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# Climate-smart community farms

## A catalyst for food systems transformation in Ghana

### Project Brief

#### Context

The Ghana School Feeding Programme (GSFP) faces interrelated systemic challenges. Limited dietary diversity in school menus continues to reduce the programme's nutritional impact. Weak linkages between local food production and school meal supply chains constrain the potential of the GSFP to strengthen local food systems. Despite adequate community production capacity, many schools experience irregular meal provision due to logistical gaps and caterer absenteeism.

The Food Systems Transformation Through School Feeding project under the CCHeFS initiative aims to address these challenges by promoting interventions that integrate nutrient-rich, locally grown crops into school meals programmes (SMPs). In Ghana, researchers seek to leverage the GSFP as a platform for food systems transformation by growing climate-smart, nutritious crop species in school farms to supply the GSFP, strengthen local value chains, and expand opportunities for rural women and youth.

#### Key results

- Community farms established in two regions of Ghana.
- 400 community members trained in climate-smart agriculture practices—including many women and youth.
- Positive trends in uptake of potato sack farming in home gardens.
- Encouraging community engagement, including by local and national government officials, leading to the establishment of a Community of Policy and Practice (CoPP).



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## Intervention and impact

The aim of the project in Ghana is to generate evidence demonstrating how integrating new species into GSFP menus can catalyse local food-system transformation, enhance nutrition, promote gender equity, and improve climate resilience. The project objectives include:

- Establish community farms to support the GSFP.
- Assess the feasibility and acceptability of new species integration into GSFP menus across two agro-ecological regions.
- Strengthen farmer and caterer capacity for new species production, processing, and menu development through climate-smart practices.
- Evaluate the impact of interventions on dietary diversity, women's empowerment, and local market dynamics.

To achieve these objectives, the project is divided into three progressive initiatives: stakeholder mapping and institutional analysis, establishment of community farms and capacity building training, and policy engagement.

### STAKEHOLDER MAPPING AND INSTITUTIONAL ANALYSIS

National and district-level Net-Map workshops were conducted to identify and analyse stakeholder influence on the integration of neglected under-utilised species (NUS) into the GSFP. Net mapping was used to visualise the connections among key actors and their relative influence on the GSFP. Participants were purposively selected from core institutions in the school feeding ecosystem—including government ministries and agencies, academic and research institutions, civil society organisations, private sector entities, United Nations (UN) agencies, and the media. During the facilitated workshops, participants responded to the guiding question: “Who would influence the incorporation of NUS into school feeding in Ghana?”

Through group deliberation, participants drew directional links between actors to represent five types of influence: formal command, funding, technical assistance, advocacy, and dissemination of evidence-

based information. Participants also identified “opinion leaders” or individuals or institutions with informal influence. Each link type was defined and assigned a distinct colour and each opinion leader was assigned an influence score.

The Net-Map exercise identified 68 distinct stakeholders relevant to incorporating NUS into the GSFP. These stakeholders can be grouped into nine broad categories: international research organisations, media, international/local NGOs and civil society organisations, research and academia, UN agencies, donors, champions (political, traditional or community leaders, private sector, and government).

National workshops revealed a highly centralised coordination structure led by the GSFP Agriculture & Nutrition Unit, the National Development Planning Commission (NDPC), and the Ministry of Food and Agriculture (MoFA). Collaboration was driven primarily by advocacy and technical support, rather than funding flow, underscoring the need for stronger coordination among education, agriculture, and nutrition sectors. The district-level Net-Map workshops revealed limited transaction between farmers and caterers, low awareness of the nutritional value of NUS, and opportunities for gender-responsive interventions.

While integrating NUS into the GSFP offers a practical path to improve child nutrition, enhance agrobiodiversity, and strengthen local food systems, this analysis revealed that a small but influential group of public agencies, research institutions, and development partners dominates the institutional landscape—shaping policy and standards. Media, NGOs, private suppliers, and community leaders play essential supporting roles in communication, innovation, and local mobilisation. Implementing NUS will require structured coordination across ministries, procurement and menu standards, and meaningful engagement of front line implementers such as caterers and farmer organisations.

## ESTABLISHMENT OF COMMUNITY FARMS AND CAPACITY BUILDING TRAINING

To establish community farms, the research team partnered with local leaders in the Hohoe Municipality District of the Volta Region and the Kpandai District of the Northern Region. Through these partnerships, the local communities donated land for the project. One community-school farm was established in: Fodome Agbesia and Fodome Helu (Hohoe Municipality), Lesseni and Meme (Kpandai District). School Farm Committees were established to oversee the development of the community farms and coordinate with agricultural extension officers to ensure the farms are integrated with the GSFP in each region.



Map of Hohoe Municipality of the Volta Region and the Kpandai District of the Northern Region. Credit: Sourced from Map Chart, edited in Canva by Savannah Dysard.

Each farm is a minimum of two acres and will cultivate orange fleshed sweet potatoes, tomatoes, and peppers. The farms are expected to produce 2,500 mounds of sweet potatoes per farm. Each mound should yield about a half bag of orange flesh sweet potatoes. Raised vegetable beds will have about 20,000 vegetable seedlings (tomatoes, peppers). This is projected to yield 31.5 tonnes per season. The project seeks to complement the existing GSFP by providing nutritious meals to approximately 2,000 pupils in Basic 1–6 across four

selected implementation sites. Each school has a student population of 400-500 in the specified classes. Thus, this project is expected to sufficiently supply the GSFP in each region for one academic term.

During the planting of orange fleshed sweet potatoes, tomatoes, and peppers, community members were invited to participate in the farm training. About 400 community members participated in climate-smart agriculture (CSA) training, many of which were women and youth. The CSA practices included mulching, intercropping, organic composting, drip irrigation, and nursery management. All participants were also given sacks and vines of the orange fleshed sweet potatoes to cultivate private farms in their home gardens.

## POLICY ENGAGEMENT

A Community of Policy and Practice (CoPP) was established to foster cross-sector collaboration, co-learning, and policy engagement that strengthens the design and delivery of GSFP and deepens its impact on food systems. This was launched in June 2025.

Findings from the Volta and Northern Regions will be synthesised into policy briefs and shared with the GSFP Secretariat, Ministry of Gender, Children and Social Protection (MoGCSP), NDPC, and MoFA. Engagement will include district-level roundtables, media campaigns, and possible integration into the GES School Health and Education Programme (SHEP) and nation-wide GSFP.



Photo of research team member monitoring orange flesh sweet potato mounds. Credit: Dr. Mawuli Kushitor.

## Early findings and next steps

To date, the Ghana project has established the operational foundation for demonstrating how school meals can serve as a catalyst for food-system transformation. Community members have introduced vegetable farms in sacks at their homes. Early monitoring indicates positive adoption of sustainable soil-management and water-efficiency practices.

As the project moves into its next phase, the focus will shift towards linking production with meal provision through whole-school, whole-community models, generating robust evidence to inform national policy, and embedding CSA practices into the GSFP.

Going forward, the team will advance this work by taking the following actions:

- Monitor and collect data on the progress of the community farms and student dietary diversity;
- Introduce mushroom farms;
- Train women and youth on mushroom farm establishment and cultivation mechanisms;
- Conduct training for cooks and caterers on climate-smart school menu planning, food safety, and processing using the Paddle-to-Empower (PTE) bicycle-mill technology;
- Conduct cooking demonstrations for cooks and caterers on new menu items using orange fleshed sweet potatoes, tomatoes, peppers, potato leaves, and mushrooms;
- Conduct data collection and analysis, and write reports and policy briefs;
- Establish national guidelines linking community CSA farms with the GSFP.

## About this project brief

This project brief is part of a series aiming to convey the results and progress of the Food Systems Transformation Through School Feeding Project, funded by the International Development Research Centre (IDRC) and the Rockefeller Foundation under the Catalyzing Change for Healthy and Sustainable Food Systems (CCHeFS) initiative. The full series can be found at [www.regenerativefoodsystemsalliance.org](http://www.regenerativefoodsystemsalliance.org).

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