



1. Project Data

Project ID P149286	Project Name UG Multisectoral Food Security Nutrition	
Country Uganda	Practice Area(Lead) Agriculture and Food	
L/C/TF Number(s) TF-18896,TF-B6111	Closing Date (Original) 31-Dec-2022	Total Project Cost (USD) 33,791,816.26
Bank Approval Date 07-Jan-2015	Closing Date (Actual) 29-Dec-2023	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	34,640,000.00	34,640,000.00
Revised Commitment	34,640,000.00	33,791,816.28
Actual	34,639,950.01	33,791,816.26

Prepared by Hassan Maher Amin Waly	Reviewed by Avjeet Singh	ICR Review Coordinator Avjeet Singh	Group IEGSD (Unit 4)
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2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) of Uganda's Multi-Sectoral Food Security and Nutrition Project as articulated in the Grant Agreement (GA, page 6) was identical to the one in the Project Appraisal Document (paragraph 22) and aimed to:

"Increase production and consumption of micronutrient-rich foods and utilization of community-based nutrition services in smallholder households in project areas."



Parsing the PDO. The PDO will be parsed based on three objectives as follows:

1. To increase production of micronutrient-rich foods in smallholder households in project areas.
2. To increase consumption of micronutrient-rich foods in smallholder households in project areas.
3. To increase utilization of community-based nutrition services in smallholder households in project areas.

b. Were the project objectives/key associated outcome targets revised during implementation?

Yes

Did the Board approve the revised objectives/key associated outcome targets?

No

c. Will a split evaluation be undertaken?

No

d. Components

The PDO was supported by the following three components:

1. Delivery of multi-sectoral nutrition services at primary school and community levels (appraisal cost: US\$17.80 million, actual cost: US\$21.78 million). This component used the multi-sectoral approach to deliver enhanced and effective nutrition services to communities in the project districts by improving the nutrition functions of: (i) community-based institutions; (ii) primary schools; (iii) agriculture extension mechanisms; and (iv) village health teams (VHTs) in line with Uganda Nutrition Action Plan (UNAP) and the three sectoral strategic plans. It was comprised of the following four sub-components:

- 1.1. Community sensitization and establishment of community-based institutions.
- 1.2. Enhancing nutrition services delivered through primary schools, parent groups, and lead farmers.
- 1.3. Agriculture support for school-based nutrition services.
- 1.4. Strengthened nutrition services through Village Health Teams (VHTs) and Health Center Level II.

2. Strengthening capacity to deliver nutrition interventions (appraisal cost: US\$5.20 million, actual cost: US\$6.97 million). This component aimed to improve the capacity of sectoral institutions to deliver nutrition interventions relevant to the project, including support for: (i) national, district, and sub-county, stakeholder sensitization on nutrition and project activities; (ii) consultancy services to develop necessary training materials for extension agents, primary schools, and community workers, including workshops to finalize training and support materials and printing and distribution of necessary support materials for each sector; (iii) consultant services to deliver nutrition training for relevant district, primary school and community personnel; and (iv) sector-specific refresher training and supportive supervision for relevant staff at district level and below.



3. Project management, monitoring, evaluation and knowledge generation (appraisal cost: US\$4.64 million, actual cost: US\$5.89 million). This component included initiatives to: (i) ensure project management and coordination; and (ii) support monitoring, evaluation at all levels, knowledge generation and management, and dissemination of findings within Uganda and globally. This component mainly financed goods, services, and specified incremental operating costs.

Revised Components. While the original components remained unchanged, activities were added to project components because of the Additional Financing (AF). The AF was primarily requested to scale up project activities to address the COVID-19 impacts in the short and medium term, to minimize disruptions, and ensure sustainability of project results. As a result, additional activities were added to the existing components. Specifically, the AF financed: (i) water, sanitation, and hygiene (WASH) activities, relevant WASH training, and promotion for increased consumption of fruits/vegetables/MNR foods to contribute to fight against the impact of COVID-19; (ii) nutrition improving activities through Nutrition Sensitive Saving schemes for farmers; and (iii) quality-assured micronutrient rich (MNR) seed/planting material multiplication centers and seed banks, value addition, marketing, and distribution activities.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Cost. The estimated total project cost at appraisal was US\$27.64 million. The actual cost according to the ICR (Data Sheet, page 2) was US\$34.64 million. The increase compared to the appraisal estimate was due to Additional Financing (see below for details).

Financing. The project was financed through a Global Agriculture and Food Security Program (GAFSP) Grant of US\$27.64 million that financed all project interventions. In 2021, the project received an Additional Financing (AF) of US\$7.00 million. The total project financing was US\$34.64 million. The actual amounts disbursed were US\$27.64 million and US\$7.00 million for the original Grant amount and the AF, respectively.

Borrower Contribution. The project was fully financed through the GAFSP Grant and no borrower contribution was expected.

Dates. The project was approved on January 7, 2015 and became effective eleven months later on December 7, 2015. The Mid-Term Review (MTR) was conducted on March 19, 2018, about three years and four months after effectiveness. While the PAD did not provide a specific date for the MTR, this Review finds that it was timely conducted and in-line with other World Bank funded operations. The project closed on December 29, 2023 which was about four years beyond the original closing date on December 31, 2019. The project was restructured three times and received one additional financing as follows:

1. On September 21, 2018, when the amount disbursed was US\$15.13 million, in order to revise the results frame work and extend the Grant closing date from December 31, 2019 to December 31, 2020. This extension was to accommodate the delay experienced in project effectiveness and allow more time to implement activities (Restructuring Paper, paragraph 6).
2. On October 21, 2020, when the amount disbursed was US\$26.70 million, in order to extend the Grant closing date from December 31, 2020 to December 15, 2021. According to the Restructuring Paper (paragraph 4) this extension was "to allow for completion of critical remaining project activities that could not



be implemented due to the COVID-19 pandemic and the related response measures that include restrictions on movement and congregation of people."

3. On June 30, 2021, the project received an Additional Financing (AF) of US\$7.00 million. With the AF the closing date was extended from December 15, 2021 to December 31, 2022, and new activities were added as noted above.

4. On July 28, 2022, when the amount disbursed was US\$32.10 million, in order to revise the results framework to better capture changes with the AF financed activities, revise the implementation schedule, and extend the Grant closing date from December 31, 2022, to December 31, 2023, to complete all the planned activities and fully utilize the AF resources (Restructuring Paper, paragraph 8).

A split rating will not be applied to assess the overall project outcome because the PDO was not changed, and the PDO outcome end targets were revised upwards to more accurately capture the outcomes of additional resources that the project received.

3. Relevance of Objectives

Rationale

Context at Appraisal. At appraisal, Uganda was among the 20 countries worldwide with the highest prevalence of under nutrition. Micronutrient deficiencies (particularly vitamin A and iron) were also highly prevalent across all regions. The total fertility rate was 6.2 births per reproductive age woman, one of the highest in the world, and about 78% of the population was under the age of 30 years, which, combined with Uganda's rapid population growth, posed a challenge to service delivery, infrastructure development, and employment. Recognizing the essential role of nutrition in fostering human capital and sustaining economic growth, the Government of Uganda (GoU) prioritized strengthening nutrition across key sectors, including health, agriculture, and education. By leveraging existing programs within each sector, it aimed to enhance technical capacity and streamline sectoral coordination for nutrition, particularly at the sub-national level. The Uganda Multi-Sectoral Food Security and Nutrition Project is therefore focused on agriculture, health and education, recognizing that other sectors provide important complementary support was a pioneering response to address nutritional challenges.

Previous Bank Experience. The project design was informed by other World Bank projects in Uganda including the Northern Uganda Social Action Fund (NUSAF), Global Partnership for Education (GPE), and the Agricultural Technology and Agribusiness Advisory Services (ATAAs), Early Childhood Development (ECD) projects. The project design also incorporated lessons and experiences learned from other multi-sectoral projects that have been implemented in Uganda including: Parent-led school gardens program, Uganda Community Connector (CC) and Harvest Plus. The Bank also participated in the National Nutrition Technical Committee and a Nutrition Donor sub-group to leverage and harmonize multi-sectoral nutrition program support in coordination with the UN agencies, particularly UNICEF. Overall, the Bank had relevant experience to design and supervise the implementation of this project.

Consistency with Bank Strategies. At appraisal, the PDO was in line with the World Bank Country Assistance Strategy for Uganda (CAS, FY2011-FY2015). The CAS strategic objective of Nutrition improvement focused on agriculture, health, education early child development, hygiene and



sanitation, and gender strategies. Specifically the project supported the CAS first objective: Promote Inclusive and Sustainable Economic Growth, and the third objective: Promote Human Capital Development through focusing on nutrition and corresponding health and human capital outcomes. In addition, the project would help improve efficiency in public spending.

At completion, the PDO continued to be in line with World Bank's Country Partnership Framework for Uganda (CPF, FY2016-FY2021), which was still in operation at the time of the ICR. Specifically, the PDO was in line with two of the CPF strategic outcomes (SOs), namely, Improved Social Service Delivery (SO2) and Increased Agricultural Commercialization (SO3). In addition, supporting human capital development including water and sanitation remain key WBG priority areas. The project also focused on the adoption of nutrition-sensitive agricultural (NSA) interventions to increase MNR crop production and value-addition through the agriculture sector which linked with SO3. In addition, the project supported capacity building and the development of school based demonstration and nutrition education services for improving skills and knowledge of project beneficiaries through the education sector which contributed to SO2. Finally, the project supported improved nutrition and training to increase utilization of community-based nutrition services through the health sector which also contributed to SO2.

Consistency with the Government Strategies/Priorities. At appraisal, the PDO was in line with Uganda's strategic framework for economic development and the National Development Plan (NDP) which incorporated nutrition as a cross-cutting issue in the following key sectors: agriculture; health; education; and gender, labor, and social development. The PDO was also in line with the Uganda Nutrition Action Plan (UNAP, 2011-2016). UNAP's primary goal was focusing public resources and national efforts to reduce stunting. UNAP proposed to scale up implementation of a package of high impact and cost-effective nutrition interventions by operationalizing the nutrition component of the NDP, as well as the 2003 Uganda Food and Nutrition Policy (UFNP) and the Uganda Food and Nutrition Strategy (UFNS, 2005).

At completion, the PDO continued to be in line with Uganda's National Development Plans (NDP). Specifically, key strategic elements of the NDP-2 (FY2016-FY2020) and NDP-3 (FY2021-FY2025) emphasized ending hunger, improved nutrition and food security, increased household incomes, enhanced value addition, and strengthened private sector capacity to drive growth. Also, the Uganda Nutrition Action Plan (UNAP-2) aimed to strengthen smallholder household incomes and nutrition within key social sectors, including agriculture, health, and education. The project outcome also contributed to the knowledge resources and implementation of the UNAP-2 (FY2021-FY2025) as well as the Uganda Food and Nutrition Policy, aimed at promoting adequate, safe, high quality and nutritious food with a long shelf-life for local, regional, and international markets.

Summary of Relevance of Objectives. The PDO statement was clear, focused, and pitched at an adequate level of ambition given the Bank's experience and the envisioned outcomes. At completion, the PDO was in line with World Bank Strategy and the Government priorities as noted above. Further, the AF was in line with World Bank's Strategic Response to COVID-19 through the COVID-19 Strategic Preparedness and Response Program (SPRP), as well as the Emergency COVID-19 Economic Crisis and Recovery Development Policy Financing. Therefore, Relevance of Objectives is rated High.

Rating

High



4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To increase production of micronutrient-rich foods in smallholder households in project areas.

Rationale

Theory of Change (ToC). To achieve the stated objective, the project supported seed multiplication centers to facilitate farmers' access to micronutrient rich (MNR) seed/planting materials and increase seeds available to households. This was expected to make local acquisition of quality seed for subsequent planting easy and protect farmers from purchasing sub-standard seeds. Thus, the quantity of seed/planting materials of selected MNR crops produced by Lead Farmers would increase. The project also supported: strengthening linkages between agriculture extension services and participating primary school demonstration gardens, and community sensitization and mobilization on nutrition to increase the levels of awareness of MNR crops.

Expected outputs/intermediate results: women trained in nutrition sensitive agriculture, number of the local seed multiplication centers were established and operationalized, number of farmers accessed and multiplied seed/planting materials for MNR crops, and the quantity of seed/planting materials of selected MNR crops produced by Lead Farmers.

All this would contribute to achieving an increase in households in the project districts reported year-round production of at least three micronutrient rich crops (PDO outcome).

Anticipated long-term impacts were the improved nutritional status of pregnant and lactating women and children under age 2, and reduced stunting.

The key assumptions that underpinned the achievement of the stated objective were: (i) districts, primary schools, and health centers/ community would have the capacity and resources to implement the project activities; (ii) community, schools, and stakeholders at all levels would work together seamlessly; (iii) targeted individuals would allocate time to the activities introduced by the project; (iv) women's workload resulting from participating in the nutrition saving schemes or demonstration garden intervention would not compromise their role as mothers; (v) improved knowledge and skills would increase agricultural production all year round; and (vi) there would be adequate enthusiasm among target community people to utilize the agricultural technology introduced by the project, to produce and consume MNR foods to fight against malnutrition.

Overall, the ToC reflected plausible links between the supported activities, outputs and expected outcomes. The ToC was used as a basis for developing the operation's results framework and it reflected a good balance between the complexity and clarity of the causal links. The PDO was aligned with the higher level objective of Uganda's Nutrition Action Plan (UNAP) that focused on multi-sectoral engagement in response to development challenges. Finally, the stated critical assumptions were logical and realistic.

Outputs/Intermediate Results



- 298,102 farmers had access to multiplied or produced micronutrient rich seed/planting materials in project areas compared to a baseline of none and exceeding both the original and revised targets of 93,000 and 293,375, respectively (targets exceeded).
- The quantity of seed/planting materials of selected micronutrient rich crops multiplied or produced by lead farmers in project areas reached 107,583 exceeding the original target of 105,000 (target exceeded).
- 340,408 women were trained in nutrition sensitive agriculture through parents groups (PGs) in project areas exceeding both the original and revised targets of 27,000 and 303,797, respectively (targets exceeded).
- 36 local seed multiplication centers for micronutrient rich crops were established and operationalized compared to a baseline of none and exceeding the target of 30 (target exceeded).

Outcome

- By project completion 51.78% of households reported year-round production of at least three micronutrient rich crops in project areas compared to a baseline of 41.20% and exceeding the original target of 49.44% and slightly exceeding the revised target of 51.50% (PDO Outcome indicator #2).
- The ICR (paragraph 25) reported that the project's Impact evaluation study (2023) showed that households in project districts had higher levels of awareness of MNR crops than households in control districts. Specifically, awareness regarding orange flesh sweet potato, amaranthus, pumpkin and iron rich beans. The study also revealed that adoption rates of MNR crops were significantly higher in project districts compared to control districts, which consequently boosted production of MNR crops such as orange flesh sweet potato (35kg per HH), pumpkins (41kg per HH) and vegetables (31kg per HH).

Summary of Efficacy Assessment. The project aimed to increase production of micronutrient-rich foods in smallholder households in project areas through supporting seed multiplication centers, providing training to women and increasing awareness among beneficiaries. The project met or exceeded all of its intermediate results indicators, and achieved its PDO outcome target as noted above. Therefore, the efficacy with which this objective was achieved is rated High.

Rating

High

OBJECTIVE 2

Objective

To successfully increase consumption of micronutrient-rich foods in smallholder households in project areas.

Rationale

Theory of Change (ToC). To achieve the stated objective, the project coordinated nutrition actions across multiple sectors (agriculture, health, and education). Interventions would be primarily delivered in selected primary schools and community level to improve coverage of nutrition services in agriculture, health, and education (nutrition information, inputs, and commodities). Specifically, the supported activities included: supporting community mobilization and improved understanding on the importance of nutrition and



key actions for nutrition in all selected districts. To deliver these community-based nutrition services, the project supported the development of institutional capacities of the relevant line ministries and local government coordination, supervision and monitoring. At a national level, the project would support management, monitoring and evaluation, knowledge generation and dissemination, and policy advocacy.

Outputs and intermediate results: Number of under-2 children reached for Growth Monitoring and Promotion (GMP) in project areas, number of households consuming fruits/vegetables/ Micro Nutrient Rich (MNR) porridge at least three times a week, number of cooking demonstrations carried out at community level, number of Parent Groups (PGs) established and functional, number of primary schools offering a package of nutrition demonstration activities in project areas, number of people receiving improved nutrition services (disaggregated by gender and age) in project areas, number of girls (primary 4 and above) receiving weekly iron folic acid supplements through primary schools in project areas, number of cooking demonstrations carried out at community level, and number of people receiving loans disbursed under Nutrition Sensitive Saving schemes.

All this was expected to result in increased consumption of micronutrient-rich foods in smallholder households in project areas.

The achievement of the stated objective was underpinned by the following critical assumptions: (i) districts, primary schools, and health centers/ community would have the capacity and resources to implement the project activities; (ii) community, schools, and stakeholders at all levels would work together seamlessly; (iii) targeted individuals would allocate time to the activities introduced by the project; (iv) women's workload resulting from participating in the nutrition saving schemes or demonstration garden intervention would not compromise their role as mothers; and, (v) nutritional and health services would be readily available in target communities.

Overall, the ToC reflected plausible links between the supported activities, outputs and expected outcomes. The ToC was used as a basis for developing the operation's results framework and it reflected a good balance between the complexity and clarity of the causal links. The PDO was aligned with the higher level objective of Uganda's Nutrition Action Plan (UNAP) that focused on multi-sectoral engagement in response to development challenges. Finally, the stated critical assumptions were logical and realistic.

Outputs/Intermediate Results

- 3,000 Parent Groups (PGs) were established and functional fully achieving the target of 3,000 (target fully achieved).
- 1,500 primary schools offered a package of nutrition demonstration activities in project areas fully achieving the target of 1,500 (target fully achieved).
- 832,170 people received improved nutrition services in the project areas compared to a baseline of 177,460 and exceeding the target of 713,449 (target exceeded).
- 253,133 girls (primary 4 and above) received weekly iron folic acid supplements through primary schools in project areas exceeding the target of 219,381 (target exceeded).
- 1,837,513 primary school children received deworming tablets through primary schools in project areas compared to a baseline of 39,906 and exceeding the target of 1,809,887 (target exceeded).
- 448,135 children under-2 children were reached for GMP in project areas compared to a baseline of 40,500 and exceeding the target of 445,126 (target exceeded).



- 30,918 cooking demonstrations were carried out at community level exceeding the target of 30,000 (target exceeded).
- 142,410 households consumed fruits/vegetables/ Micro Nutrient Rich (MNR) porridge at least three times a week compared to a baseline of 93,000 and exceeding the end target of 139,500 (target exceeded).
- 15,000 people received loans disbursed under Nutrition Sensitive Saving schemes fully achieving the target of 15,000 (target fully achieved).

Outcome

- By project completion, 51.78% of children aged between 6 - 23 months from households in project districts had minimum dietary diversity compared to a baseline of 45.90% and exceeding both the original and revised targets of 50.49% and 51.63%, respectively (PDO Outcome indicator #1). According to the ICR (paragraph 28) and as a result of the project activities, the "overall, household dietary diversity improved by 22%, women's dietary diversity by 62%, and children's dietary diversity was 4%."
- The ICR (paragraph 27) reported that according to the impact evaluation study of the project, 10-11% more households in project districts adopted improved feeding practices compared to households in control districts. Also, 20-23% more households in project districts adopted improved health practices compared to control districts.
- The consumption scores of households in project districts were found to be 9-11 points higher than control districts, translating into 26-34% higher based on the Food Consumption Score (FCS) (ICR, paragraph 29). Also, the evaluation study, showed that 32% more households in project districts were found to be more food secure (as measured by FCS) than households in control districts.
- The project activities also reduced stunting as there was a significant improvement in Height for Age scores by about 18-21% in project districts compared to control districts. The results also showed that the project significantly reduced the proportion of children with stunting in project districts by 5.1-5.3% more than in control districts (ICR, paragraph 30), indicating that the project contributed to sustained significant long-term reductions in child stunting.

Summary of Efficacy Assessment. To achieve the stated objective, the project enhanced knowledge and awareness of nutrition and health benefits and increased the consumption of MNR crops through a combination of activities that included community nutrition education forums, cooking demonstrations, information dissemination and community-based health sessions such as Growth Monitoring and Promotion (GMP). The evidence provided in the ICR (M&E data and impact evaluation study) point to the success of the project in increasing consumption of micronutrient-rich foods in smallholder households in project areas. The project exceeded its original and revised target for the PDO outcome indicator and most targets for intermediate results indicators were exceeded. The evidence reported in the ICR also indicated that the project activities contributed to sustained significant long-term reductions in child stunting. Therefore, the Efficacy with which this objective was achieved is rated High.

Rating
High



OBJECTIVE 3

Objective

To increase utilization of community-based nutrition services in smallholder households in project areas.

Rationale

Theory of Change (ToC). This achievement of objective was interdependent on both Objectives 1 and 2. To achieve the stated objective, the project supported strengthening the capacity of sectoral institutions to deliver nutrition interventions relevant to the project. This included supporting national, district, and sub-county, stakeholder sensitization on nutrition and project activities; financing consultancy services to develop training materials for extension agents, primary schools, and community workers; finance consultant services to deliver nutrition training for relevant district, primary school and community personnel; and provide sector-specific refresher training and supportive supervision for relevant staff at district level and below.

Outputs/Intermediate Results: establishing Parent Groups, which were used as platforms for delivering various trainings for women and for demonstrations, women who received loans under the nutrition sensitive savings scheme, number of households in project districts registered in using improved nutrition and health services, number of people receiving improved nutrition services in project areas, number of girls (primary 4 and above) receiving weekly iron folic acid supplements through primary schools in project areas, number of primary schools offering a package of nutrition demonstration activities in project areas, and of local seed multiplication centers for micronutrient rich crops established and operationalized.

All this was expected to contribute to increase utilization of community-based nutrition services in smallholder households in project areas.

The achievement of the PDO was underpinned by the following five critical assumptions: (i) districts, primary schools, and health centers/ community would have the capacity and resources to implement the project activities; (ii) community, schools, and stakeholders at all levels would work together seamlessly; (iii) targeted individuals would allocate time to the activities introduced by the project; (iv) women's workload resulting from participating in the nutrition saving schemes or demonstration garden intervention would not compromise their role as mothers; and, (v) nutritional and health services would be readily available in target communities.

Overall, the ToC reflected plausible links between the supported activities, outputs and expected outcomes. While the ToC was used as a basis for developing the operation's results framework, enhanced capacity of targeted sectoral institutions was not directly measured. Finally, the stated critical assumptions were logical and realistic.

Outputs/Intermediate Results

- 3000 Parent Groups (PGs) were established and functional fully achieving the target of 3,000 (target fully achieved).
- 15,000 people (of which 70% were women) received loans disbursed under Nutrition Sensitive Saving schemes fully achieving the target of 15,000 (target fully achieved).
- 36 local seed multiplication centers for micronutrient rich crops were established and operationalized fully achieving the target of 36 (target fully achieved).



- 832, 170 people received improved nutrition services in project areas compared to a baseline of 177,460 and exceeding the target of 713,449 (target exceeded).
- 253,133 girls (primary 4 and above) received weekly iron folic acid supplements through primary schools in project areas compared to a baseline of none and exceeding the target of 219,381 (target exceeded).
- 1,500 primary schools offered a package of nutrition demonstration activities in project areas fully achieving the target of 1,500 (target fully achieved).
- 4,500 WASH demonstration facilities compliant with COVID requirements were established and operationalized at community and schools (target fully achieved).
- Notable achievements not captured by the RF included: enhancing the capacity of 118, 909 key project staff/actors including the project's management at different levels, to deliver nutrition services to project beneficiaries.

Outcome

- By project completion, 57.31% of women in the project areas participated in community-based nutrition activities compared to a baseline of 36.40% and fully achieving the target of 57.3% (PDO outcome indicator # 3).
- The ICR (paragraph 32) reported that the successful delivery of multi-sectoral nutritional services at primary school and community levels benefitted from: (a) strong political commitment from government leadership and local leaders demonstrated by the annual allocation of resources through their budgets to support nutrition interventions, (b) a dedicated coordination structure under the Office of the Prime Minister that ensured alignment of the project activities and the countrywide scale up strategy for multi-micronutrient supplements, (c) district local governments ensured that project activities were integrated into District Nutrition Action Plans, (d) community-based nutrition actions were regularized through continuous mobilization, training and integration of key service delivery platforms. These initiatives provided an effective institutional structure for sustainably improved nutrition outcomes and human capital development.

Summary of Efficacy Assessment. To achieve the stated objective, supported strengthening the capacity of sectoral institutions to deliver nutrition interventions relevant to the project. The achievement of this objective was also interdependent on the successful implementation of activities under Objective 1 and 2. The project fully achieved its PDO outcome target and most intermediate results targets were either fully achieved or exceeded. Overall, the evidence provided in the ICR point to the success of the project in providing an effective institutional structure for sustainably improved nutrition outcomes and human capital development. Therefore, the efficacy with which this Objective was achieved is rated High.

Rating
High

OVERALL EFFICACY



Rationale

Overall Efficacy is rated High. The project successfully increased production of micronutrient-rich foods in smallholder households in project areas (Objective 1) through supporting seed multiplication centers, providing training to women and increasing awareness among beneficiaries. The project fully achieved or exceeded all of its intermediate results indicators, and fully achieved its PDO outcome target pertaining to this objective. The project also successfully increased consumption of micronutrient-rich foods in smallholder households in project areas (Objective 2) through enhancing knowledge and awareness of nutrition and health benefits and increased the production of MNR crops. The project exceeded its original and revised target for the PDO outcome indicator and most targets for intermediate results indicators pertaining to Objective 2 were exceeded. Also, the evidence reported in the ICR indicated that the project activities contributed to sustained significant long-term reductions in child stunting. Finally, the project contributed to increasing utilization of community-based nutrition services in smallholder households in project areas (Objective 3). The project fully achieved its PDO outcome target and most intermediate results targets pertaining to this objective were either fully achieved or exceeded. Overall, the evidence provided in the ICR point to the success of the project in providing an effective institutional structure for sustainably improved nutrition outcomes and human capital development.

Overall Efficacy Rating

High

5. Efficiency

Economic and Financial Analysis (EFA)

Ex-ante

- The project's internal rate of return (IRR) was estimated at 24% with a net present value of benefits estimated to be US\$33.4 million and the benefit-cost ratio of 2.3. The economic benefits were calculated mostly from nutrition interventions for children under five and did not take account potential benefits from other source, such as improved cognitive skills for school-age children that benefit from more nutritious food and better care practices.
- Cost-benefit analysis was conducted based on the estimated economic value of the benefits attributable to specific interventions funded by the project. The monetary value of health and nutrition benefits was calculated by assuming that a statistical life year saved was valued at 1.5 times the country's GDP per capita.
- The project was expected to generate significant health and nutrition benefits. An investment of US\$27.64 million was expected to save 115,455 Disability-Adjusted Life Years (DALYs) and avert 65,000 cases of stunting annually.
- The project would also contribute to enhancing agricultural production and productivity through strengthened institutions. In addition, the project would contribute to addressing gender issues in the agriculture sector through focusing on improving and diversifying household food production of smallholder farms which are traditionally controlled by women.



Ex-post

- The ex-post analysis followed the same methodology at appraisal to ensure consistency and comparability. The analysis estimated the internal rate of return at 16% which was below the 24% estimated at appraisal. The discount rate used for the economic analysis was 6% while opportunity cost of capital was 11%. The estimated net present value of benefits was US\$45.4 million, with a benefit-cost ratio of 1.4 (compared to 2.3 at appraisal), which implied that for every US\$1 invested through this project, it generated benefits of US\$1.4. The economic analysis employed a cash flow model over 20 years, accounting for all project costs and benefits.
- Benefit streams were calculated based on Disability-Adjusted Life Years (DALYs), averted cases of stunting, and education benefits.
- The ICR (paragraph 36) attributed the lower *ex-post* IRR compared to the *ex-ante* one due to "an overestimation of the number of beneficiaries and benefits during appraisal, as well as some changes in the calculations since the original ones were not provided. Specifically, for the number of stunting cases, recorded figures from the Ministry of Health were used instead of estimates."
- The project also contributed to increased income for lead farmers and parent group members through the production and sale of crops, such as orange fleshed sweet potato (6-7% adoption impact compared to non-project districts) and other nutrient-rich vegetables such as high iron rich beans.
- Sensitivity Analysis. The analysis showed that the project remained viable with increases in capital and recurrent costs or in delay of benefits due to implementation issues. However, a two year delay in benefits reduced the IRR to 11.8%. In reality, the project experienced a four year delay.
- Implementation Efficiency. The project experienced an eleven months delay in effectiveness and closed four years beyond its original closing date. Implementation delays were partially due to the outbreak of COVID-19 and the associated restrictions. The project was also extended by two years due to the AF which scaled up some activities and increased PDO outcome targets.

Summary of Efficiency Assessment. The *ex-post* IRR was estimated at 16% which was below the *ex-ante* estimate at 24%, but still well above the discount rate of 6% and the opportunity cost of capital at 11%. While the project experienced implementation delays as noted above, part of the delay (~ 2 years) was also due to the increase in scope as a result of the AF and the project fully achieved or even exceeded its targets. Based on the sensitivity analysis, a two year delay dropped the IRR to 11.8%, so it is plausible to assume that a four year delay would result in even lower IRR, although not reported by the ICR. Finally, the benefit-cost ratio at completion was estimated at 1.4 compared to 2.3 at appraisal which indicated that for every US\$1 invested through this project, the return at completion was less than what was expected at appraisal. Therefore, Efficacy is rated Substantial with some shortcomings.

Efficiency Rating

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
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Appraisal	✓	24.00	0 <input checked="" type="checkbox"/> Not Applicable
ICR Estimate	✓	16.00	0 <input checked="" type="checkbox"/> Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Relevance of Objectives was rated High. Overall Efficacy was rated High. The project successfully increased production of micronutrient-rich foods in smallholder households in project areas (Objective 1). The project also successfully increased consumption of micronutrient-rich foods in smallholder households in project areas (Objective 2). Also, the evidence reported in the ICR indicated that the project activities contributed to sustained significant long-term reductions in child stunting. Further, the project contributed to increasing utilization of community-based nutrition services in smallholder households in project areas (Objective 3). Overall, the evidence provided in the ICR point to the success of the project in providing an effective institutional structure for sustainably improved nutrition outcomes and human capital development. Efficiency was rated Substantial with some shortcomings.

Based on the assigned ratings to the three Outcome criteria, the Outcome of the project is rated Highly Satisfactory.

a. Outcome Rating

Highly Satisfactory

7. Risk to Development Outcome

The following risks could impact the Development Outcome:

1. Technical risk. The operations and maintenance of equipment and structures could be at risk because the mechanism for this had been tested only during the short period of the AF implementation period. To mitigate this risk, the project put in place a Memorandum of Understanding, where District Local Governments (DLGs) would continue to provide technical support and supervision to value addition centers, ensuring proper maintenance and operation of all equipment and centers. The value-addition centers were designed to be self-sustaining, and the funds generated will be used to maintain and operate the equipment, and District Local Governments will also provide refresher training through the extension service system led by the agricultural engineers.

2. Stakeholders risk. There is a risk that seed entrepreneurs may not continue to offer quality declared seeds (QDS) to farmers after the project's end as they could potentially: fail to secure seeds/planting materials from the breeders, or may not seek agricultural extension advise and supervision of good agricultural practices, and may not comply with the requirement of having their products certified by the Ministry of Agriculture Animal Industry and Fisheries (MAAIF) Also, producers may opt not to sell their products only among their local communities to avoid competing with larger seed suppliers. This will not only



undermine the sustainability and utilization of QDS, but also the production and utilization of MNR crops, food security, nutrition, livelihood, and commercialization. This will negatively impact the development outcome of the project in the medium/long term. That said, District Local Governments are committed to continuously support seed entrepreneurs through the extension supply system and linkages with the National Agricultural Research Organization. Also, additional support can also be leveraged through the Bank - financed Uganda Climate Smart Agricultural Transformation Project where the development of the seed system is a key intervention for support.

8. Assessment of Bank Performance

a. Quality-at-Entry

- **Strategic Relevance and Approach.** The project was strategically relevant and in line with the Government priorities. The PDO was also in line with the Bank strategies (see Section 3 for details). The project was expected to help Uganda strengthen smallholder household food security and improve nutrition for targeted beneficiaries through a multi-sectoral approach that involved key social sectors, including agriculture, health, and education.
- **Technical, Financial and Economic Aspects.** The project design featured a clear PDO that was supported by relevant activities. The project design featured a multi-sectoral approach that aimed to improve the delivery of nutrition services at community levels using community-based institutions, primary schools, agriculture extension mechanisms, and village health teams, and through sectoral institutions including project management and coordination at both national and decentralized levels. To improve targeting of project beneficiaries, the design featured an innovative beneficiary identification process based on nutritional status and poverty data. This ensured that a high portion of nutritionally disadvantaged groups were covered by the project interventions. The PAD included a detailed economic and financial analysis that provided adequate justification for the project investments.
- **Poverty, Gender, and Social Development Aspects.** The project contributed to addressing poverty by helping beneficiaries in the production and sale of MNR crops. Women were the main target beneficiaries of the project. To ensure the inclusion of women, the project design required that at least 60% of the total female beneficiaries in 15 districts be targeted for training opportunities.
- **Environmental and Fiduciary Aspects.** Relevant environmental and social safeguards were identified at appraisal. The (PAD, paragraph 86) noted that the implementing agencies had no Environmental and Social Development personnel to handle environmental and social aspects, and recommended that relevant specialist be hired within six months of effectiveness. Procurement arrangements did not include a community procurement guideline at design stage for schools and the communities to carry out their procurement activities. Financial management arrangements were adequate.
- **Implementation Arrangements.** At appraisal, the Ministry of local government (MOLG) was not explicitly identified as an implementing entity in the original project design. The project also experienced delays in establishing the Project Coordination Unit (PCU), and fiduciary readiness on the ground. This negatively impacted implementation readiness and contributed to delayed effectiveness.



- **Risk Assessment.** Seven risk areas were identified at appraisal, and the overall risk was rated as Substantial. Overall, risk identification was thorough and reflected relevant mitigation measures. In a further communication, the project team confirmed that the mitigation measures worked as expected, however, the risk related to the outbreak of COVID-19 was not anticipated.
- **M&E Arrangements.** M&E activities were handled by the PCU which was housed at the MAAIF. Also, M&E included an adequately designed Results Framework that reflected a set of indicators of adequate relevance, coverage, and measurability to track the project activities and assess the achievement of its PDO. M&E benefitted from positioning a Monitoring and Evaluation Specialist at the PCU as one of the conditions for effectiveness.

Summary of Quality-at-Entry (QAE) Assessment. The project was strategically relevant. Design included a clear PDO that was supported by relevant activities. Environmental and fiduciary aspects were adequate. Implementation arrangements had minor gaps. Gender aspects were adequately covered by the project design. Risk identification was thorough and reflected relevant mitigation measures. M&E arrangements were adequate. Overall, Quality at Entry is rated Satisfactory.

Quality-at-Entry Rating Satisfactory

b. Quality of supervision

- The Bank conducted 17 implementation support missions over the duration of the project implementation. However, from 2020 to 2022, all Bank supervision was virtual due to COVID-19 lockdowns and travel restrictions.
- The project benefited from a well-rounded Bank team that reflected technically strong specialists in relevant areas. This included experienced nutrition, agriculture, education, and health specialists. The team also included a capacity building specialist, an economist, financial management specialist, procurement specialist, and safeguard specialist.
- The Bank team maintained a good balance between introducing multi-sectoral global best practices in nutrition, and getting the Office of the Prime Minister involved early enough for overall coordination. This ensured that all relevant ministries would participate effectively in project activities. Further, the Bank team pursued open discussions at the central level to address implementation bottlenecks and engaged various stakeholders to ensure the effectiveness of the project interventions.
- The projects fiduciary performance benefited from the on-the-job capacity building provided by the Bank's fiduciary specialists. Further, the project oversight benefited from having the agriculture lead based in Kampala.

Summary of Quality of Supervision Assessment. The Bank task team successfully guided the implementation of the project against environmental challenges, including the COVID pandemic. The Bank team also oversaw the Government's request for additional financing and successfully expanded the project scope. The team composition was consistently maintained throughout the project life, and the Bank provided quality support and supervision to the project. Overall, the Quality of Supervision is rated Satisfactory.



Based on the assigned ratings to QAE and Quality of Supervision, the Overall Bank Performance is rated Satisfactory.

Quality of Supervision Rating

Satisfactory

Overall Bank Performance Rating

Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

- The PAD did not include a theory of change since it was not required by the Bank at the time of appraisal. This Review constructed a theory of change for each of the three objectives through using information from the detailed project description in the PAD (Annex 2) and the theory of change reported in the ICR (Annex 7).
- The PDO was measured through three PDO outcome indicators which were relevant, reflected reasonable targets, and had baseline data. However, the unit of measurement of the three PDO indicators was revised to percentage to more accurately capture what was to be measured by each of the PDO indicators and in alignment with national reporting (ICR, paragraph 51).
- The results framework also included 10 intermediate results indicators (IRIs) to track the progress of the different project activities. The IRIs were measurable, reflected reasonable targets, and were connected to the project activities. An additional IRI was included after MTR, and 4 IRIs were included as part of the project extension with additional financing.
- The M&E design also called for a baseline study, midline and endline evaluations of the project. In addition, positioning of a Monitoring and Evaluation Specialist at the PCU was one of conditions for effectiveness to ensure an early start of M&E activities.
- Overall, M&E design was sound and reflected a well-designed RF that included a set of indicators of adequate relevance, coverage, and measurability to track the project activities and assess the achievement of its PDO. In a further communication, the project team stated that while the M&E design was robust, it could have been further strengthened by including indicators to capture some spillover or unintended outcomes of the project that were observed beyond the results framework or PDOs. For example, indicators for increased school attendance, improved student's performance, students/people adopted project interventions in non-project districts, and the volume of marketed MNR crops that reflect commercialization during the AF period.

b. M&E Implementation

- M&E implementation experienced delays at the initial stages due to relying on a the paper-based system. This was rectified when the project migrated to an e-based reporting system, which allowed information to become available in real time. According to the ICR (paragraph 53) "all the



results indicators were regularly reported on, and all the data was geo-referenced and geo-tagged."

- M&E implementation benefited from capacity building for all M&E officers of the sectors, including nutrition M&E who were trained and exposed to Geo-enabled Technology for monitoring the project implementation in the context of their sector.
- A total of 300 Community Facilitators (CF) were recruited and each of them were responsible for a cluster of 5 schools where data was collected from head teachers, Village Health Teams, Lead Farmers and Parent Groups. Data/information was then transmitted to the district project assistants for compilation/consolidation/ validation and submission to PCU.
- The project also used cell phone technology for project monitoring and built capacity on geo-enabled M&E for about 535 project staff. The data was sent instantly to the District Project Assistants and M&E officers at the central level.
- According to the ICR (paragraph 53) the use of geo-technology improved M&E's effectiveness, efficiency, accuracy of data collection, evaluation, learning and reporting.
- The impact evaluation endline survey of the original project operations and a rapid social assessment (RSA) to evaluate COVID-19 impacts on the social aspects of the project interventions were both carried out.
- Finally, it worth highlighting that the project won an award from the World Bank for effectively adopting the use of e-technology in M&E (ICR, paragraph 53).

c. M&E Utilization

- According to the ICR (paragraph 54) "the M&E data was used to inform project management and decision-making in a timely and appropriate manner."
- Utilization of M&E data was evident when the M&E data including MTR and impact evaluation reports helped inform technical mission discussions, prepare Implementation Status and Results Reports (ISRs) and other reports for communicating with World Bank management on project issues.
- In addition, the project information-based M&E data was used by government through the Minister of Finance Budget Speech to advocate for policy and budgetary support to the project and support the nutrition agenda of the country. Also, the results of the project fed into the organization of the 3rd National Nutrition Forum anchored by the Office of the Prime Minister that took place in May 2024.
- The M&E data were used to guide the setting of new targets after MTR, project restructuring of project and at programming of Additional Financing to capture more accurately the outcomes of the additional resources. M&E data also informed the revision of the Results Framework, including upward revision of end targets for all the three PDO indicators as well as six IRIs.
- The M&E data also informed the project management on the need, procurement, and distribution of additional nutrition commodities. This allowed well-timed strategic action and response to satisfy nutritional needs of the target groups supported by the project.

Summary of M&E Quality Assessment. M&E benefited from a sound design that reflected a well-designed RF that included a set of indicators of adequate relevance, coverage, and measurability to track the project activities and assess the achievement of its PDO. M&E implementation benefited from communication technologies, and data were collected on all results indicators were geo-referenced and geo-tagged, which enabled systematic tracking of project performance. M&E utilization was evident in



using M&E data to inform management decisions, and project data were also used to advocate for policy and budgetary support to the project and support the nutrition agenda of the country as noted above. Therefore, the M&E Quality is rated High.

M&E Quality Rating

High

10. Other Issues

a. Safeguards

- **Environmental Category and Safeguards.** This project was classified as Category B since impacts were expected to be minimal, site specific and readily manageable. The project triggered two Environmental Safeguards policies: Environmental Assessment OP/BP 4.01 and Pest Management OP 4.09. Since this project was closely linked with the Bank-financed Agriculture Cluster Development Project (ACDP-P145037) as both projects were implemented in the same cluster districts, the Environmental and Social Management Framework (ESMF) for ACDP was adapted and revised. Also, key aspects of the ACDP Pest Management Plan (PMP) were also captured and reflected in the ESMF to provide a framework for management of pesticide use. The ESMF was disclosed in-country and at the Infoshop on November 19, 2014.
- **Compliance with Environmental Safeguards.** According to the ICR (paragraph 57) "the safeguards performance ratings were largely satisfactory." However, the project faced a challenge in the designation of safe final disposal of the collected agro-chemical waste due to budget constraints and costly outsourced waste handlers. The project's Grievance Redress Mechanism (GRM) was functional, and thematic grievances captured through the GRM monitoring tool. The overall environment and social safeguards rating at the close of the project was rated Satisfactory. In a further communication, the project team stated that "the project fully adhered to the Bank's Safeguard policies."

b. Fiduciary Compliance

- **Financial Management (FM).** FM arrangements were handled at three levels including the national (MAAIF), the Local Government for monitoring and supervision and at the school level on behalf of the community. Capacity building was completed at each level and systems were streamlined. According to the ICR (paragraph 58) "periodic reports were prepared at each of these levels and consolidated at the national level to submit to the World Bank on time." There were no outstanding audits, and any issues that came up were addressed by management. The Financial management performance was rated Satisfactory in the final ISR.
- **Procurement.** Procurement for the project was carried out at two levels: national (through MAAIF) and at community level. Procurement processes at MAAIF initially experienced delays due to internal bureaucracy, stakeholder consultative processes during preparation of statement of requirements for Nutrition commodities and IEC materials, and limited knowledge of project objectives among some internal staff. There were also delays in uploading documentation into the



Systematic Tracking of Exchanges in Procurement (STEP), and the project faced challenges due to human resource losses. Procurement activities benefited from the expertise of the procurement specialist in the Bank financed Agriculture Cluster Development Project and a dedicated procurement staff in the mainstream Ministry. Delayed implementation at the community level was in some instances attributed to conflicting roles between the key players in procurement. To ensure successful completion, the project procurement team undertook extensive training and provided handholding support in community procurements. According to the ICR (paragraph 59) "there were no major issues of compliance with procurement requirements during project implementation." Procurement management performance was rated Satisfactory in the final ISR.

c. Unintended impacts (Positive or Negative)

The ICR (paragraph 44) reported four unintended outcomes:

- "1. The project contributed to shaping the design of the program approach under the National Development Plan (NDP-III) based on the lessons learnt from the multi-sectoral approach of the project. This has also been extended to the ongoing development of NDP-IV. The Draft School Health policy also benefitted from the Uganda nutrition and school feeding guidelines developed by the project.
2. The project strengthened the community-based monthly nutrition forum, establishing it as a viable and cost-effective structure for: (a) identification, referral and management of malnourished children between the villages and health facilities; (b) facilitation of frequent dialogue especially between female farmers and agriculture extension officers, health workers, school authorities and local government officials.
3. Homegrown feeding programs expanded to supplement student and staff diets and were managed by parent groups using MNR crops from demonstration gardens. Availability and accessibility of school feeding for both teachers and students became a reality with all project districts reporting improved school enrolment, retention, attendance, and performance. Data on the 1500 Universal Primary Education (UPE) schools obtained from the project Districts' Department of Education collected between 2016-2023, showed a 20 percent average increase in retention rates of students and a 26.5 percent average increase in pass rates of exam candidates. The provision of Iron and Folic Acid to schoolgirls also had a similar impact on their education.
4. The project supported the development of the Orange Fleshed Sweet Potato value chain for commercialization. Thus, it demonstrated that nutrition can significantly contribute to the country's economic growth through commercialization and competitiveness of MNR crop production and agro-processing."

d. Other

None.

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
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Outcome	Satisfactory	Highly Satisfactory	There is no disconnect. The ICR main text also rated the overall outcome as Highly Satisfactory.
Bank Performance	Satisfactory	Satisfactory	
Quality of M&E	High	High	
Quality of ICR	---	High	

12. Lessons

The ICR included four lessons. The following three are emphasized with some adaptation of language:

1. A multi-sectoral nutrition approach combined with a robust supra-ministerial coordination is critical to achieve an effective institutional structure for improved nutrition outcomes. The project experience emphasized the importance of multi-sectoral approach and coordination. Future nutrition initiatives should leverage and strengthen the national nutrition coordination structures under the leadership of the supra-ministerial coordination structures to achieve better coordination and greater impact. In the case of this project, the coordination anchor was nationally mandated to oversee the country’s nutrition strategy, which was vital in the success of the approach.

2. Successful implementation of multi-sectoral nutrition projects requires constant learning from implementation experience and evaluation outcomes. Nutrition projects tend to have a complex nature and exhibit locational variability. Therefore, a national-level policy dialogue and widespread dissemination of project learnings are essential for obtaining the desired commitment from the highest levels of government to maintain project gains.

3. M&E design need to reflect adequate implementation arrangements and relevant indicators to comprehensively assess the project outcomes. The project experience demonstrated that the adoption of Geo-enabled M&E technology, capacity building of relevant staff, and proper utilization of M&E outputs can all help to significantly improve the M&E quality, speed, and due diligence. Reliable M&E data allows for effective decision making and course-correction to fully achieve the planned outcomes. In addition, careful selection of nutrition related indicators and setting of realistic targets is critical to achieve the desired results. Nutrition outcomes, by their nature, take time to fully manifest as behavioral change is a time-consuming endeavor that progressively takes root. As such, project teams need to be realistic in setting targets that reflective of such progression.

13. Assessment Recommended?

No

14. Comments on Quality of ICR



- **Quality of Evidence.** The ICR reflected a strong evidence base that was used to assess the project outcomes.
- **Results Orientation.** The ICR used the available M&E data and supplemental evidence from impact evaluation studies to justify the achievement of the PDO.
- **Quality of Analysis.** The ICR assessment of outcomes reflected a good balance between achievements on the ground and achieving outcome targets. The ICR also included a detailed EFA that justified the project investments.
- **Internal Consistency.** Various parts of the ICR were internally consistent and logically linked and integrated.
- **Lessons.** Lessons reflected the project experience and were based on evidence and analysis.
- **Consistency with guidelines.** The ICR used the standard structure defined in the Guidelines and used available evidence to justify the assigned ratings. However, the section on environmental and social compliance lacked an explicit statement on the compliance of the project with World Bank Safeguard policies.
- **Conciseness.** Overall, the ICR provided a concise coverage of project activities, and candidly reported on most shortcomings.

Summary of the Quality of ICR Assessment. The ICR was well-written as it provided a concise yet thorough coverage of different aspects of the project. It adequately used the evidence base to assess the achievement of the PDO. The lessons drawn by the ICR were relevant. Overall, the Quality of the ICR is rated High.

a. Quality of ICR Rating
High