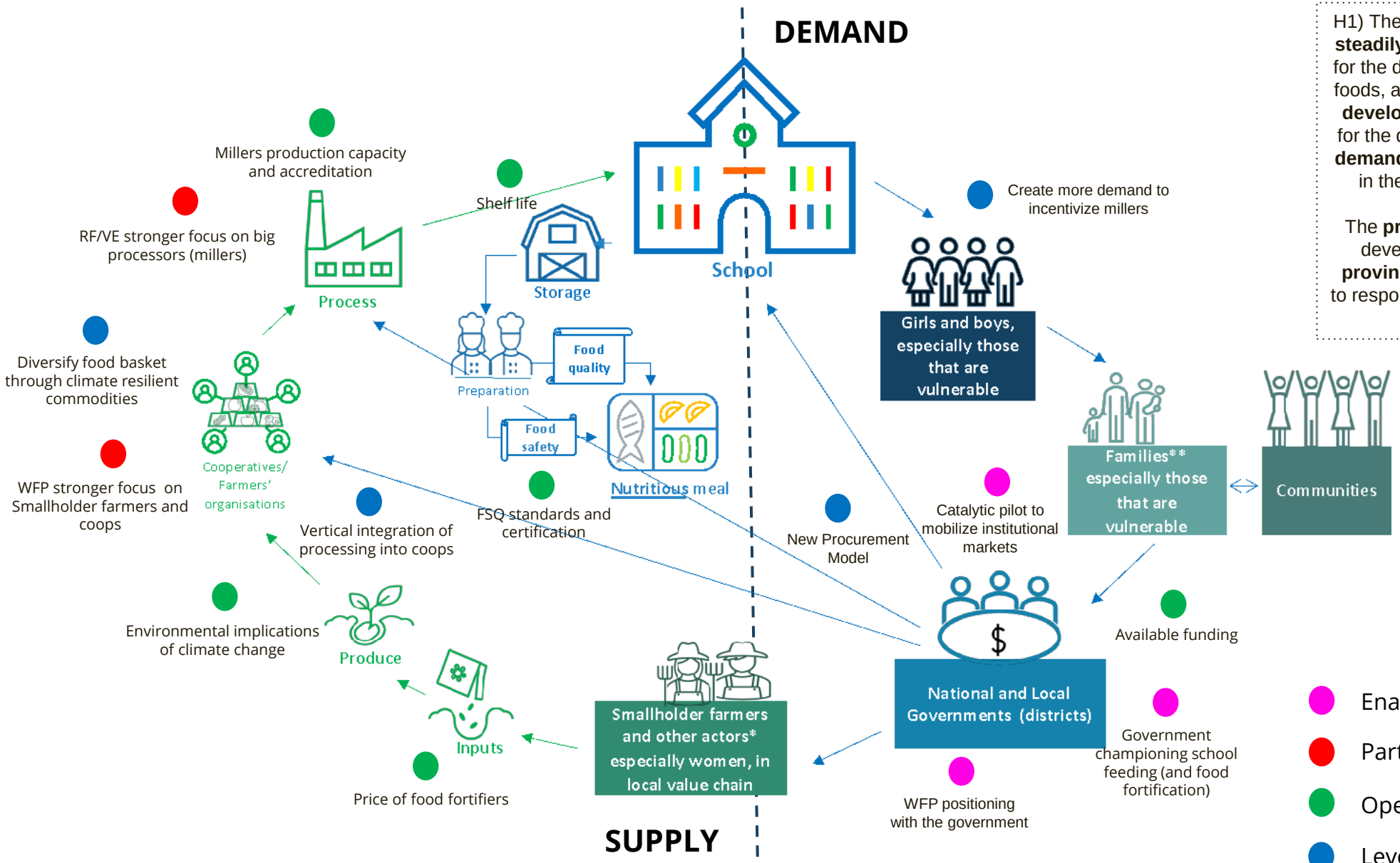
Source: WFP Rwanda Country Brief (September 2023)

National School Feeding overview

- C18) WFP started supporting the implementation of school feeding in Rwanda since 2002. Currently, school feeding reaches 3.5 million children from pre-primary to secondary school.
- C19) The Ministry of Education launched the National School Feeding Policy in 2019. It proposes to achieve the vision that “all school children in Rwanda shall achieve their full development potential through a sustainable school feeding programme that provides adequate and nutritious meals at school”.
- C20) The School Feeding Policy is within the scope of sector policies and international, regional and national strategies. The proposed actions are aligned and contribute to the achievement of the National Strategy for Transformation (NST1-7YGP), Vision 2020, the Education Sector Strategic Plan (ESSP 2018/19-2023/24), the National School Health Policy (SHP), the Multi-Sector Strategy to Eliminate Malnutrition, and Sustainable Development Goals 2 and 4.
- C21) The policy includes recommended actions in 6 key areas: (1) scaling up the coverage of school feeding programmes; (2) ensuring health and nutrition sensitive school feeding programming; (3) promoting school gardening and farming; (4) securing sustainable financing for school feeding programmes; (5) creating appropriate policies and frameworks linking market access to farm produce by local farmers to the school feeding programme; and (6) partnerships, multi sectoral coordination, collaboration and shared responsibility in the management of school feeding programmes.
- C22) The policy acknowledges that school meals not only ensure adequate food for the school children but also provide a vehicle for food fortification and micro-nutrient supplementation.
- C23) School Feeding operational guidelines were launched in 2021 to supporting its implementation at all levels. WFP already integrated fortified whole maize grains into the menu guidance.
- C24) The country is currently transitioning to a regional government-led procurement modality at district level.
- C25) Rwanda is part of the School Meals Coalition since June 2021.

Source: interviews with key stakeholders, WFP Rwanda Country Brief (2023), and National School Feeding Policy (2019)

Rwanda Food System Model: the value chain big picture

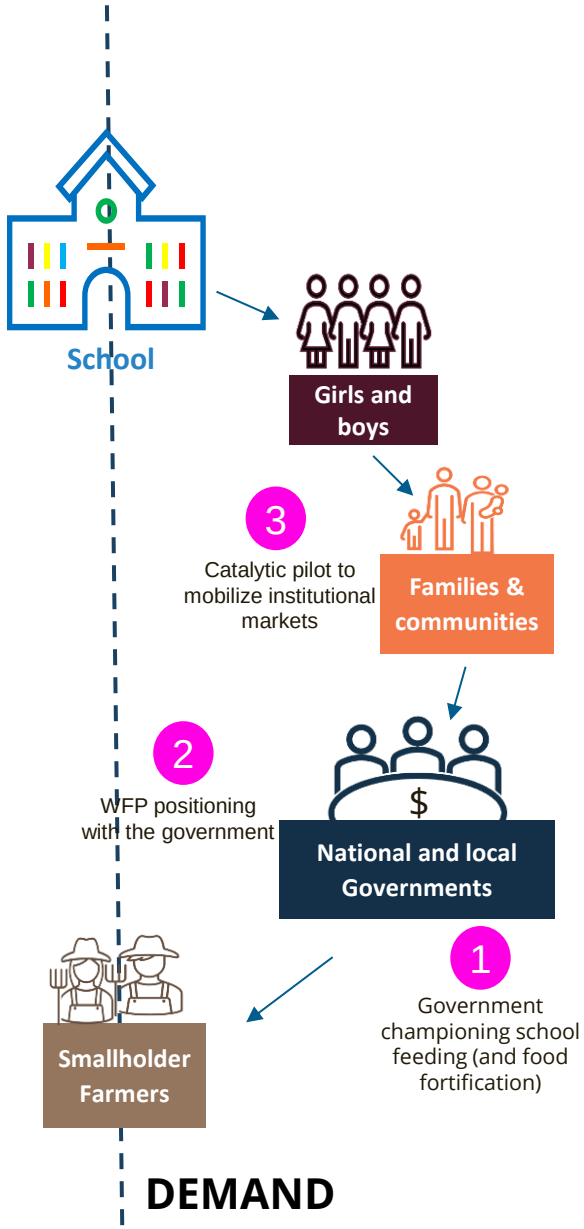


Highlights

H1) The **food system is developing steadily** in Rwanda. The value chain for the demand and supply of fortified foods, although in its **early stages of development**, has shown potential for the development of a **consistent demand** and supply of fortified foods in the country, especially whole grains.
The **project has been catalytic** in developing the demand, and is **proving the capacity** of the supply to respond to that increasing demand.

- Enabling environment
- Partnership Challenges
- Operational challenges
- Leverage points

Focus 1: enabling environment



E0) The WFP-RF project is implemented in a conducive and **enabling environment**. Besides the Government strong endorsement and support to school feeding, WFP sound positioning as the main partner in school feeding paved the way for piloting the RF project with promising results. Food fortification is planned to be scaled in the new government-led procurement model.

1 Government championing school feeding

E1) Rwanda is one of the global leaders in school feeding. School meals are the government's investment in developing the human capital of the country, which requires improved education and health among children and young people. The National School Feeding Program provides daily meals to 3.8 million children (2022). The country was one of the first to join the School Meals Coalition, and President Paul Kagame shows a strong commitment to act as ambassador of school feeding at regional and global level. By the end of 2022, the Government increased the government subsidy to school meals from 56 to 135 RWF per child per day, with parents expected to cover the remaining costs of 15 RWF per child per day.

The Government envisions a food systems transformation in its overall strategy 'Vision 2050', the National Strategy for Transformation (NST 1), and strategic plans for sectors such as agriculture, health, nutrition, commerce, and the environment. It focuses on diet quality and nutrition security; livelihoods equity; environmental resilience; agricultural productivity; infrastructure capacity; and financing and investment.

➡ How can the WFP-RF project leverage on the strong support of the government to scale up food fortification in the country?

2 WFP positioning with the government

E2) WFP has been, since 2002, a strong partner of the government in school feeding policy-making and implementation. WFP not only successfully implemented the Homegrown School Feeding Program but it is also guiding and strengthening the Government's capacity to transition to a district-level based new procurement model. Strong credibility and reputation attracted the attention of the RF to partner with WFP in this project, which has been catalytic for creating the institutional demand for fortified whole grains in the country.

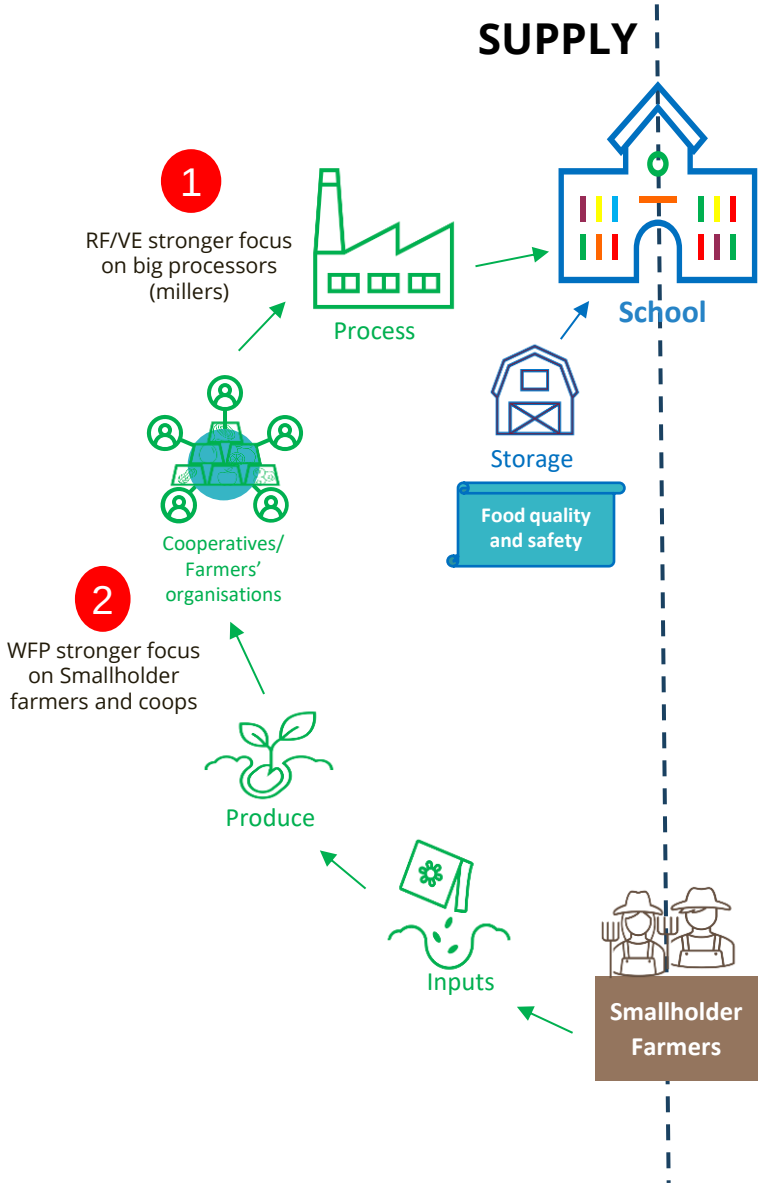
➡ How can WFP build on that sound positioning in order to build a value proposition for the scale up of fortified foods in the country?

3 Catalytic pilot to mobilize institutional markets

E3) The 18 month pilot program in Rwanda supplied 13,765 schoolchildren in 18 schools with FWG maize meals, demonstrating the potential to produce high quality FWG flour at the same cost as refined flours, shift consumer preferences towards healthier FWG foods and leverage institutional food procurement to improve diets in a budget-neutral way.

➡ How can the WFP-RF project leverage on these results in order to scale up fortification beyond institutional markets?

Focus 1: partnership challenges



P0) The WFP-RF partnership has some challenges that are undermining a more fruitful, efficient and effective **collaboration between WFP and Vanguard Economics (VE)**, the two implementing partners of the project. These challenges stem from a different approach that each partner has on the value chain. While **WFP** overall approach is in supporting **smallholder farmers and cooperatives**, **VE** is mostly focused on expanding processing capacity by accrediting more **millers**.

1 RF & Vanguard Economics stronger focus on big millers

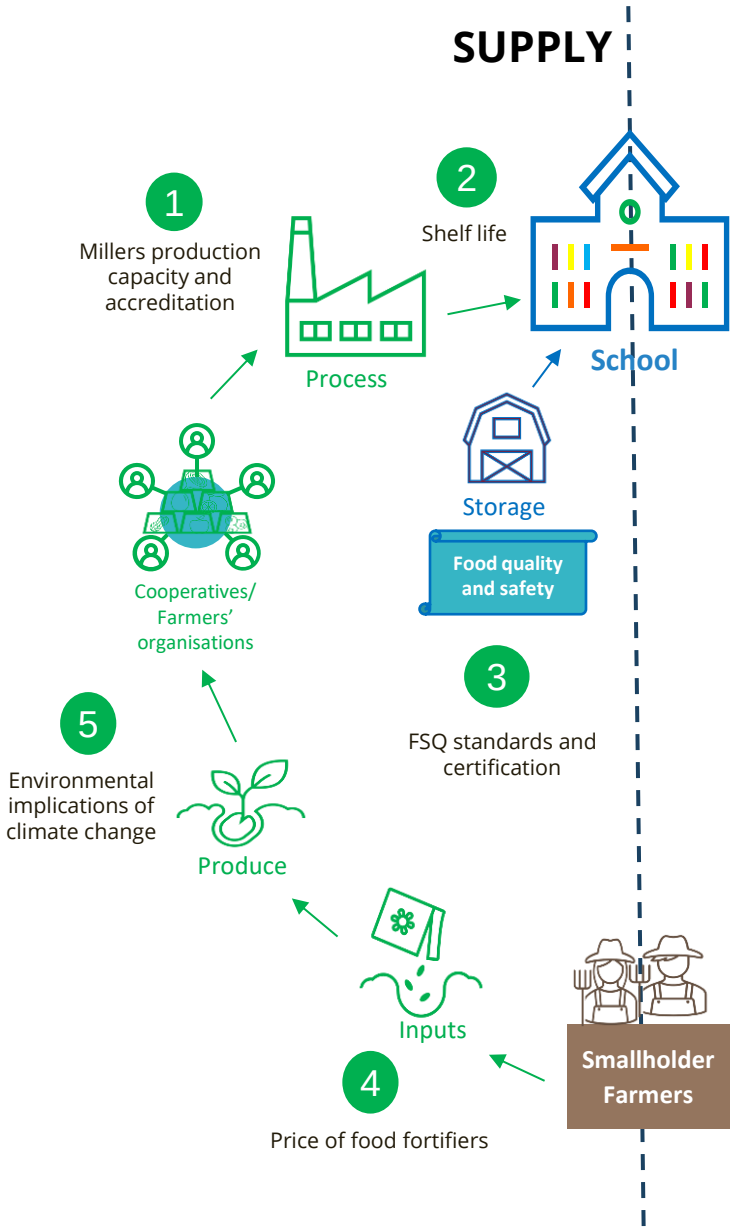
P1) The RF approach to scale up the project, through Vanguard Economics, focuses on strengthening the capacity of the millers, especially the big ones, so that the supply chain is able to increase its production capacity quickly. This focus also requires the acceleration of the accreditation process of millers through FDA and the Rwanda Standards Bureau, so that they become official suppliers for schools. VE focus on ensuring consistent supply hinges upon the strong need, in the short term, to supply 70,000 tones of food a year to schools, which is not met through fortified foods. This is the reason behind its current insistence on bringing big millers to the supply chain, which is the key bottleneck for the scaling up.

2 WFP stronger focus on smallholder farmers and coops

P2) WFP also acknowledges the need to bring in more millers to increase the production capacity of fortified foods along the value chain, especially for FWG maize meals. However, its main focus revolves around strengthening the capacity of smallholder farmers and local cooperatives to produce high quality food that can be fortified in the processing later on or already supporting the capacity to produce biofortified foods. The decision to strengthening the capacity of local cooperatives is part of the approach to support homegrown school feeding as a way to support local economies and the food system transformation in a more holistic approach. Furthermore, WFP places a stronger emphasis on food quality and safety than VE. VE acknowledges its importance, but it identifies the trade-off between having high quality standards and not having the demand covered for more nutritious school meals. In addition to this, WFP also places a greater emphasis on the importance to respect government procedures before implementing any intervention or activity, while VE approach is to generate supply and demand first and then ask for government support.

→ Given these two different strategic and operational approaches of the two main implementing partners of the project, how can both partners find common ground in order to strengthen its collaborative synergies?

Focus 3: operational challenges (I)



O0) Even though the WFP-RF project is implemented in a conducive environment for school feeding, food fortification is still in its early stages of development in Rwanda, especially through FWG. **Capacity gaps** are found in the form of operational challenges along the supply chain that hamper the capacity of the WFP-RF project to deliver on its expected results.

1 Millers production capacity and accreditation

O1) A major bottleneck for scaling up the supply of FWG is that only one miller officially qualifies as an accredited supplier of FWG maize in Rwanda, Minimex. The two implementing partners of the project are their major clients (WFP, 90% and VE, 10%), and school feeding is its only market, with a total production of 80 metric tones. The project, mainly through VE, is working with FDA to get the approval of other millers, such as Silion, Wacof and Watsibo, among other, which are already supplying other grains in the market of school feeding.

To strengthening millers capacity, it is required more investment in technical equipment and know-how. In order to justify the investment to make the business case for attracting more millers, consistent demand in institutional and trade markets is required.

➡ What can WFP-RF do more or differently in order to address the shortage of supply and accelerate FWG provision to schools?

2 Short shelf life

O2) The shorter shelf life of FWG compared to refined grains is a recurrent challenge mentioned by the different stakeholders. An area currently being studied, the ideal shelf life is estimated to be between 4.5 and 6 months (it is at 3 months currently). A major factor that extends shelf life is the certification of standards, which is done externally in Kenya. Technical factors such as dry temperature and acidity of the grains play also a major role, as well as the typology of the packing container.

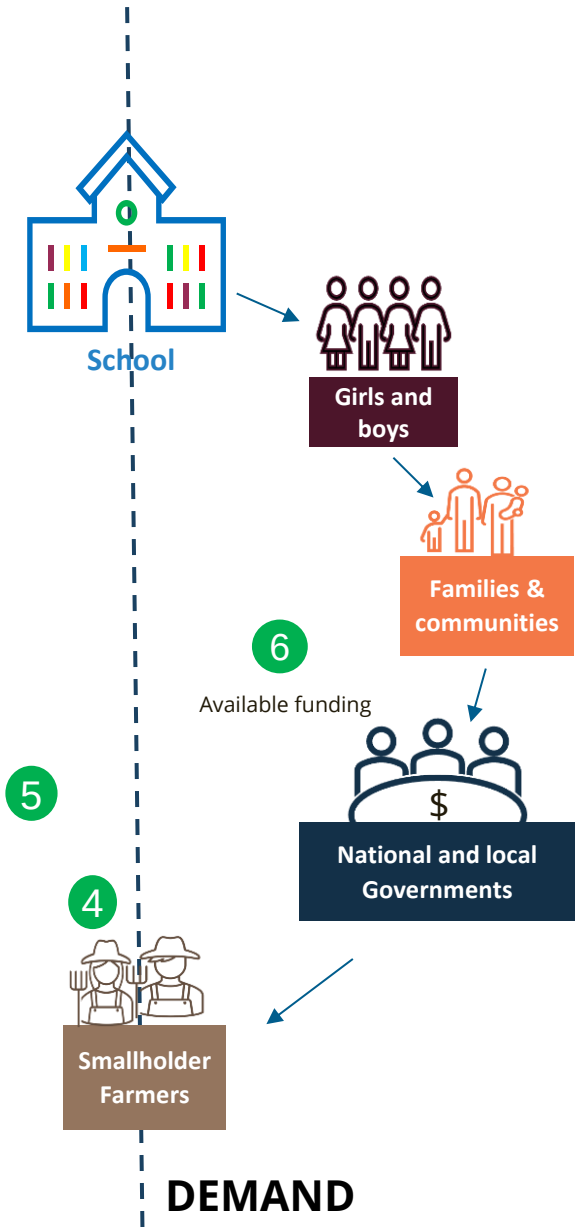
➡ Are there any other non-tracked alternatives that could contribute to shorten the shelf-life of FWG?

3 FSQ standards and certification

O3) The dependence of foreign accreditation processes of standards of food safety and quality for fortified foods is a major drawback hampering the development of the supply chain. WFP is working with the Rwanda Standards Bureau (RSB) since 2023 in harmonizing standards for fortified foods, a work in progress. RSB also certified the testing labs of VE, but outside the scope of the project.

➡ Is there any other way that WFP and RF/VE can explore in order to accelerate the certification process?

Focus 3: operational challenges (II)



4 Price of food fortifiers

O4) Food inputs such as food fortifiers are imported from other countries. Prices, due to high inflation since the start of the Ukrainian war, have been rising considerably. This is challenging the feasibility of the supply chain to incorporate fortifiers, which is also translated into an increase of the final price of FWG, and lesser incentives to the private sector.

➡ How can the WFP-RF project lower the dependency of external inputs and reduce their price volatility?

5 Environmental implications of climate change

O5) Given Rwanda's high vulnerability to climate shocks, developing a climate resilient and responsive food production is increasingly becoming a key priority both for RF and WFP. Of special relevance is the strong dependence of natural rainfall given the low irrigation capacity (only 5% of agriculture water use is irrigated). Producing whole grains could feed more people with less land, water and GHG emissions already. Other than maize, there are certain commodities that are more climate friendly, such as high iron beans, for example. WFP, in the scope of the project, provided capacity building to 10 cooperatives for the production of fortified beans that were supplied to WFP schools. The main caveat for the promotion of beans is price, so that they are more expensive than FWG maize. SAMS unit in WFP is already working towards testing small irrigation systems with farmers, so that they become less dependent on rainfall and therefore ensure a more reliable food supply. Some coops are already testing conservation agriculture through circular economy practices such as upcycling waste, reduce land and water use while increasing production.

➡ What role can the WFP-RF project play embedding a climate resilient and responsive approach to the production of fortified foods?

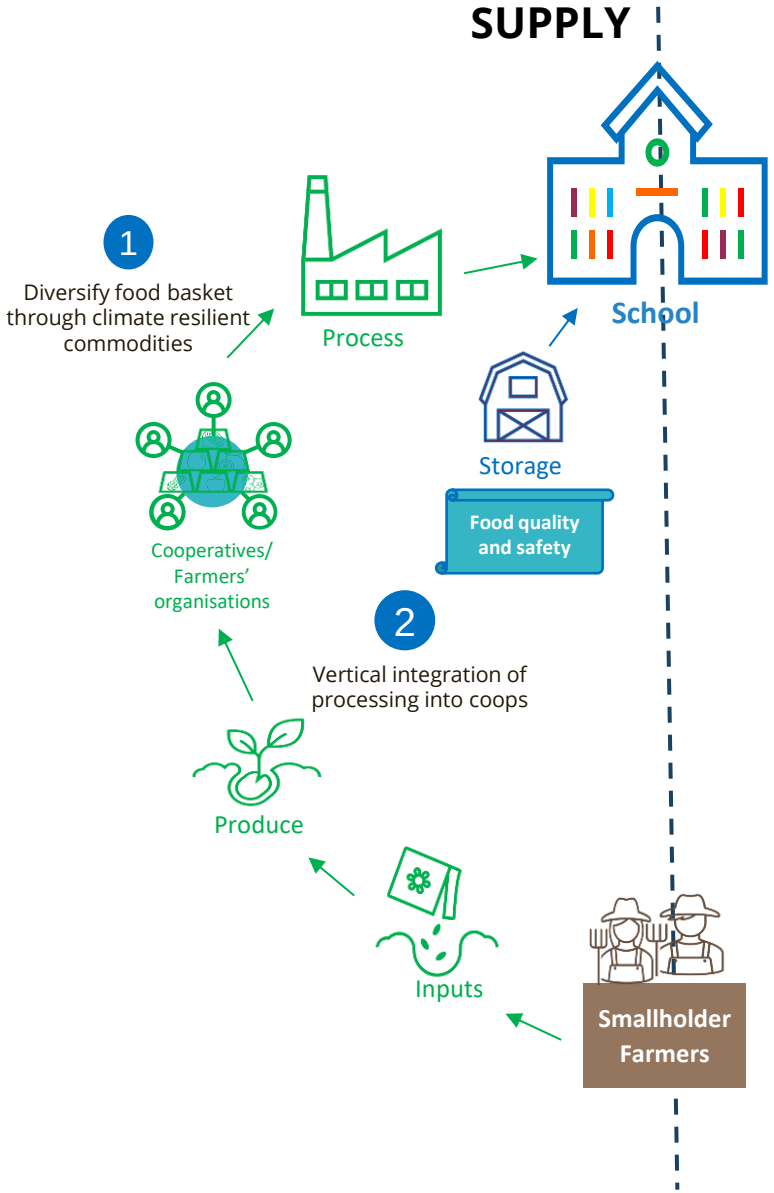
From the **demand side** of the value chain, available funding for school feeding is not enough to ensure a sustainable supply of fortified foods.

6 Available funding

O6) The project has been catalytic in introducing FWG maize in the country through the school feeding pilot. However, the scale of the challenges is so broad that the project's available funding does not allow to scale much. Rather, WFP team senses that RF/VE expectations are higher than the financial financial contributions allocated to implement the project. At the national level, rising food prices due to inflation and lower capacity of parental contributions also undermine the availability to invest in food fortification.

➡ How can the WFP-RF project re-balance results' expectations with available funding in a way that makes sense for both partners?

Focus 4: Potential leverage points (I)



L0) **Leverage points** are points in the food system model where **changes and improvements are already happening at the moment**. They represent trending early innovations that could be leveraged further by the WFP-RF project intervention.

1 Diversify food basket through climate resilient commodities

L1) A major point for discussion is whether the project should promote one or more fortified food commodities. RF/VE preference is to go big in the market with one, the FWG maize. WFP, on the other hand, is figuring out a more diversified fortified food portfolio, including other commodities such as iron beans and other grains such as corn flour. The diversification of the fortified food basket is an opportunity to integrate the criteria of climate resilience and responsive commodities. High-iron beans, as mentioned, comply with this criteria, as they provide a more diversification of fortified food and are, at the same time, more climate friendly. Exploring the link between environmental friendly food crops and more nutritious meals is definitely a leverage point worth taking into account at this stage of the project's implementation. It goes in line with the School Feeding Policy and RF future interests.

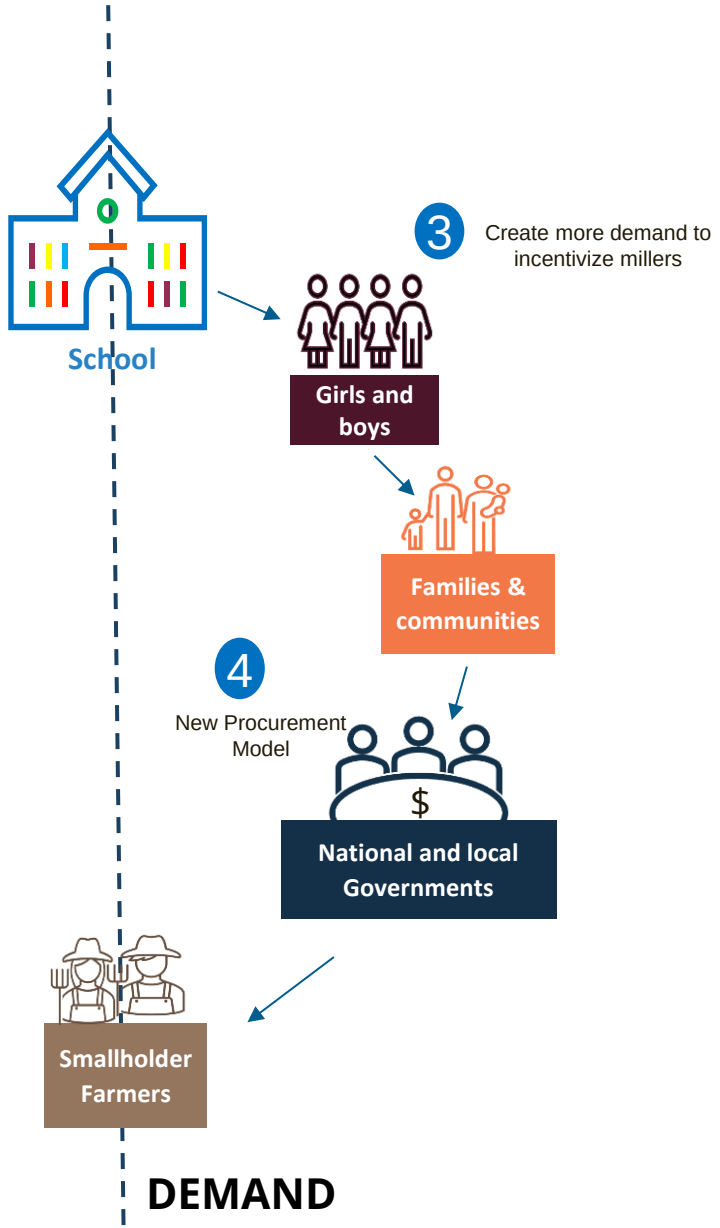
→ How can WFP and RF/VE align on the need and advantages to diversify the fortified food basket? Is there any common ground to build synergies from?

2 Vertical integration of processing into farmers' coops

L2) A cooperative visit to smallholder farmers during the developmental evaluation country mission unveiled their plans to strengthen their value proposition by vertically integrating food processing in the coop. The coops' management has developed a business plan for it, aligned with the will to diversify food crops. This prospect goes in line with SAMS approach after the team participated in the Ignite Innovation Challenge with USAID in looking for innovative ways to transform the food system. One of these ways is precisely the integration of food processing into farmers' activities, which would allow a greater impact into local economies and households. Two major challenges are, however, the need for working capital (know-how) and access to finance. Overcoming these two challenges is key for coops to be able to compete with larger, bigger players in the market, along with ensuring proper market infrastructure such as storage and food safety and quality.

→ How can the WFP-RF project contribute to study the feasibility of such vertical integration? How this could contribute to scale food fortification in the country? How could coops get enough size so to build economies of scale and increase their competitiveness in the market?

Focus 3: Potential leverage points (II)



3 Create more demand to incentivize millers

L3) The project is already working closely with some millers to strengthen their capacity to become accredited and ready to supply FWG maize to schools. Whereas some of them may have already committed to develop this business line, their main incentive is still the institutional market represented by the new procurement model at district-level. In order to scale, and given the positive results yielded by the pilot, developing the trade market would represent another strong argument for mobilizing resources that could support millers capacity production for fortified foods. Raising awareness in consumer markets is not only an incentive for millers, but it also contributes to generate the social behavior change in families and communities that might find it easier to buy and, therefore, prepare more nutritious meals at home. VE is already working into this direction of the demand side of the value chain, but outside the scope of the project.

➡ How can the WFP-RF project contribute to create demand of fortified foods in commercial markets? What kind of advocacy and SBCC campaigns could be designed? Which influencers could step in? What assets could be leveraged from institutional to trade markets?

4 New Procurement Model

L4) The success of the pilot in Rwanda enabled WFP and RF to support the government to include FWG maize meals into the national school feeding program. The country is shifting from WFP homegrown school feeding program where WFP directly buys and distributes food to schools to a decentralized, government-led model at the district level. In this new procurement model, the districts procure the food to schools, who then buy directly from farmers and transport the food to the schools (school feeding committees submits their needs to the districts). WFP advised and designed the new model's guidelines, and it is overseeing transition to its implementation.

The new model aspires to strengthen the government's capacity to manage its own decentralized homegrown program, with direct benefits to the strengthening of the local economies, supporting local smallholder farmers and cooperatives through creating a sustainable market for locally produced nutritious food products. Still, operational challenges remain the same. As a new model, food fortification requires raising awareness at the district level so that procurement of food include fortified meals. VE is working in creating this awareness, without the collaboration of WFP.

➡ What can WFP do, in addition to supporting the districts with technical assistance, to enforce fortification policy implementation at local level and leverage upon the advantages to generate positive externalities across the local value chains?

WFP positioning and project's value added

Highlights

H2) WFP has a **strong consolidated positioning** in the **food system** in Rwanda, being the trust partner of the government in school feeding since 2002. It is widely recognized, by the key stakeholders of Rwanda's food system and the project partners, as the fundamental 'partner' and the **leader in convening school feeding** in the country.

In particular, the **WFP-RF project** has been the first pilot project funded and implemented by international development partners that addresses **food fortification effectively** in Rwanda, driving demand and strengthening supply. Furthermore:

V1) The WFP-RF project has broken the taboo on the adoption of fortified food diets in schools, generating a positive outlook and awareness on healthy diets to teachers, school children and families.

V6) The project is raising several creative tensions that translate into strategic dilemmas (see next page). Although in the short term these dilemmas may be seen as a burden, they have the potential to bring new innovative pathways to the pioneering work that WFP is doing in food fortification.

V2) The RF project is opening a new line for WFP on mobilizing resources and working with new private sector partners such as Mastercard Foundation and the like. This opens the door to embrace new, innovative partnerships.

V5) The project is also raising awareness on the need to integrate climate change into nutrition, health, education and local economies work through an enhanced systemic food perspective.

V3) The project, although humbly, is making the CO team aware of the need to break the silos and foster cross-unit collaboration among cross-disciplinary staff engaged in food fortification (i.e. closer linkages between procurement and program)

V4) The project has already been catalytic and pioneering in the introduction of fortified foods as an innovation in the Rwanda food system.

WFP-RF project boundaries as dilemmas

D0) **Boundaries** help reflecting about what aspects of the WFP-RF should be included and which ones should be excluded given the challenges and limitations of the project in fostering food systems transformations in the country. They emerge, in the case of Rwanda, as **strategic dilemmas**. Questions are proposed to stimulate debate and further discussion.

D1A) RF/VE are determined to scaling up food fortification with a focus on strengthening millers capacity and generating more demand, either institutional and non-institutional. Even though there is strong acknowledgment and recognition of WFP value added to the project so far, they are taking steps with or without WFP.

Dilemma 1

With or without you

How can WFP renegotiate/rebalance the project expectations with available funding in order to re-energize the partnership? What aspects need to be assessed?

D1B) The hands-on approach taken by RF/VE has undermined WFP trust in the partnership. The value of RF is recognized among WFP units, but the fact that the WFP-RF project has limited funding to strengthening the supply chain and high demands from RF is raising doubts about the willingness of WFP to keep betting for RF in the context of Rwanda.

D2A) WFP, as a public UN agency, it is characterized by a rather bureaucratic culture of work, following institutional systems, processes and procedures; and working closely with government agencies and ministries at national, regional, local and global level. The RF partnership has opened up a way to work with more flexibility and adaptability given changes in context and project priorities.

Dilemma 2

Integrating new ways of working

To what extent working with RF represents an opportunity for integrating a more agile way of working in WFP Rwanda CO?

D2B) RF and VE, as private sector partners, are characterized by working with more flexibility and speed in decision-making, based on regular changes of priorities and strategic approaches. Bureaucracy is not so strong in these partners, which makes their systems less prone to generate rigid processes and procedures.

Rwanda Food System Model

DEVELOPMENTAL EVALUATION TEAM

Catalyzing Good Food Through School Feeding Programmes & Institutional Procurement

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