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Report No: PAD1107

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT
IN THE AMOUNT OF US\$27.64 MILLION

TO THE

REPUBLIC OF UGANDA
FOR A

UGANDA MULTISECTORAL FOOD SECURITY AND NUTRITION PROJECT

DECEMBER 31, 2014

*Agriculture; Health Nutrition and Population; and Education Global Practices
Eastern Africa Country Cluster 1
Africa Region*

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ABBREVIATIONS AND ACRONYMS

ACDP	Agriculture Cluster Development Project
ATAAS	Agricultural Technology and Agribusiness Advisory Services
AWP/Bs	Annual Workplans/Budgets
BoU	Bank of Uganda
CAO	Chief Administrative Officer
CBO	Community Based Organization
CC	Community Connector
DP	Development Partner
DIS	District Inspector of Schools
DNCC	District Nutrition Coordination Committee
DNAP	District Nutrition Action Plan
DSIP	Agriculture Sector Development Strategy and Investment Plan
ESMF	Environmental and Social Management Framework
GAFSP	Global Agriculture and Food Security Program
GDP	Gross Domestic Product
GMP	Growth Monitoring and Promotion
GOU	Government of Uganda
GPE	Global Partnership for Education
HC	Health Centre
HDI	Human Development Index
HNP	Health, Nutrition, Population
IFA	Iron and Folic Acid
IFMS	Integrated Financial Management System
IYCF	Infant and Young Children Feeding
LFs	Lead Farmers
LGs	Local Governments
MAAIF	Ministry of Agriculture Animal Industry and Fisheries
MDGs	Millennium Development Goals
M&E	Monitoring and Evaluation
MFPED	Ministry of Finance, Planning and Economic Development
MGLSD	Ministry of Gender, Labor and Social Development
MFSNP	Multisectoral Food Security and Nutrition Project
MOES	Ministry of Education and Sports
MOH	Ministry of Health
MOLG	Ministry of Local Government
NAADS	National Agricultural Advisory Services
NARO	National Agricultural Research Organization
NDP	National Development Plan
NMS	National Medical Stores
NUSAF	Northern Uganda Social Action Fund
OPM	Office of the Prime Minister
PG	Parent Group

PCU	Project Coordination Unit
PDO	Project Development Objective
PFP	Project Focal Point
PIM	Project Implementation Manual
PMP	Pest Management Plan
PSNAP	Primary School Nutrition Action Plan
SMC	School Management Committee
SNV	Stichting Nederlndse Vrijwilligers (Dutch NGO)
SUN	Scaling Up Nutrition
UN	United Nations
U5MR	Under five Mortality Rate
UFNP	Uganda Food and Nutrition Policy
UNAP	Uganda Nutrition Action Plan
UNICEF	United Nations International Children's Emergency Fund
UPE	Universal Primary Education
USAID	United States Agency for International Development
VHTs	Village Health Teams
WASH	Water, Sanitation and Hygiene

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Uganda Multisectoral Food Security and Nutrition Project

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PAD DATA SHEET

Uganda

Uganda Multisectoral Food Security and Nutrition Project (P149286)

PROJECT APPRAISAL DOCUMENT

AFRICA

Report No.: PAD1107

Basic Information			
Project ID P149286	EA Category B-Partial Assessment	Team Leader Ziauddin Hyder	
Lending Instrument Investment Project Financing	Fragile and /or Capacity constraints []		
	Financial Intermediaries []		
	Series of Projects []		
Project Implementation Start Date 07-Jan-2015	Project Implementation End Date 31 December, 2019		
Expected Effectiveness Date 01-Jul-2015	Expected Closing Date 31 December-2019		
Joint IFC No			
Practice Manager Tijan M. Sallah	Sr Global Practice Directors Juergen Voegele	Country Director Philippe Dongier	Regional Vice President Makhtar Diop
Approval Authority			
Approval Authority AFRVP Decision			
The project is funded through the Global Agriculture and Food Security Program (GAFSP) Trust Fund and the approval authority is with the Regional Vice President.			
Recipient: Republic of Uganda			
Responsible Agency: Ministry of Agriculture, Animal Industry & Fisheries			
Contact:	Mr. Vincent Rubarema	Title:	Permanent Secretary
Telephone No.:	256414320004	Email:	ps@agriculture.go.ug

Project Financing Data(in USD Million)										
<input type="checkbox"/>	Loan	<input type="checkbox"/>	IDA Grant	<input type="checkbox"/>	Guarantee					
<input type="checkbox"/>	Credit	<input checked="" type="checkbox"/>	Grant	<input type="checkbox"/>	Other					
Total Project Cost:		27.64			Total Bank Financing:		0.00			
Financing Gap:		0.00								
Financing Source					Amount					
Recipient					0.00					
Global Agriculture and Food Security Program					27.64					
Total					27.64					
Expected Disbursements (in USD Million)										
Fiscal Year	0000	15	16	17	18	19	20			
Annual	0.00	4.64	7.00	8.00	6.00	2.00	0.00			
Cumulative	0.00	4.64	11.64	19.64	25.64	27.64	0.00			
Institutional Data										
Practice Area / Cross Cutting Solution Area										
Agriculture, Health Nutrition and Population, and Education										
Cross Cutting Areas										
<input type="checkbox"/> Climate Change										
<input type="checkbox"/> Fragile, Conflict & Violence										
<input checked="" type="checkbox"/> Gender										
<input type="checkbox"/> Jobs										
<input type="checkbox"/> Public Private Partnership										
Sectors / Climate Change										
Sector (Maximum 5 and total % must equal 100)										
Major Sector			Sector			%	Adaptation Co-benefits %		Mitigation Co-benefits %	
Health and other social services			Health, Nutrition and Population			30				
Agriculture, fishing, and forestry			Agricultural extension and research			40				
Education			General Education Sector			30				
Total						100				
<input checked="" type="checkbox"/> I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.										

Themes		
Theme (Maximum 5 and total % must equal 100)		
Major theme	Theme	%
Human development	Nutrition and food security	100
Total		100
Proposed Development Objective(s)		
The Project Development Objective (PDO) is to increase production and consumption of micronutrient-rich foods and utilization of community-based nutrition services in smallholder households in project areas.		
Components		
Component Name	Cost (USD Millions)	
Component 1: Delivery of multisectoral nutrition services at primary school and community levels	17.80	
Component 2: Strengthening capacity to deliver nutrition interventions	5.20	
Component 3: Project management, monitoring, evaluation and knowledge generation	4.64	
Compliance		
Policy		
Does the project depart from the CAS in content or in other significant respects?	Yes	No
	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project require any waivers of Bank policies?	Yes	No
	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have these been approved by Bank management?	Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>
Is approval for any policy waiver sought from the Board?	Yes	No
	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project meet the Regional criteria for readiness for implementation?	Yes	No
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	X	
Natural Habitats OP/BP 4.04		X
Forests OP/BP 4.36		X
Pest Management OP 4.09	X	
Physical Cultural Resources OP/BP 4.11		X
Indigenous Peoples OP/BP 4.10		X
Involuntary Resettlement OP/BP 4.12		X
Safety of Dams OP/BP 4.37		X
Projects on International Waterways OP/BP 7.50		X
Projects in Disputed Areas OP/BP 7.60		X

Legal Covenants			
Name	Recurrent	Due Date	Frequency
Description of Covenant			
Conditions			
The grant agreement will not become effective until satisfactory evidence has been furnished to the World Bank that the conditions specified below have been satisfied			
Source Of Fund	Name	Type	
GAFSP	Project Implementation Manual	Effectiveness	
GAFSP	Project Coordination Unit	Effectiveness	
Description of Condition			
a) The Recipient has adopted the Project Implementation Manual in accordance with the provisions of Section 1.B of Schedule 2 of the Grant Agreement; and b) The Recipient has established the Project Coordination Unit in accordance with the provisions of Section 1.A1.(a)(ii) of Schedule 2 of the Grant Agreement, and appointed a Project coordinator, an accountant, a procurement specialist, and a monitoring and evaluation specialist to said Project Coordination Unit, in accordance with the provisions of Section III of Schedule 2 to the Grant Agreement			
Team Composition			
Bank Staff			
Name	Title	Specialization	Unit
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Innocent Mulindwa	Senior Education Specialist	Senior Education Specialist	GEDDR
Meena M. Munshi	Senior Economist	Senior Economist	GFADR
Eva K. Ngegba	Program Assistant	Program Assistant	GHNDR
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Richard M. Seifman	Consultant	Consultant	GHNDR
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Christine Makori	Senior Counsel	Senior Counsel	LEGAM
Shingira Masanzu	ET Consultant	ET Consultant	LEGAM
Christiaan Johannes Nieuwoudt	Finance Officer	Finance Officer	CTRLA

Non Bank Staff

Name	Title	City

Locations

Country	First Administrative Division	Location	Planned	Actual	Comments

I. STRATEGIC CONTEXT

A. Country Context

1. Over the last two decades, Uganda has pursued policies aimed at economic and social development, which have not kept pace with population growth and opportunities to take advantage of a potential demographic dividend. Economic growth has averaged 5.5 percent since the year 2000, mainly in industry, agriculture, and services. The country has 84 percent rural population. Uganda's population of 33.7 million is rapidly growing at 3.2 percent annually; the total fertility rate is 6.2 births per reproductive age woman, which is one of the highest in the world. The total population is projected to reach 100 million by 2050. Furthermore, 78 percent of the population is under the age of 30 years, which combined with Uganda's rapid population growth poses a challenge to service delivery, infrastructure development, and employment.

2. Uganda's progress toward achieving its Vision 2040 goals and Millennium Development Goals (MDGs) is mixed. The country has almost halved national poverty in less than 20 years (from 56 percent in 1992 to 24 percent in 2009-10) and also improved access to safe water and HIV treatment. However, these economic gains may not translate into progress in nutrition, health, and other development priorities. Other MDGs have not shown progress, particularly those related to child and maternal health and mortality, in part because of poor coverage of maternal, neonatal and child health and nutrition services. Uganda is also unlikely to achieve the MDG for universal primary education, as primary school dropout rates are high, with only 33 percent of students completing primary grade 7.

3. The 2013 Human Development Index (HDI) listed Uganda as one of 15 developing countries whose income growth benefited the poor. However, human development remains 'low' and Uganda is ranked 161 out of 186 countries, underscoring the need to improve pro-poor policies in social sectors. Under nutrition is a critical element in this ranking because of its contributions to productivity losses from poor physical status, increased health care costs, and reduced cognitive functions and learning performance. Conversely, a population with adequate nutritional status, reflecting investments in social and human capital, contributes to sustained and equitable economic growth.

4. Recognizing that nutrition interventions are essential investments in human infrastructure for long term development, the Government of Uganda (GoU) has identified priority actions to strengthen nutrition within key social sectors, including health, agriculture, and education. This proposed multisectoral project is an innovative effort to strengthen nutrition by building upon existing major programs within each of these sectors. The approach is to improve technical capacity as well as coordinated sectoral implementation and administration capacity for nutrition, especially at sub-national levels. The proposed project has been awarded funding from the Global Agriculture and Food Security Program (GAFSP), which seeks to fill financing gaps in country and regional agriculture and food security strategies to contribute to achieving the MDG1 goal of reducing hunger and poverty in half by 2015.

B. Sectoral and Institutional Context

Nutrition

5. Globally, child and maternal under nutrition underlie more than one-third of all child deaths and result not only in failure to meet the first MDG - to halve poverty and hunger - but to meet other goals in health, education, and gender equity. Uganda is among the 20 countries worldwide with the highest prevalence of under nutrition. In 2011, 33 percent of under-5 children were stunted, higher than in neighboring countries with lower per capita income. Stunting is nearly twice as high in rural compared to urban areas (36 percent compared to 19 percent), and there are great regional variations. Micronutrient deficiencies (particularly vitamin A and iron) are also highly prevalent across all regions.

6. Experiences in Uganda and globally have shown that under nutrition may persist even as income improves. For example, poverty levels in Uganda declined 2 percentage points/year between 1995 and 2006 while stunting declined only by 0.6 percent; Uganda's "breadbasket", the Southwest Region, has relatively low poverty (18 percent) but very high prevalence of stunting (42 percent); and while chronic under nutrition has decreased in most regions, particularly Kampala, Northern and Eastern regions, in two regions with some of the greatest increases in commercialization of agriculture (Central 2 and Western), stunting rates actually worsened between 2006 and 2011, possibly due to increased focus on cash crops worsening household food security¹. These trends are a concern given Uganda's focus on agriculture as a primary growth sector.

7. The UNICEF nutrition conceptual framework identifies the multifaceted elements of food, health, and care that contribute to continued undernutrition in Uganda:

- i. *Inadequate dietary intake – poor dietary quality and/or quantity*: Food insecurity affects 23 percent of households and is common among smallholder farmers, who account for 96 percent of all farm production in Uganda. Smallholder farmers mainly engage in subsistence rain-fed agriculture, typically on less than five acres of land, and are vulnerable to seasonal fluctuations in production, food shortages and weather shocks. The typical diet is monotonous (plantains, cereals, and starchy roots) and low in micronutrients, reflecting lack of awareness and low prioritization of nutrition. Limited crop varieties and low use of inputs and new technologies also contribute to insufficient production of micronutrient-rich foods.
- ii. *Poor care and sub-optimal feeding practices contribute to inadequate dietary intakes in infants and young children in both food secure and insecure households*. Global experience has linked increased rates of stunting to lack of dietary diversity and poor feeding practices such as breastfeeding and feeding frequency. Across Uganda, 63 percent of children less than 6 months are exclusively breastfed and 13 percent of children 6-23 months consume a minimum standard of dietary diversity (four or more food groups). These are particularly important for the critical first 1000 days of life (pregnancy through birth and to 23 months), which is the period of greatest nutritional vulnerability when nutritional insults have the greatest effects on growth and

¹ Wamani, H. 2014. Determinants of Chronic Under nutrition in Uganda: A review and re-analysis of Demographic and Health Survey Data.

development. Poor practices among these vulnerable groups indicate a lack of community knowledge and awareness, and weak nutrition education systems.

- iii. *High burden of disease, including acute respiratory infections, diarrhea, and malaria, is a significant determinant of stunting in infants and young children in the Ugandan context. This is linked to insufficient health services and unhealthy household environments (poor water and sanitation).*

8. Given these multifaceted determinants of stunting, the recent Lancet Series on Maternal and Child Nutrition (www.thelancet.com) highlighted the importance of multisectoral approaches. Agricultural interventions alone, without incorporating behavior change communication to explicitly address the issues described above and others (e.g., dietary diversity, feeding practices, intra-household food distribution, sanitation, and hygiene), are not as effective at improving nutritional outcomes, as well as the reverse.

9. Uganda's strategic framework for economic development and the National Development Plan (NDP) incorporates nutrition as a cross-cutting issue in the following key sectors: agriculture; health; education; and gender, labor, and social development. As a framework to scaling up multi-sectoral actions outlined in the NDP, the country developed the Uganda Nutrition Action Plan (UNAP) (2011-2016), with the primary goal of focusing public resources and national efforts to reduce stunting. UNAP proposes 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 2005 Uganda Food and Nutrition Strategy (UFNS). It also takes into account an evolving shift to decentralized political, administrative, and fiscal authority to local governments (LGs), and transference of tasks outside the public sector, which has a bearing on nutrition planning, coordination, and management (e.g., through decentralized public/private sector agriculture extension services). Critical in addressing the causal factors around nutrition and achieving sustained results, is the need to pursue operations in key sectors consistent with their sectoral strategies, competencies, and activities mainstreamed within them. This project is therefore focused on agriculture, health and education, recognizing that other sectors provide important complementary support. This draws on experiences from other multisectoral projects that have been implemented in line with UNAP (Box 1).

Box 1: Experiences with community-based agriculture and nutrition projects in Uganda

Parent-led school gardens program found that primary schools can be an effective platform for community engagement and social change (2011-14, 716 government primary schools, 8 districts, district local governments and local CBOs SNV/Netherlands Development Organization in partnership with the Embassy of the Kingdom of Netherlands and UNICEF). Operationalization was flexible to reflect different contexts, with some common strategies, including: use of school gardens as demonstration centers to increase use of productivity-enhancing practices and to facilitate linkages between extension service providers and communities; increasing community engagement through parental participation in garden activities and village coordinating committees; promoting vegetable study plots and water, sanitation and hygiene (WASH) for students; use of the School Nutrition Committee to coordinate and manage the school gardens; and local Community Based Organization (CBO) support for peer-to-peer mentoring to improve household agriculture practices through

demonstration gardens.

Uganda Community Connector (CC) is an integrated nutrition and agriculture project seeking to improve food security and nutrition of women and under-five children through agriculture training, nutrition education and behavior change, and savings group and microfinance activities (funded by USAID, implemented by FHI 360 in 15 districts). Implementation is flexible, guided by locally developed plans including the District Food Security and Nutrition Plan and a menu of 20 livelihood and nutrition interventions. CC is implemented through the District Nutrition Coordination Committee (DNCC) and sub-county structures (health, community development, agriculture extension, and chief), with partner CBOs to reach producer organizations and contact farmers at village level. The use of media, particularly radio, is an important part of demand generation. Focusing on a limited number of specified crops allows consistent messaging from all communication channels; this should be based upon rapid assessment of regional differences in under nutrition determinants and appropriate and locally available crops to ensure approaches are contextually appropriate. Promotion of consumption of poultry remains a challenge in communities where it is primarily a source of income, and this behavior was found to be very difficult to change.

HarvestPlus: Sweet potato is an important staple in Uganda, although most communities consume white-fleshed varieties instead of the nutrient-rich orange-fleshed sweet potato (OFSP). Agriculture, nutrition, and marketing strategies have been developed to increase availability and consumption. HarvestPlus introduced OFSP to Uganda in 2007 and has since found that community-based packages effectively increase production and home consumption of OFSP in Uganda. Key aspects of increasing year round consumption of OFSP include: demand creation through behaviour change communication; seed systems for provision of high-yield variety planting materials to smallholders; and agriculture extension services on improved agronomic practices and crop management, post-harvest storage, and processing. Community-based approaches include the use of nutrition promoters for demand creation and supporting farmers to become multipliers to provide local sources for OFSP planting materials instead of relying on mass distribution.

10. Uganda is one of the early riser countries joining the international Scaling Up Nutrition (SUN) movement, which aims to harmonize donor support and strengthen government stewardship of the sector according to the principles of the Paris Declaration on Aid Effectiveness. The Bank participates in the National Nutrition Technical Committee and a Nutrition Donor sub-group to leverage and harmonize multisectoral nutrition program support. In coordination with the UN agencies, particularly UNICEF, the Bank is already supporting the GoU in strengthening multisectoral coordination and developing capacity to implement UNAP.

11. Given the GoU's nutrition objectives and execution challenges, an important consideration is the Ugandan Government decentralization policy (legislation introduced in 1997), through which the Chief Administrative Officer (CAO) and District Directorates are responsible for virtually all activities and operational fund management within the district. Further, new districts are continually being created and some districts are better staffed and able to plan, manage and coordinate than others, which will be considered in selection of districts for implementation. Most communities have not been prioritizing nutrition relative to income

generation objectives; furthermore, there is a lack of nutrition knowledge at the community level. There is correspondingly poor technical, implementation, and administrative capacity for nutrition in key sectors, particularly from district-level downwards, at odds with national nutrition policies, guidelines, strategic plans, and relatively strong central technical capacity. In sum, there is need for extensive heightened nutrition awareness in the local government and administrative units responsible for providing public functions and services. The project will be addressing these problems, and includes a separate capacity development component to respond to capacity constraints. The World Bank Uganda Economic Update 3rd edition, "Are You Being Served?" (March 2014), notes that the growth of district governments has not been matched with increased funding, particularly in those districts not well funded and with many positions vacant. "Increasing value for money in education and health spending in lagging districts can help achieve better outcomes without raising costs." (Page 5)²

Agriculture Sector

12. Food availability, quality, and diversity determinants of household nutritional status, clearly fall within the mandate of the Ministry of Agriculture, Animal Industries and Fisheries (MAAIF). However, the major programs under MAAIF focus on increasing productivity and commercialization of staple foods and cash crops. Comprehensive community-based agricultural service structures have been established with Bank support, including the Agricultural Technology and Agribusiness Advisory Services (ATAAS) project³ and the Agriculture Cluster Development Project (ACDP), currently under preparation. The GoU has recognized a gap in support for nutrition. Although the Agriculture Sector Development Strategy and Investment Plan (DSIP) (2010/11-2014/15) has the goal of increasing rural incomes, livelihoods, food and nutrition security, in practice the comprehensive community-based service structures under MAAIF have minimal focus on nutrition; MAAIF has no programs in place to address the identified barriers to improving dietary quality (i.e., poor awareness and prioritization of micronutrient-rich crops and limited use of inputs and new technologies to support these) although sub-component 3.2.7 of DSIP, "enhance food and nutrition security planning", expressly includes nutrition activities as a central part of MAAIF's work plan and promotes enhancing collaboration with other sectors to improve nutrition and the corresponding strategic objective under UNAP is to enhance production and consumption of diverse diets. These have not yet been implemented and there is little country experience on how to operationally support these strategies through Government channels.

Health Sector

13. The Health Sector Strategic and Investment Plan (HSSIP), 2010/11-2014/15, guides Ministry of Health (MOH) investments toward the country's medium-term health goals. Nutrition strategies are among the country's top health priorities: Scaling up delivery of priority nutrition services is included under HSSIP Theme 1, Attaining Universal Coverage; Community-based nutrition services through Village Health Teams (VHTs) are explicitly included; and

² See also "Service Delivery with More Districts in Uganda: Fiscal Challenges and Opportunities for Reform

³ ATAAS promotes technology generation, agribusiness advisory services, and the interface between research and agriculture extension services through farmer groups (the National Agricultural Research Organization (NARO) and the National Agricultural Advisory Services (NAADS))

nutrition services are included as part of the National Minimum Health Care Package. However, these nutrition strategies have not been widely implemented, with the result that coverage is low for UNAP priorities (scaling up micronutrients and improving maternal, infant, and young child feeding practices). One challenge is the generally poor utilization of health services under Uganda's publicly funded health system (barriers include distance and transport; staff shortages and low motivation; weak supply chain management; and poor infrastructure). A further challenge is the absence of nutrition resources at the community level, leaving major gaps at the level where they are most needed: the VHT cadre was rolled out to bring preventive and promotive health and nutrition services closer to communities but most districts have not received the nutrition training module; and there is insufficient availability of high impact nutrition commodities such as iron and folic acid, therapeutic zinc supplements, and deworming.

Education Sector

14. The Education Sector Strategic Plan (2007-2015) guides the Ministry of Education and Sports (MOES) by providing the basic framework and curricula for primary schools and their role with regard to school health and nutritional education. Primary schools are identified as critical entry-points for community engagement for nutrition because of: (i) relatively high parental convergence and community mobilization through schools; (ii) opportunities to reach schoolchildren with behavior change communication for their own benefits and, in longer term, as change agents to transfer knowledge and practice to their households; (iii) availability of land at almost all primary schools and UFPN mandate that they have demonstration plots for agriculture, nutrition and hygiene education; and (iv) decentralized infrastructure for school-based management of finances, procurement, accountability, monitoring, and reporting. Previous experiences in Uganda have confirmed that primary schools are important venues to effectively mobilize communities to improve agriculture practices.

15. MOES has also developed nutrition curriculum for improved nutrition education at all levels from early childhood education, through primary and secondary schools, to pre-service and in-service training for health sector and teacher training colleges. Policies exist to guide linkages between schools and community health /nutrition efforts (e.g. between Health Centre II and VHT), including the draft 2010 School Health Policy and costed strategic plan, as well as the 2010 Basic Requirements and Minimum Standards Indicators for Education Institutions. A key bottleneck is insufficient implementation of such linkages between community-based health and nutrition services and primary schools compounded by limited budgetary allocations towards quality education enhancement programs. Further steps taken by the sector include the recent (2013) launch of the National Guidelines on School Feeding and Nutrition Intervention Program which clearly articulate the various options that school management teams can adopt in nutrition education and awareness promotion as well as the use of school demonstration gardens as pedagogical tools in the promotion of local food production and consumption are well articulated strategies for schools adoption.

Relationship to CAS

16. The proposed project is in line with the Uganda Country Assistance Strategy (CAS) of (FY10/11-14/15) and the CAS Progress Report of July 2013. CAS strategic objectives Nutrition

improvement will look to agriculture, health, education, early child development, hygiene and sanitation, and gender strategies, and vice versa. Specifically the project will support the first (Promote Inclusive and Sustainable Economic Growth) and third (Promote Human Capital Development) strategic objectives of CAS through focus on nutrition and corresponding health and human capital outcomes. In addition, the project will help improve efficiency in public spending. These strategic objectives are directly in line with the proposed project contributing to the implementation of the NDP and UNAP.

17. The proposed project will also complement and strengthen several WB-financed projects. The ATAAS (and proposed ACDP) projects support the generation and diffusion of demand-led improved technologies by agricultural research and advisory institutions and improving access to agricultural infrastructure. The focus is on staple crops, commodities and income generation; therefore, it cannot address homestead production of micronutrient-rich crops, which is essential to food security of smallholder farmers and the population at large. This proposed project will use primary schools as an entry point for community mobilization, and will complement the WB-financed Uganda Global Partnership for Education (GPE) Teacher and School Effectiveness Project, which supports improved school management, accountability to the community, and school learning environments, among others. It is also aligned with ongoing projects supported by other development partners including the United States Agency for International Development (USAID), UNICEF, and the Netherlands Development Organization, which are seeking to improve nutrition through health and agriculture sectors.

C. Higher Level Objectives to which the Project Contributes

18. **Responsive to the goals of the World Bank to serve clients as a "solutions" bank,** this project reflects the application of science of delivery methodologies by combining the Bank's multisectoral knowledge and experience with its financial resources to achieve integrated development solutions of critical national priority. Project design reflects collaborative efforts with the client and development partners to provide Uganda with integrated, sectoral solutions and synergies to achieve maximum nutrition improvement impact. The approach integrates investment in operational analysis and data collection related to measurable targets, and to do so in a learning-by-doing approach.

19. **Regarding the Government's decentralization policy,** the Bank analysis is contained in its 3rd Economic Update, and includes a major institutional policy recommendation to "Decentralize selected departments of the line ministries to the regions and/or facilitate the development of inter-district cooperative arrangements in the sectors where they are needed", as well as a related fiscal policy recommendation to "Increase the share of unconditional transfers to districts and design these in a way that enhances the district governments level of accountability".

20. **Uganda's National Development Plan, Vision 2040, and the Uganda Nutrition Action Plan (UNAP)** focus on multisectoral engagement in response to development challenges. Uganda has recognized that one of the most viable strategies for achieving Millennium Development Goals (MDGs) is to adopt the SUN strategy of focusing on the 1000 day window of opportunity directed at women of reproductive age, newborn and young children under the

age of two years. The project is designed within the objectives articulated in the UNAP and implemented through national systems to achieve ownership, build capacity, and achieve sustainability.

21. **The proposed project will complement a number of ongoing and planned efforts supported by other external development partners** to address nutrition in rural environments and for young children and women of child bearing age. Among these are the programs supported by the USAID, Islamic Development Bank (IDB), Japan International Cooperation Agency (JICA), the Korean International Cooperation Agency (KOICA), French Development Agency (FDA) and the Netherlands.

II. PROJECT DEVELOPMENT OBJECTIVES

A. Project Development Objective (PDO)

22. **The PDO is to increase production and consumption of micronutrient-rich foods and utilization of community-based nutrition services in smallholder households in project areas.**

23. The project focus is on promoting short-term changes in high-impact nutrition behaviors and practices that are known to contribute to stunting reduction in the medium- and long-term. The project complements other agricultural efforts (such as the ACDP), which are designed to raise agricultural productivity and income, but will not address the gap in production and consumption of micronutrient-rich foods, thereby reducing stunting.

B. Project Beneficiaries

24. The project will support activities in rural districts of Uganda. The primary beneficiaries will be: (a) Pregnant and lactating women and under-2 children in all participating districts delivering enhanced community-based nutrition services; and (b) All household members of Lead Farmers (LFs) and Parents Groups (PGs) participating in nutrition promoting activities with catchment areas of selected primary schools. In total, the project will directly benefit about 1.14 million primary beneficiaries, expected to be mainly from smallholder farming families. Secondary beneficiaries will include primary school teachers and school children; VHTs; agriculture, education, and health line ministry extension workers (at central, district, and sub-county levels); and District Nutrition Coordinating Committees.

Table 1: Estimated number of primary project beneficiaries

Phase	No. Districts	Primary Beneficiaries	Participating Districts		Participating Primary School Communities
			<i>Pregnant and lactating women</i>	<i>Children 0-23 months</i>	<i>People in Households of LFs and PGs</i>
1	5	380,000	75,000	125,000	180,000
2	10	760,000	150,000	250,000	360,000
	15	1,140,000	225,000	375,000	540,000

25. The selection of project districts is based on regional rankings of 2011 Demographic and Health Survey (DHS) estimates of: i) the prevalence of stunting in under-five children, and ii) low dietary diversity, selected because they indicate both the severity of the problem and potential to benefit from the focus on increasing production and consumption of micronutrient-rich foods. Further, the project is designed to mitigate the potentially negative effects of increased agriculture commercialization on nutrition in areas covered by the proposed ACDP project that focuses on staple crops and commodities and will not address homestead production of micronutrient-rich crops, which is essential to food security and nutrition. The 41 districts in the ACDP were ranked by stunting and dietary diversity. Fifteen districts with a combined score of these two criteria below 10 were identified as having both high under nutrition and high need for interventions to improve dietary diversity. These 15 districts were from four geographical regions, namely Southwest, West Nile, East Central, and Western. Five of these districts were selected to participate in the project for the first phase (see Table 2) based on readiness for implementation, using the most recent available Ministry of Local Government (MOLG) reports, While most districts met the minimum standards, selection gave weight to the ratings that reflect performance criteria and staff functional capacity, including procurement capacity and performance, council executive performance, and functionality of the district agriculture, education, and health Directorates.

Table 2: Phase 1 and 2 district selection (based on high stunting and low dietary diversity)

Phase 1	Five selected districts: Bushenyi, Nebbi, Ntungamo, Maracha, and Namutumba.
Phase 2	Ten districts will be selected in Year 2 from the remaining 15 that qualified on the basis of combined high stunting and low diet diversity: Isingiro, Yumbe, Arua, Bugiri, Iganga, Kyegegwa, Kiryandongo, Kamwenge, Masindi, Kyenjojo, Kabarole, Kabale, Hoima, Kibaale, and Kasese. The selection process will use available MOLG reports on the Local Government readiness for implementation and exclude districts under ATAAS or ACDP with substantial outstanding fiduciary issues

C. PDO Level Results Indicators

26. Progress toward the PDO achievement will be measured through the following outcome indicators, all within participating project areas: (i) Net change in percentage of households reporting year-round production of at least three micronutrient-rich crops; (ii) Net change in percentage of children 6-23 months in households consuming minimum dietary diversity; and (iii) Net change in percentage of women participating in community-based nutrition activities.

III. PROJECT DESCRIPTION

A. Project Components

27. The proposed project will support GoU efforts to improve child nutrition through nutrition interventions across multiple sectors at national and district levels yet to implement selected interventions within each respective sector emphasizing existing systems, budgets, and accountability structures in eligible districts.

28. The project will support interventions to improve the content and coverage of nutrition services at primary schools and surrounding communities. The focus will be on delivering interventions to address the key determinants of chronic malnutrition in project areas, as identified in each sector under UNAP. These interventions are mainly focused on production and consumption of diversified micronutrient rich crops, nutrition care practices, and hygiene and sanitation demonstration. Simultaneously, the project will support demand-side approaches to enhance utilization of VHT delivered community-based nutrition services. Primary schools are mandated to establish school gardens as “agriculture and nutrition classrooms” (e.g. for demonstration purposes and to deliver nutrition curricula) although these mandates are often neglected. Schools will be used as an entry point to strengthen linkages between communities and line ministries, specifically MOES (primary school teachers), MAAIF (agriculture extension services), and MOH (health workers and VHTs). The interventions under Component 1 will be delivered in selected⁴ primary schools that meet eligibility requirements and their surrounding communities. The activities under this component will be largely facilitated by a School Nutrition Committee, a sub-committee of the School Management Committee (SMC), which will develop and implement a Primary School Nutrition Action Plan (PSNAP) (described below in more detail). The institutional capacities of MAAIF, MOES, and MOH, as well as of participating districts, will be supported under Component 2 to enhance coordination, project management, and technical capacity to deliver activities under this project. Component 3 will support project management and coordination; monitoring and evaluation; and knowledge generation, management and dissemination. The component activities are described in detail in Annex 2.

⁴ Selection criteria for Primary School will include rural or peri-urban Government aided schools implementing the Universal Primary Education (UPE) program; presence of necessary structures and staff, including head teacher and agriculture teacher, School Management Committee; unqualified school audit for the past financial audit; at least one half acre of arable, available water, and conflict-free land; and indicators of willingness to participate in the program, including commitment to have or establish a functional School Nutrition Committee and a project bank account, and PGs willing to participate in school level nutrition programs, including time and labor commitments.

COMPONENT 1: DELIVERY OF MULTI-SECTORAL NUTRITION SERVICES AT PRIMARY SCHOOL AND COMMUNITY LEVELS (US\$17.80 million)

29. The objective of this component is to improve the nutrition functions of (i) community-based institutions; (ii) primary schools; (iii) agriculture extension mechanisms; and (iv) VHTs in line with UNAP and the three sectoral strategic plans. The activities supported are organized broadly by the lead responsible sector, although there will be overlap in activities given the cross-cutting nature of interventions and the differing roles and capacities of each sector. It is estimated that approximately 15 districts, 5,400 VHT members, 1,500 primary school demonstration gardens, 3,000 LFs and 3,000 PGs (consisting of an estimated 45,000 parents), will be supported over the life of the project.

Sub-component 1.1 Community sensitization and establishment/strengthening of community-based institutions (Lead entity: Districts)

30. This sub-component will support community sensitization and mobilization on nutrition. Activities financed under this sub-component will include: (i) initial sensitization of communities, including media communications; (ii) formation, mobilization, and facilitation of PGs from the communities surrounding selected primary schools, each to be led by a chairperson who will be identified by the PG; and (iii) two LFs from each primary school catchment area who will be chosen by the community taking into consideration their agricultural skills, available land, and interest in sharing improved technologies. Building capacity of service providers in nutrition is an essential component of the project (details included under Component 2). Where Districts do not have the necessary human resources to deliver the project activities and are not able to recruit necessary staff in a timely manner, the project will provide the option for Districts to identify and access local NGOs/CBOs support as facilitators for community mobilization and agricultural extension, in conjunction with Community Development Officers at sub-county level.

Sub-component 1.2 Enhancing nutrition services delivered through primary schools, lead farmers and parent groups (Lead sector: Education)

31. This sub-component will support the establishment or strengthening of school and community-based nutrition activities, some of which will be implemented by the Primary Schools in collaboration with LFs and PGs established under sub-component 1.1, while others will be implemented by the teachers and school leadership: (i) Establishment/strengthening a "School Nutrition Committee" to develop and implement the PSNAP, including establishing/strengthening demonstration gardens and oversight, with participation of PGs; (ii) provision of support for the LFs to establish community-based multiplication and distribution mechanisms to increase community access to improved seeds and vines and; (iii) nutrition education, (food preparation, food safety, and hygiene practices) ; and (iv) school-based deworming for all school children and weekly iron folic acid (IFA) tablet supplementation for female students in primary four and above (these inputs to be procured by the MOH under sub-component 1.4).

Box 2: Prototype Primary School Demonstration Gardens

Each primary school will receive a package in Years 1, 2, and 3 to establish/strengthen their school gardens to produce year-round micronutrient-rich crops, and to support nutrition education activities. The Primary School Demonstration Gardens will be primarily managed by the PGs. Demand for nutritious foods will be generated through communications and promotion strategies. The primary incentive for PG participation is to gain skills to increase availability and yields of nutritious foods for home consumption, particularly during hungry seasons, arising from improved soil management and cultivation practices, diversified crops, labour-saving technologies, and improve post-harvesting processes. Eligible expenses for schools will include rainwater harvesting; cooking pots and utensils; gardening tools (e.g. Sprayer Pump, Hoe, Rake, Watering can, Panga, Slasher, Wheelbarrow); locally available and non-locally available micronutrient-rich crop seeds and planting materials; fencing materials; fertilizer; and herbicide/pesticides. The School Nutrition Committee will be able to select from a menu of nutrition education demonstrations, and the package will support local purchase of necessary materials. School gardens will receive two further years of successively reduced support: Year 2 packages will include locally available and not locally available planting materials and seeds for micronutrient rich crops; fertilizer; and support for nutrition education demonstrations. Year 3 packages will include only support for nutrition education demonstrations. The packages are estimated to cost up to US\$10,000 over 3 years.

Box 3: Prototype Lead Farmer Support

Each LF will receive a package in Years 1 and 2 to enable community-based multiplication, replication, and adoption of improved agricultural technologies and practices to support year-round production of micronutrient-rich foods. The main incentive for these LFs is improved availability and yields of nutritious foods for home consumption, particularly during hungry seasons, arising from improved soil management and cultivation practices and diversified crops. The importance of nutritious foods for health and development will be promoted through community nutrition activities. Year 1 support will include tools (e.g. Sprayer Pump, Hoe, Rake, Watering can, Panga, Slasher); Locally available micronutrient rich fruit and vegetable seeds and fertilizer. In Year 2, support will include locally available micronutrient-rich fruit and vegetable seeds as well as introduce nonlocally available micronutrient-rich fruit and vegetable seeds and planting materials. Appropriate varieties will be selected following MAAIF and District consultations and will consider local food preferences and agro-ecological zone and growing conditions. Communications and promotion strategies are expected to generate demand for these previously unavailable improved planting materials. LFs will be trained to produce and sell nutritious crop planting materials to surrounding households, generating marginal profits expected to provide additional incentive for LF participation.

The LF packages are estimated to cost up to US\$1,000 over two years of support. MAAIF advice from the District Directorate to the LFs (but not inputs) could encompass other priority UNAP elements such as poultry rearing (A possible operational research study would be on considering the mechanisms and effects of including poultry within the project, given the potential nutrition benefits; projects such as Community Connector have found poultry difficult to incorporate into nutrition-promoting community interventions).

Sub-component 1.3 Agriculture support for school-based nutrition services (Lead Sector: Agriculture)

32. This sub-component will support strengthened linkages between agriculture extension services and participating primary school demonstration gardens, specifically (i) engagement of MAAIF agriculture crop extension specialists with selected primary schools in development of the PSNAP, agricultural demonstration garden design, and procurement support for the project financed primary school-based activities; and (ii) technical and procurement support to LFs and communities in expanding production of promoted crops; and (iii) delivery of a pre-developed nutrition curriculum based on the UNAP priorities.

Sub-Component 1.4 Strengthened nutrition services through Village Health Teams (VHTs) (Lead Sector: Health)

33. The VHTs were established by MOH to mobilize communities for health and nutrition programs and strengthen delivery of basic health and nutrition services at household level. This sub-component will support priority nutrition services through VHTs under this mandate. In all selected districts, the project will support the following: (i) community mobilization on nutrition, nutrition behavior change communications, and monthly growth monitoring and promotion (GMP) of children under 23 months and (ii) provision of IFA supplements and deworming for pregnant/lactating women and zinc supplements for children 6-59 months. In selected primary school catchment areas, the project will also support the following, in line with the MOH mandate to support school health and nutrition activities: (i) School Nutrition Committee membership in selected primary schools for development and implementation of the PSNAP; (ii) primary school-based nutrition education sessions for students and PG demonstrations, as included in the PSNAP (necessary inputs to be procured by the School Nutrition Committee); and (iii) deworming tablets for school children and IFA supplements for girls in grade 4 and above.

COMPONENT 2: STRENGTHENING CAPACITY TO DELIVER NUTRITION INTERVENTIONS

34. This component will improve capacity of sectoral institutions to deliver nutrition interventions relevant to this 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.

COMPONENT 3: PROJECT MANAGEMENT, MONITORING, EVALUATION AND KNOWLEDGE GENERATION

35. This component will include 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 will finance goods, services, and specified incremental operating costs (for all components).

Sub-component 3.1 Project management and coordination

36. This sub-component will support: (i) project-related implementation capacity, including support for the designated project coordinator and key additional staff needed in areas such as fiduciary and M&E specialists who make up the Project Coordination Unit (housed within MAAIF); (ii) additional activities and related expenditures for central ministries not currently readily handled by their procurement and financial management systems, including management information systems, as well as auditing, and reporting; (iii) strengthening district and sub-entities fiduciary management and service delivery contracting capabilities, including staff training, as well as supplemental operational funds to carry out explicit project-related mandates.

Sub-component 3.2 Project monitoring, evaluation, and knowledge generation

37. This sub-component will support: (i) cross-coordination of project activities; and (ii) the development and implementation of a consolidated project system for regular project activity and fiduciary monitoring reporting. This will be administered by the PCU but will require the three implementing sectors and participating Districts to adopt the system and provide regular reports consistent with it; (iii) surveys to provide baseline, midline and endline values, and an impact evaluation building on the foresaid; and (iv) policy analysis and operational research, including consideration of critical aspects of the existing intervention packages which might be modified to enhance outcomes. With respect to operational research, the project will support up to six sub-projects which will be carried out by selected public universities.

B. Project Financing

38. A Global Agriculture and Food Security Program (GAFSP) grant of US\$27.64 million will finance all project interventions. Project implementation period is five years, from 2015 to 2019. The budget will assume a base cost for contingencies of 10 percent to reflect variations in base cost estimates for goods and services in terms of quantities and/or methods of implementation.

39. The project appraisal agreed to the content of each component and amounts allocated to each, building on the detailed costing. The largest component will be Component 1, Delivery of Multisectoral Community-based Nutrition Services (estimated US\$17.80 million); followed by Component 2, Capacity building (estimated US\$5.20 million); with the smallest allocation to Component 3 Program Management and Knowledge Generation (estimated US\$4.64 million).

C. Project Cost and Financing

40. Table 3 below shows estimated project costs by component. The detailed project description (Annex 2) provides estimates for the major interventions, namely the primary school demonstration gardens, nutrition education, LFs, and community-based nutrition activities. The Project will authorize retroactive financing for payments for Eligible Expenditures made prior to the Effectiveness date not exceeding US\$2.7 million.

Table 3: Project costs by component

Project Components	Project cost (US\$ millions)	GAFSP Financing	% Financing
1.Delivery of Multi-Sectoral Nutrition Services at Primary School and Community Levels	\$17.80	\$17.80	100%
2.Strengthening Capacity to Deliver Nutrition Interventions	\$5.20	\$5.20	100%
3.Project Management, Monitoring, Evaluation and Knowledge Generation	\$4.64	\$4.64	100%
Total Costs			
Front end Fees			
Total Financing Required	\$27.64	100%	100%

D. Project Phases

41. Project objectives will remain the same throughout the proposed five year implementation period. Phasing is planned to allow sufficient opportunity to gain experience before full project scaling up. An initial phase (Phase 1 for the first 2 project years) will move forward with all aspects of capacity building and program management activities. With respect to service delivery, five Districts will engage in the entire project package, providing insight into the implementation structure and sequencing of activities. This initial District testing will provide basic guidance on what implementation aspects need to be modified. For this reason, in addition to the selection criteria enumerated above, Phase 1 Districts were selected with the aim of covering a range of regions and agro-ecological zones, to maximize project learning for subsequent implementation. Phase 2 (project years 3-5) will expand the number of additional Districts by 10, so that the total project coverage will be a maximum of 15 districts. Phase 2 District-selection will occur in Year Two following the guidelines described above, and agreed by the World Bank.

E. Lessons Learned and Reflected in the Project Design

42. The project design incorporates lessons learned from international best practice from development science and nutrition; from various global and national evaluations and assessments; and from Government and DP experiences in Uganda:

a) *International and Uganda-specific experience with nutrition:* Selected nutrition interventions in the critical first 1000 days of life (and before for females of reproductive age) have significant impact on the human development of new generations. With technical guidance and social mobilization, communities have been shown to be capable of recognizing the benefits of these nutrition interventions⁵. As coverage dictates the overall impact, strengthening community-level interactions between women and other caregivers and community-based nutrition services is essential. However, progress in nutrition has been constrained by a focus on interventions within a single sector, usually health. As underscored in the UNICEF conceptual framework, which shows the relationship between food, health, and care, a multisectoral approach is essential for effective improvement in nutrition. This requires translating multisectoral strategies, policies, and guidelines into service delivery at community levels. Evidence suggests that the best approach for multisectoral interventions is to “think multisectorally, act sectorally”. This is particularly important to ensure that project delays in one area do not hold back implementation in other sectors. Uganda has had similar experiences to what is proposed for this project through schools and agriculture⁶, and although these were limited in scope and coverage, they provide some key learnings, including that focusing on year round production and consumption of fruits and vegetables in backyard/kitchen gardens has been found to be an effective approach to improving dietary diversity. School gardens can be an effective platform for community engagement and social change (see box 1: Experience with community-based agriculture and nutrition projects in Uganda). The presence of a district nutrition coordinator with explicit multisectoral focus is important to coordinate the implementation, as it is difficult to break out of sectoral silos.

b) *Uganda World Bank project experience:*

This project was developed with significant and regular guidance from World Bank and Government of Uganda sector specialists, as well as DPs, who shared their implementation experience, and identified what methods were used in their sector, with advantages and disadvantages (a list of World Bank projects which provided insight are contained in the footnote⁷). These considerations were taken into account and are reflected in the selected implementation arrangements. Some important experiences considered in the project design:

- i. Project design consultations are necessary both before and after project approval. The project development process has been a collaborative effort engaging sectoral ministries and the Office of the Prime Minister, which worked step-by-step with the Bank and as a joint collaborative team. DPs have been consulted throughout. The intention going forward is to continue this practice through annual joint reviews.
- ii. Capacity constraints at ministries include slow disbursement and inadequate fiduciary performance, which is an important risk for project implementation. It is important to include training, and possibly consultant support for procurement and finance, to increase capacity and support the ministry staff.

⁵ E.g., in Uganda: BASICS (USAID), ECD (World Bank)

⁶ In Uganda: Enhancing School Gardens (SNV), Community Connector (USAID), Harvest Plus

⁷ Northern Uganda Social Action Fund (NUSAF), Global Partnership for Education (GPE), ATAAS, Early Childhood Development (ECD)

- iii. A critical factor in implementation success, drawn from many sectoral and community development projects in Uganda as well as elsewhere, is the performance of local government. This will be a decentralized operation which requires orienting local government leadership and having them internalize their roles and responsibilities and cooperate across sectors.
- iv. Accountability by Primary Schools is a challenge. There has been experience in the past with misuse of funds and mistrust of institutions at local levels. Public sharing of expenditures coupled with greater community and citizen engagement, transparency, and accountability will strengthen project support and implementation.
- v. Mobilization and ownership of project activities by community groups is essential to project implementation. In many districts where there are insufficient Community Development Officers, NGO-contracted community-based facilitators have been successful in establishing and supporting community groups, particularly in hard-to-reach or underserved areas.

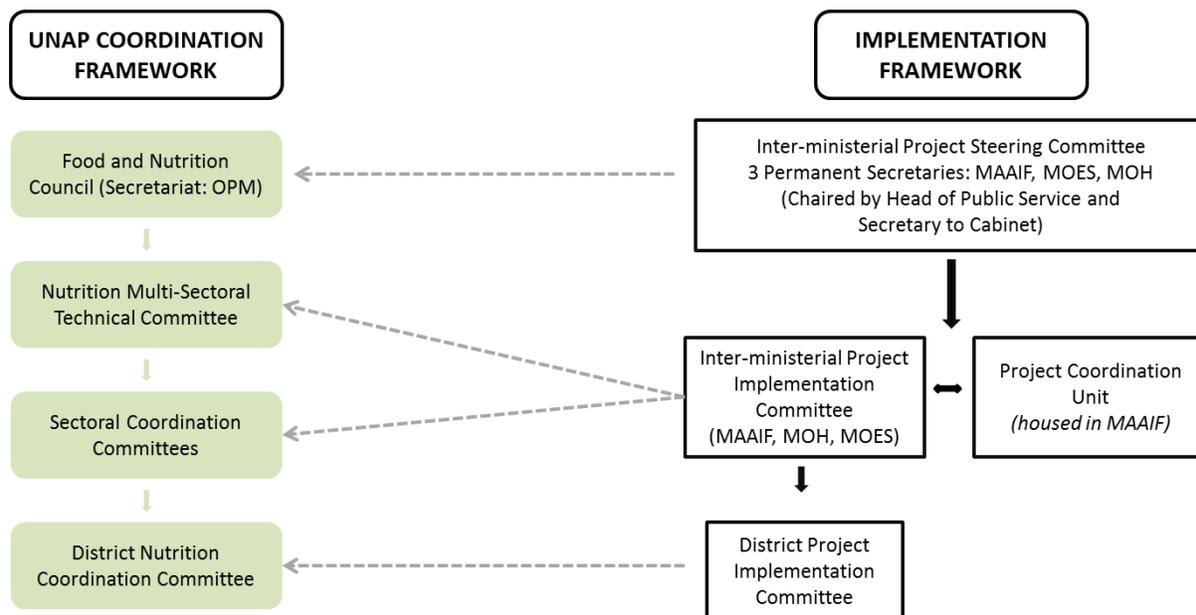
IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

43. The Project implementation will take place at national and district levels. A Project Implementation Manual (PIM) will describe institutional relationships at both national and District levels; their roles and responsibilities; the development and approval of Action Plans and annual workplans and budgets (AWP/B); fiduciary management (including procurement, financial flows, and auditing); and project supervision and coordination, monitoring and reporting. Adoption of the PIM will be an Effectiveness Condition for the project. A PCU within MAAIF will be established and is also an Effectiveness Condition for the project.

44. The organizational chart (Figure 1) provides the basic implementation framework for the Project. Annex 3 provides detailed information on the institutional and implementation arrangements at both national and district levels.

Figure 1: UNAP and Project Implementation Framework



45. At national level the Office of the Prime Minister (OPM) is responsible for UNAP oversight, coordination and strategic guidance. It chairs the Uganda Food and Nutrition Council (“Council”) and serves as the Council’s secretariat, including the UNAP sub-body, the Uganda Nutrition Multisectoral Technical Committee (“Technical Committee”). The proposed Project activities are an integral part of the UNAP effort and its progresses are to be regularly presented to the UNAP Technical Committee and Council. An Inter-ministerial Project Steering Committee, comprised of the three Permanent Secretaries and chaired by the Head of Public Service/Secretary to the Cabinet (or a designee), will review project progress reports and provide project oversight. It will be supported by an Inter-ministerial Project Implementation Committee that will meet at least monthly, to be chaired by the MAAIF Permanent Secretary (PS) or designee. This Committee will review project AWP/Bs and recommend their review and approval by PS MAAIF, which will then consolidate project AWP/Bs for submission to the World Bank for no objection, with reports to Ministry of Finance, Planning and Economic development (MFPED) for information and follow-up. The composition, roles responsibilities, and coordination arrangements for both Committees will be outlined in the PIM.

46. A Project Coordination Unit (PCU) will be housed in MAAIF, comprised of a Project Coordinator, Accountant, Procurement Specialist, and M&E Specialist. Its role and responsibilities will be described in detail in the PIM. PCU establishment including terms of reference and staffing will be an Effectiveness Condition for the Project.

47. At District level the Chief Administrative Officer (CAO) and the three District Line Directorates (agriculture, education and health) are responsible for virtually all activities within the jurisdiction. The District Nutrition Coordination Committee (DNCC), with the District Nutrition Coordinator (DNC) as principal focal point, will develop and oversee the District Nutrition Action Plan (DNAP) which is included in the five year rolling District Development Plan. AWP/B for the District will be produced and will include all Project activities to be

undertaken by both the District Directorates and selected Primary Schools. To assure timely availability of funds, approximately six months estimated funding will be available in the District account for access by primary schools or District Directorates, as needed and justified. The agriculture, education and health Directorates will have Project Focal Points (PFPs) who will meet regularly with the DNC and provide activity and fiduciary reports.

48. At the Primary School level a Primary School Nutrition Action Plan (PSNAP) will be developed by the School Nutrition Committee and submitted for approval to the DNCC. The PSNAP will be implemented by the primary school leadership, PGs and LFs.

49. At community level existing community groups will be made aware of and carry out, nutrition agricultural, health, and improved nutrition behavioral practices which are promoted by the project, organized around VHTs and LFs.

B. Results Monitoring and Evaluation

50. Monitoring of project results will be based on sectoral activity and fiduciary data under Components 1 and 2, reported through normal government systems, consolidated in quarterly reports produced by the PCU described above, which is headed by a project coordinator (funded by the project) as well as an M&E specialist, accountant, and procurement specialist, housed at MAAIF. The consolidated project system will monitor and track progress and effectiveness in implementing the project (inputs, activities, processes, outputs, intermediate outcomes, and PDO indicators). Intermediate indicators from all three sectors were identified to monitor progress in the chain of results expected to contribute to the PDO, including community mobilization, nutrition-relevant community demonstrations, community multiplication of promoted crops, and smallholder use of micronutrient-rich planting materials. The project will also monitor progress in utilization of nutrition services at primary schools and in communities. A detailed baseline study will be conducted within three months of starting the project and findings will be used to set the baseline values for the PDO indicators, strengthen the results chain, and revise implementation plans if needed.

51. A rigorous impact evaluation will be conducted to evaluate the extent to which the project influences year-round micronutrient-rich crop production and consumption, and dietary behaviors and nutritional status of targeted populations. Midline and endline surveys will be conducted and the final results of the project will be assessed through an impact evaluation which will be carried out supported by a separate Bank-executed GAFSP grant (US\$800,000 supplemented with Project financing) specifically for this purpose. The findings from the evaluation will inform the planned scale-up of the project in other districts in Uganda and also contribute to the evidence base on the interactions between agriculture, nutrition, and stunting reduction. Taking advantage of strong local capacity in agriculture and nutrition evaluation, Makerere University will be engaged in conducting the impact evaluation with support of other academic institutions, the GoU and the World Bank. The impact evaluation plan has already been developed jointly by Makerere University and Partnership for Child Development (PCD), based in Imperial College, London.

C. Sustainability

52. This project will support UNAP, which has been under implementation since 2011. The Government has demonstrated commitment to improve nutritional outcomes, and doing so with its decentralized policy and by empowering communities. Project implementation is designed to strengthen public sector relevant Government systems and procedures to respond to nutrition objectives, particularly at district and sub-district levels, as well as national nutrition coordination, thereby enhancing capacity to sustain UNAP goals, strategies and strategic interventions. This includes improved cross-sectoral planning, budgeting, operational coordination, financial and procurement management, and monitoring and evaluation. Fiscal sustainability is expected to be moderate given the relatively low share of project financing which will go to recurrent costs. It will depend, however, on the Government increasing funding to scale up the multisectoral approach in additional districts, as appropriate.

53. Ultimate sustainability will depend on the communities adopting and, taking ownership of the agricultural, health, education, and hygiene practices put forward. The plan is to provide regular supportive supervision and guidance, monitoring of progress, and taking corrective measures in methodology as needed. This is coupled with an extensive implementation evaluation effort at mid-term which will provide insight into the degree the benefits are finding traction with the target beneficiaries.

V. KEY RISKS AND MITIGATION MEASURES

Risk Rating Summary and Overall Risk Rating Explanation

A. Risk Ratings Summary Table

Risk Category	Rating
Stakeholder Risk	Substantial
Implementing Agency Risk	
-Capacity	Substantial
-Governance	Substantial
Project Risk	
-Design	Substantial
-Social and Environmental	Low
-Program and Donor	Moderate
-Delivery Monitoring and Sustainability	Substantial
-Other	
Overall Implementation Risk	Substantial

B. Overall Risk Rating Explanation

54. **Stakeholder risk is Substantial.** At sectoral, district and community level this new package of interventions depends on multiple stakeholder commitment. Continued support and encouragement from leadership will be required throughout.

55. Capacity risk is Substantial. Reliance on inter-sectoral coordination at district level to ensure effective project implementation will principally depend on rigorous engagement by the CAO and designees; on adequate numbers of critical, trained personnel at district, county, sub-county and village levels; and on use of external service delivery entities, where appropriate. Implementation capacity will need strengthening at selected districts. At district level agriculture, education, and health sectors have trained personnel who deal with the rural and peri-urban communities; however, operational coordination mechanisms do not presently exist, nor is nutrition included in their priority work programs. There are experienced NGOs which are active in communities and deal with nutrition, and offer districts, on a needs basis, potential pathways to expand project coverage and perform implementation tasks which are not available at this point from Government.

56. Governance risk is Substantial. To mitigate governance risks, including fraud and corruption in the course of project implementation, the project will: i) provide technical assistance at critical junctures including at national level and for the selected districts, to support better accountability, accuracy and timeliness of project financing and activities; ii) improve procurement and financial management processes, as needed, and iii) have a robust program of unannounced site visits by district staff to primary schools and communities.

57. Project risk elements range from Substantial to Low. Implementation capacity challenges will be mitigated by a number of factors: i) the decentralization process will continue to put greater management control and financial resources into district hands and primary schools, with funds directly flowing from the Ministry of Finance to the MAAIF Project Account to District project accounts; ii) Government is committed to provide adequate key project staffing in selected Districts; iii) there will be nutrition sensitization and nutrition technical in-service training programs at all levels, and for each sector; iv) LFs, chosen by the communities will receive technical guidance, supervision and related inputs, and will be provided project specific training; v) the project will provide technical support, particularly with respect to fiduciary management and monitoring, where it is not available on a timely basis at both national and sub-national levels; vi) there will be an effort to work with Development Partners in a complementary manner to achieve UNAP objectives related to the project and to avoid duplication of effort (the process of donor engagement and learning from existing projects was already started during project preparation, hence rating of program and donor risk as “moderate”); vii) the emphasis will be on Uganda ownership of a realistic set of project activities; viii) a two-phased approach to scaling up the project will allow for addressing implementation needs, and sequencing of interventions on the ground will be done so that commitments, training, capacity, and necessary inputs will be in place when needed for each sectoral undertaking; and ix) sectoral interventions can go forward separately without being held captive if there are lags in moving ahead with other sectoral actions.

58. Nutrition requires a coordinated approach and providing multisectoral leadership and coordinated action for nutrition programs is a challenge. There are risks of fragmentation of the national response, establishment of parallel systems, and duplication of efforts. In response, the Government has established the Uganda Food and Nutrition Council ("Council") under the Office of the Prime Minister (OPM), which will provide high-level coordination and oversight, complemented by institutional arrangements, as described above and detailed in Annex 3.

59. Risk related to monitoring of service delivery and regular and reliable data collection is Substantial. It will depend in large measure on district systems and the capacity of district Directorates to work together, as well as primary school competencies and the leadership of the Head Teacher. The intention is for the PCU in the first year to hold joint reviews at least once every quarter with each participating District to assess progress, successes, challenges and ways to mitigate implementation bottlenecks. Community-based services are particularly challenging given the dispersed nature of activities, capacity challenges, and difficulty in collecting information. To mitigate these monitoring risks the project will provide modest additional support for activity and financial management supervision to the selected Districts.

VI. APPRAISAL SUMMARY

A. Economic and Financial Analysis

60. The benefits to households from this project arise from projected improvements in human capital associated with improved nutritional status rather than economic benefits per se. This is because the links between income and nutrition are not always straightforward, as seen, e.g. by the high rates of stunting in Uganda in areas with relatively low poverty, like the Southwest. Nutrition improvements are expected to result from increased production and consumption of micronutrient rich foods and increased use of community-based nutrition services. This in turn has economic benefits, as malnutrition slows economic growth and affects human capital and productivity through several routes: (i) direct loss in productivity from poor physical status; (ii) indirect loss from poor cognitive function and deficits in schooling; and (iii) losses owing to increased health care costs (World Bank, 2006). Height has been shown to be related to productivity and final height is determined in large part by nutrition from conception to age two. A one percent loss in adult height as a result of childhood stunting is associated with a 1.4 percent loss in productivity. In addition, stunting also has term effects on cognitive development and school achievement. Students who were stunted before the age of five are more likely to underperform in school and to drop out of school. Undernourished children are faced with the challenge of competing favorably in school due to having lower cognitive and physical capacities. The low education levels attained by stunted children, often makes them less qualified for work, thus significantly reducing income-earning potential when they reach the working age.

61. Malnutrition's economic costs for Uganda are substantial: at the macroeconomic level, the total economic loss is estimated at 1.8 trillion Uganda Shillings (UGX), which is equivalent to 5.5 percent of the GDP in 2009. Health cost of under-nutrition is estimated at 525 billion UGX with 87 percent of costs borne by families and the remaining 13 percent by the health system. An estimated 44 percent of the health costs associated with under-nutrition occurs before a child reaches 1 year of age. With respect to the impact on education, 7.3 percent of all grade repetition cases in 2009 are estimated to be associated to the higher risk of stunting. Cost of grade repetitions associated with stunting is 19.6 billion UGX or 1.8 percent of the total national investment in education (Cost of Hunger in Uganda 2013). At the individual level, the productivity losses are estimated at more than 66 percent of lifetime earnings, based on direct estimates of the impact of stunting in early life on later life outcomes (Hoddinott et al, 2011).

62. The magnitude of the economic impact of malnutrition provides a strong rationale for project interventions based on three factors: (i) markets failing to address the problems of malnutrition for poor families who do not have access to adequate food or health care, compounded by “informational asymmetries” (in which people do not always know what food or feeding practices are best for children hence cannot easily tell when their children are becoming malnourished) , which still exist and affect both poor and better-off families; (ii) effective target groups: the intervention will allocate resources to the most vulnerable and high risk segments of the population and furthermore, the focus on pregnant women and children 0-23 months, the critical “window of opportunity”, maximizes the long term impact of the interventions on human health and capital; and (iii) the Copenhagen Consensus concluded that nutrition interventions generate returns among the highest of 17 potential development investments. The global estimated benefit-cost ratios range from >5: 1 for breastfeeding promotion, >10:1 for integrated child care programs, to >6:1 for iron supplementation to pregnant women.

63. The project is expected to generate significant health and nutrition benefits. An investment of US\$27.64 million would save 115,455 Disability-Adjusted Life Years (DALYs) and avert 65,000 cases of stunting annually. A DALY is equivalent to a year of healthy life lost due to a health condition. It counts the gains from both mortality (how many more years of life lost due to premature death are prevented) and morbidity (how many years or parts of years of life lost due to disability are prevented). Cost-effectiveness analysis of selected high impact nutrition interventions in Uganda suggest that the cost/DALYs saved in Uganda is relatively competitive. For community nutrition programs the cost/DALYs saved is US\$77, while the global estimates are ranging from US\$53 to US\$153..

64. The overall results of cost-benefit analysis demonstrate that the proposed project will be a sound investment for Uganda. The present value of benefits related to improved child nutrition is estimated to be US\$59.5 million. The present value of costs is estimated to be US\$26.1million. This translates to a net present value of benefits estimated to be US\$33.4 million and the benefit-cost ratio of 2.3. Cost-benefit analysis is 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 is calculated by assuming that a statistical life year saved is valued at 1.5 times the country’s GDP per capita.

65. The cost-benefit analysis also reveals a high internal rate of return of 24 percent and annual contribution to GDP of US\$85 million. The annual increase in GDP attributable to scaling up high impact interventions is calculated based on the estimates of future benefits. Although the benefits occur several years after the investment, it is assumed that these benefits serve as an approximation of the present value of economic productivity lost each year as a result of mortality and morbidity that would otherwise be prevented by scaling up interventions. Values presented are taken from a year in which all beneficiaries have reached productive age.

66. The estimated benefits in this analysis are likely to be underestimated for several reasons: (i) the economic benefits are calculated mostly from nutrition interventions for children under five and do not into 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; (ii) it does not include benefits of increased life-years of children saved before they

become active in the labor force. Many other benefits are also excluded because they cannot be measured or easily translated to monetary values.

67. The interventions included in this project do not fall within the purview of the private sector and therefore public sector action is required to demonstrate the benefits to be derived. In addition to economic and health benefits, the project will also contribute to enhancing agricultural production and productivity through strengthened institutions. The project will contribute to addressing gender issues in the agriculture sector, as the proposed activities are focused on improving and diversifying household food production of smallholder farms which are traditionally controlled by women, through increasing access to agricultural inputs and extension services and promoting use of labor-saving technologies. The Bank's engagement provides global technical knowledge and assists the Government with complementary financing.

B. Technical

68. The project technical design is informed by multiple data sources, including globally accepted nutrition findings and recommendations (SUN approach) and best practices, existing initiatives by the GoU and DPs, a considerable body of research and data available in Uganda (some of which has been regularly collected or reported), and analysis done as part of the project diagnostics and formative design.

69. The choice of implementation areas was made by overlaying the best available information with respect to stunting and diet diversity (available only at regional level), selecting ACDP districts which have solid track records, and primary schools which demonstrate necessary pre-conditions to be considered for funding participation, as well as complementarity with relevant program-based initiatives supported by the Government, World Bank, and DPs.

70. Service delivery and capacity strengthening at district, primary school, and community level component activities were chosen in light of SUN knowledge and existing Uganda systems and practices. Interventions were those most promising to bring about: increased smallholder and household awareness; adoption and replication of agricultural technologies which result in enhanced diet diversity for women and young children; improved practical nutrition competency of primary school students and PGs; and adoption of nutrition- and health-related practices which are critical to improving nutrition outcomes of children 0-23 months and females of reproductive age. Recognizing that public sector and community leadership, technical knowledge and skills, coupled with well performing fiduciary management, reporting and monitoring systems are requisites for this new and complex initiative, several measures are planned and embedded in the project components. These include sensitization events, substantial training and capacity support mechanisms, investments in activity, procurement and financial reporting mechanisms.

71. To focus the project on nutrition knowledge and behavior, goods procurement is centered on agricultural inputs for scaling up existing nutritious crops and introduction of new biofortified varieties; nutrition instructional and demonstration materials to be used by primary schools; micronutrient supplementation, deworming, and materials needed for growth monitoring and promotion of children 0-23 months of age; additional transportation and information equipment needed for reaching the target beneficiaries and oversight of project activities; and incremental

operating costs. Given the limited resources, capacity implications, and project behavioral change objectives, the project does not include primary school feeding or infrastructure financing. To allow for refinement of project processes and interventions, the initial phase will involve a limited number of districts (5) in the five regions with greatest nutritional deficits, with a second phase which will ramp up the total number of districts to a maximum of 20 in the second project year, depending on experience with the initial districts and what has performed well, and cost implications.

C. Financial Management

72. A Financial Management (FM) assessment was conducted at MAAIF, selected districts, and selected schools that will be implementing the project. The other implementing ministries (MOES and MOH) will be accessing project funds from MAAIF.

73. The objective of the completed FM assessment was to determine whether the implementing entities have acceptable financial management arrangements in place that satisfy the World Bank's Operation Policy/Bank Procedures (OP/BP) 10.00. These arrangements would ensure that the implementing entities: (i) use project funds only for the intended purposes in an efficient and economical way; (ii) prepare accurate and reliable accounts as well as timely periodic financial reports; (iii) safeguard assets of the project; and (iv) have acceptable auditing arrangements. The FM assessment was carried out in accordance with the Financial Management Manual issued by the Financial Management Sector Board on March 1, 2010.

74. The accounting function will be managed as documented in The Public Finance and Accountability Act, 2003, Treasury Accounting Instructions 2003, Local Government Financial and Accounting Manual 2007, Local Government (Financial and Accounting) Regulations 2007 and the provisions of the PIM that will include requirements specific to the Bank financed projects. The Ministry Principal Accountant will be responsible for the financial management of the project. The Ministry will recruit an Accountant under the PCU to support the Ministry accounting staff assigned to the project. Districts without a Chief Finance Officer will have the position filled before the Ministry releases funds for project activities. The project will be on the Integrated Financial Management System (IFMS) at the Ministry and districts where IFMS has been rolled out while the other districts will be on a manual system. The districts, schools and communities involved in the project will undergo financial management training within six months after the project becomes effective in order to enhance their capacity under the project.

75. MAAIF will open a Designated Account denominated in US dollars in the Bank of Uganda (BoU) to which disbursements from the Grant will be deposited. Payments in US\$ will be made from this account. MAAIF will also open a Project Account denominated in local currency in the BoU into which transfers from the Designated Account (for payment of transactions in local currency) will be deposited. The districts will also open project specific bank accounts denominated in local currency in commercial banks acceptable to the Bank into which transfers from MAAIF will be made for project activities. The primary schools will also open project specific bank accounts into which districts will transfer their respective project funds. The signatories for the project will be done in accordance The Treasury Accounting

Instructions 2003. Community groups will also open project bank accounts at sub county level through which the Disbursements to LFs will be made.

76. The GoU is rolling out IFMS and implementing the Treasury Single Account (TSA). The proposed banking arrangements above will be reviewed as the reforms are extended.

77. MAAIF will be using the report-based disbursement method; (i) MAAIF will prepare a six monthly cash flow forecasts for project needs based on the work plan and submit the Withdrawal Applications and cash forecasts together with the cash request to the Bank after the effectiveness of the project. Subsequent withdrawal applications should be submitted quarterly with Interim Financial Reports (IFRs) within 45 days after the end of the quarter accompanied by a cash forecast for the next six months. The quarterly periods follow the calendar year quarters hence IFRs should be prepared as of end of March, June, September and December. (ii) IDA will make an advance disbursement from the proceeds of the Grant based on the cash flow forecast by depositing into a Recipient-operated Designated Account held at Bank of Uganda denominated in US Dollars. (iii) Funds can be paid from the designated account or transferred to the project account denominated in Uganda Shillings to make payments in this currency.

78. The MAAIF Internal Auditor in collaboration with the district internal auditors will be required to conduct semi-annual internal audit reviews on the project and submitting the report to the Bank within 45 days after the end of each semester. The resources for the reviews by MAAIF and district internal auditors will be provided for under the project. The Head of internal audit at districts that are vacant should be filled within six months after the project becomes effective.

79. The Auditor General is primarily responsible for auditing of all government projects. Usually, the audit may be subcontracted to a firm of private auditors, with the final report being issued by the Auditor General. The private firms to be sub-contracted should be acceptable to the Bank. In case the audit is subcontracted to a firm of private auditors, the Grant may be used to pay the cost of the audit. The audits are done in accordance with International Standards on Auditing. The appropriate terms of reference for the external auditor have been agreed between the Bank and MAAIF. MAAIF will submit the project Audit Report together with the Management Letter to the Bank within six months after the end of each financial year.

D. Procurement

80. The procurement process for the proposed project would be carried out in accordance with the World Bank's Guidelines on Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers' dated January 2011 (revised July 2014) and the 'Guidelines Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, dated January 2011 (revised July 2014), and the 'Guidelines On Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants' dated October 15, 2006 and as revised, and the provisions stipulated in the Grant Agreement. Procurement shall be done at the National Level, Local Government and Community levels. At the national level, procurement shall be conducted by the MAAIF on behalf of the other agencies MOES and MOH, and this procurement will be limited to consultants to support project implementation, vehicles, office furniture and communication materials. The National Medical Stores shall also procure and

deliver nutrition commodities (micronutrient supplements and deworming tablets) and equipment, which are to be used at the community level.

81. Primary School procurement will follow community procurement arrangements and shall be conducted by the School Nutrition Committee. Similarly the procurement by LFs shall follow the same community procurement arrangements, with all LFs in a sub-county constituting a single community procurement committee to be responsible for procurement on their behalf. The main procurements at this level will be farm tools, inputs for locally available crops as well as technologies for nutrient rich crops specifically, orange-flesh sweet potatoes, iron rich beans and protein rich maize. At District level procurement shall be for consultants to support mobilization of communities and supplementing the existing agricultural extension services.

82. The key risks are: i) the need to strengthen procurement capacity by technical and procurement staff in World Bank procedures; ii) weak inter-ministerial coordination, which exacerbates some decisions and procurement actions at national level; iii) inadequate procurement review and oversight; and iv) elite capture at the community level. Mitigation measures include: i) training of project implementing staff at needed levels in procurement and contract administration; ii) hiring a procurement specialist at MAAIF to coordinate procurement as well as guide and oversee community procurement; iii) regular internal audits of procurement processing and contract administration; and iv) District level project launch workshops and regular skills workshops for those with project responsibilities and dissemination of the community procurement guidance materials as outlined in the PIM and supporting materials.

E. Social and Environmental (Including Safeguards)

83. The proposed project has multiple positive impacts and benefits to the targeted vulnerable populations of pregnant and lactating women and children under 2 years of age as well as primary school children, parents groups and farmers. These elements include improved nutrition and school attendance of children, hygiene, soil and water conservation measures in the rural and peri-urban areas which have high stunting rates. All community members in the catchment areas of each beneficiary school will have an equal opportunity to participate in the school based demonstration project activities. The design of this initiative has been and continues to be as inclusive to the extent possible based on the consultative and participatory process for the Agriculture Sector Development Strategy and Investment Plan from which this project draws its nutrition sensitive agricultural activities and target groups that includes women and children. Similarly, several priority gender issues related to the improvement and diversification of household food production of smallholder farmers, an area controlled by women, are proposed through increased access to agricultural inputs, extension services and promotion of labor saving technologies as identified by the consultative process. The project will generate gender disaggregated data to the extent feasible to provide for the monitoring of the results indicators.

84. The salient physical project activities relevant to safeguard analysis apply to Components 1, which involve establishment and operation of demonstration gardens both in selected progressive farmer homes and at primary schools. However, though these demonstration gardens are expected to be one half-acre per selected school or homestead, they may involve use of fertilizers and pesticides which may generate some environmental, health, safety and social

issues. These impacts are expected to be minimal and not adverse, site specific and readily manageable. Schools that will be selected to host the demonstration gardens shall be chosen after confirming availability of at least one half acre of available (no need for land acquisition) and arable land. The respective District Agricultural Extension services shall be rendered to the schools and selected farmers to provide guidance for the management of the demonstration gardens. Therefore, two safeguard policies OP 4.01 Environmental Assessment and OP 4.09 Pest Management have been triggered and the project was assigned EA category B– Partial Environmental Assessment.

85. Since the Uganda Multisectoral Food Security and Nutrition Project is closely linked with the proposed Bank-financed ACDP (P145037) in that both projects will be implemented in the same Cluster Districts, Environmental and Social Management Framework (ESMF) for ACDP was adapted and revised. 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. In addition, specific guidance on the handling, use of pesticides and disposal of empty pesticide containers will be included in the Project Implementation Manual (PIM) for the Multisectoral Food Security and Nutrition Project. Together with the ESMF, these guidelines will guide the preparation of site specific PMPs during the implementation of OP 4.01, and will also address social aspects related to the inclusion of the vulnerable groups of people in the project activities. Through the community based participatory processes the project will ensure inclusion of all target groups. The ESMF has been disclosed in-country and at the Infoshop on November 19, 2014.

86. The implementing agencies that include MAAIF, MOH and MoES have no Environmental and Social Development personnel to handle environmental and social aspects. As the Project Responsible Agency, MAAIF will recruit these personnel within six months of effectiveness, and they will be expected to handle environmental and social aspects of the Multisectoral Food Security and Nutrition Project. The respective District Environment Officers and Community Development Officers will support the project activities to address both environmental and inclusion related concerns at the Local Governments level.

Annex 1: Results Framework and Monitoring
Uganda Multisectoral Food Security and Nutrition Project

Uganda: Multisectoral Food Security and Nutrition Project								
Project Development Objective (PDO): The PDO is to increase production and consumption of micronutrient-rich foods and utilization of community-based nutrition services in smallholder households in project areas.								
PDO Level Results Indicators	Baseline	Cumulative Target Values					Frequency	Data Source/ Method
		YR 1	YR 2	YR 3	YR 4	YR 5		
1. Net changes in percentage of households reporting year-round production of at least three micronutrient rich crops in project areas	TBD ⁸					20% increase from baseline	Annually	Participatory monitoring and line ministry reports; Baseline, midline, endline surveys
2. Net change in percentage of children aged 6-23 months in households with minimum dietary diversity	TBD ⁸					10% increase from baseline	Annually	Participatory monitoring and line ministry reports; Baseline, midline, endline surveys
3. Net change in percentage of women participating in community-based nutrition activities in project areas	TBD ⁸					50% Increase from baseline	Annually	Participatory monitoring and line ministry reports; Baseline, midline, endline surveys
INTERMEDIATE RESULTS								
IR1. Number of parent groups (PGs) established	0 ⁹					3000	Annually	Participatory monitoring and MAAIF reports

⁸ Baseline numbers and corresponding targets will be set following baseline survey within first year of project.

⁹ Will be confirmed following the baseline survey

IR2. Number of women trained in nutrition-sensitive agriculture through PGs in project areas	0 ⁹					27000	Annually	Participatory monitoring and MAAIF reports
IR3. Number of primary schools offering a package of nutrition demonstration activities in project areas	0 ⁹					1500	Annually	Participatory monitoring and MOES reports
IR4. Percentage increase in the quantity of seed/planting materials of selected micronutrient rich crops multiplied or produced by lead farmers in project areas	0 ⁹					Increase by 15% from baseline	Annually	Participatory monitoring and MOES reports
IR5. Percentage increase in farmers accessing multiplied or produced micronutrient rich seed/planting materials in project areas	0 ⁹					Increase by 10% from baseline	Annually	Participatory monitoring and MOES reports
IR 5. Number of people receiving improved nutrition services (disaggregated by gender and age) in project areas	0 ⁹					600000	Annually	MOH reports
IR6. Number of primary school children receiving deworming tablets through primary schools in project areas	0 ⁹					675000	Annually	Participatory monitoring and MOES reports
IR 7. Number of girls (primary 4 and above) receiving weekly iron folic acid supplements through primary schools in project areas	0 ⁹					93750	Annually	MOES reports
IR 8. Number of under-2 children reached for GMP in project areas	0 ⁹					187500	Annually	Participatory monitoring and MOH reports
IR 9. Number of meetings of the Project Inter-ministerial Implementation Committee	0					60	Six-monthly	Project reports and meeting minutes

Annex 2: Detailed Project Description

Uganda Multisectoral Food Security and Nutrition Project

1. The project approach is to plan and coordinate nutrition actions across multiple sectors (agriculture, health, and education), but to implement interventions within the existing systems, budgets, and accountability structures of each sector. Interventions will 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). To generate demand for these services, the project will support 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 will support development of institutional capacities of the relevant line ministries and local government coordination, supervision and monitoring. At a national level, the project will support management, monitoring and evaluation, knowledge generation and dissemination, and policy advocacy. These activities will be structured under three components and implemented over five years.

COMPONENT 1. DELIVERY OF MULTI-SECTORAL NUTRITION SERVICES AT PRIMARY SCHOOL AND COMMUNITY LEVELS (US\$17.80 million)

2. This component will improve service delivery of nutrition interventions through agriculture, health, and education platforms at community level and in selected primary schools. The project will improve nutrition by promoting year-round consumption of micronutrient-rich foods by increasing community knowledge about how to produce micronutrient-rich foods, awareness about nutrition, and how to prepare and why to consume these foods. The project will also promote other nutrition-supportive behaviors, particularly targeting the first 1000 days (i.e. pregnant and lactating women and children 0-23 months). These interventions will be delivered through appropriate sector-specific district and sub-county structures under districts, with technical support from MAAIF, MOES, and MOH.

3. Primary schools are uniquely placed to act as demonstration centers for social change and learning, not only for students but for parents and the broader community. In addition, schools are well positioned to further the objectives of the 2003 Uganda Food and Nutrition Policy; especially promotion of good nutrition, provision of nutrition education and training, and provision of a platform for effective multi-sectoral coordination and advocacy for food and nutrition. The 2011-2016 UNAP underscores key strategies of achieving sectoral nutrition objectives notable of which are: adoption of intra and inter-sectoral linkages for nutrition advocacy and programming; as well as equipping local institutions to provide leadership and capacity for nutrition programming which justify the use of schools as entry points in this project. With the high prevalence of chronic malnutrition in Uganda, adoption of multi-sectoral approaches is essential and provides opportunities for convergence of services at key service delivery points like schools.

4. Primary schools are mandated to establish school gardens as “classrooms” for demonstration purposes and to deliver nutrition curricula, although these mandates are often neglected. Schools will serve as an entry point to strengthen linkages between the community and primary school teachers, agricultural extension services, and HCII and VHTs. These supply-

side activities will be complemented by interventions to increase demand and utilization of nutrition services. Specific results expected from this component include: (i) Use of primary schools as a platform for community-based nutrition service delivery, specifically through improved linkages between schools, communities, extension agents (e.g., agriculture and health) and VHTs, as well as teachers. This will include agreed and defined protocols and guidelines, to be outlined in the Project Implementation Manual (PIM); (ii) Technology and innovation transfers to promote year round production of micronutrient-rich (including biofortified) crops; (iii) Transfer of practical nutrition, health, and hygiene knowledge to students and communities; (iv) Improved access of school children to health promoting services including deworming and age appropriate IFA supplements; and (v) Strengthened outreach to communities, particularly parents of under-2 children, to deliver behavior change communication to promote nutrient-rich diets, improved feeding practices, and health and hygiene messages.

5. Specific activities are detailed in the following sub-components, which are organized by the lead responsible sector, although the responsibilities will frequently overlap:

Sub-component 1.1 Community sensitization and establishment/strengthening of community-based institutions (Lead entity: Districts) (US\$ 1.50 million)

6. This sub-component will support the critical element of community sensitization and mobilization on nutrition, including the use of radio and other communications and promotion strategies. This will include the formation of PGs, virtually all of whom will be smallholder farming families, and the selection of LFs from each community who will play a lead role in demonstration, replication, and the adoption of improved agricultural practices. Financing under this sub-component will include:

a) Community sensitization and mobilization

7. Trained community facilitators will sensitize communities to project objectives and activities. PGs will be selected from each community through a transparent process, to be detailed in the PIM. Each of these PGs will comprise an estimated 30 persons that will be responsible for the primary school-based demonstration gardens. Each PG will select a chairperson who will coordinate mobilization and participation of the PGs in the school demonstration plots and other project nutrition activities. Two LFs from each primary school catchment area will be chosen by the community taking into consideration their agricultural skills, available land, and interest in sharing improved technologies. Where possible, the PGs will build upon smallholder farmers groups already established through other programs, but the project will track participation of females in PGs with a target of 60 percent, because of women's important roles in cultivation of household gardens and in infant and child care and feeding practices.

8. Building capacity of service providers in nutrition is an essential component of the project (details included under Component 2 below). Where Districts do not have the necessary human resources to deliver the project activities and are not able to recruit necessary staff in a timely manner, the project will provide the option for Districts to identify and access local NGOs/CBOs as facilitators for community mobilization, in coordination with Community Development Assistants at sub-county level. The PIM will outline the expected deliverables for

this sub-component in terms of expected outputs (i.e. number of communities sensitized, number of LFs mobilized, and number of PGs established).

Sub-component 1.2 Enhancing nutrition services delivered through primary schools, parent groups, and lead farmers (Lead sector: Education) (US\$ 13.00 million)

9. This sub-component will support the establishment and/or strengthening of school-based nutrition activities, some of which will be implemented by PGs established under sub-component 1.1, while others will be implemented by the teachers and school leadership. Two-stage selection criteria for schools will be overseen by the DNCC, facilitated by Community Development Assistants and/or selected community mobilization NGOs/CSOs. Stage I will involve identification of schools eligible to participate in the project. The eligibility criteria will include: (a) Rural or peri-urban; (b) Government aided schools implementing the Universal Primary Education (UPE) program; (c) presence of head teacher and agriculture teacher; (d) unqualified school audit for the most recent financial audit. The output of this process will be a list of schools eligible to participate in the project in each district. At Stage II, the eligible schools will complete an application form, which will include the following criteria, selected to identify school-level ownership and readiness for implementation. The criteria for school applications include: (a) Presence of a functional School Management Committee (SMC); (b) An existing, or commitment to establish, a functional sub-committee of the SMC, a "School Nutrition Committee", which will include representation of the school administration; (c) existence of at least one half acre of arable and conflict-free land with available water; (d) Organized PG willing to participate in school level nutrition programs, including time and labor commitments; and (e) establishment of a project bank account.

10. The activities under this sub-component will be largely facilitated by the School Nutrition Committee (to consist of a limited number of participants, up to six members, per the Education Action and following lessons from similar projects), consisting of at least the Head Teacher, and/or agriculture/science Teacher, PG chairperson, representative LF, and representative VHT. The School Nutrition Committee will develop a Primary School Nutrition Action Plan (PSNAP), proposed budget, and work plans, implementation and reporting. These will be coordinated with the activities of the LFs and the PGs by the PG chairperson and the representative LF. The proposed PSNAP will be reviewed and adopted by the SMC before submission to the district for approval. Existing primary school structures will be used for financial arrangements (described in more detail in institutional arrangements and will be clearly defined in the PIM).

a) Establishing/strengthening school demonstration gardens.

11. The school demonstration gardens will be the "garden classrooms" and promotional platforms for knowledge and technologies for micronutrient-rich food production. The demonstration gardens are expected to be at least half an acre¹⁰, and will be managed by the LFs with support from the PGs. The agriculture extension agent will provide technical support for this process in line with the priorities identified in UNAP (role described below). The School Nutrition Committee will facilitate the purchasing and use of necessary inputs following the approval of the PSNAP and associated budget. Eligible expenses for schools will include rainwater harvesting; cooking pots and utensils; gardening tools (e.g., Sprayer Pump, Hoe, Rake, Watering can, Panga, Slasher, Wheelbarrow); locally available and non-locally available

¹⁰Following local experiences of SNV's similar school garden promotion project.

micronutrient-rich crop seeds and planting materials; fencing materials; fertilizer; and herbicide/pesticides. The School Nutrition Committee will be able to select from a menu of nutrition education demonstrations, and the package will support local purchase of necessary materials. School gardens will receive two further years of successively reduced support: Year 2 packages will include locally available planting materials as well as not locally available planting materials and seeds for micronutrient rich crops, particularly biofortified crops such as OFSP and iron-rich beans; fertilizer and herbicide/pesticides; and support for nutrition education demonstrations. Year 3 packages will include only support for nutrition education demonstrations. The packages are estimated to cost up to US\$10,000 over 3 years.

b) School-based nutrition services

12. The Head Teacher, the agriculture/science teacher, and other staff will build on national guidelines that have been developed for skills-based agricultural, health, and nutrition education. Nutrition education will be provided to school children at school using materials developed and distributed through this project. In line with the UNAP focus, special focus will be put on promotion of nutritious diets, use of health and nutrition services, nutritious food preparation and food safety practices; promotion of safe water and sanitation, and improved hygiene practices such as hand-washing; six-monthly deworming tablets for all students in participating primary schools; and weekly IFA supplements for girls in primary four and older (to be procured by the MOH under subcomponent 1.4).

13. Building upon national experiences with Child Health Days, through which teachers have been trained to deliver health interventions such as deworming tablets, the project will strengthen linkages between primary schools and HCII to enable designated and trained teachers to deliver weekly IFA supplements to girls aged primary four and above, and six-monthly deworming to all primary school children. The project will finance the procurement of these inputs through the existing MOH procurement system (below, under sub-component 1.4), as well as support associated operating costs and training. Designated teachers will maintain stocks of IFA for weekly supplementation of targeted girl students, with supervision by the HCII in-charge.

c) Promoting community replication and adoption of year-round nutrient-rich food production by LFs

14. The LFs will promote community replication and adoption of the improved agricultural technologies and practices demonstrated in the school gardens. A key focus of the LFs will be to improve community access to improved seeds and vines (such as community-based multiplication and distribution mechanisms). The project will support provision of locally available improved seeds, tools (e.g. Sprayer Pump, Hoe, Rake, Watering can, Panga, Slasher), and fertilizers to the LFs in the first year of the project with training to multiply planting materials to other members of the PG. In the second year, LFs will receive non-locally available micronutrient-rich fruit and vegetable seeds and planting materials. Appropriate varieties will be selected following MAAIF and District consultations and will consider local food preferences and agro-ecological zone and growing conditions. Communications and promotion strategies are expected to generate demand for these previously unavailable improved planting materials. LFs will be trained to produce and sell nutritious crop planting materials to surrounding households, generating marginal profits expected to provide additional incentive for LF participation. The PGs and other community members will then purchase plant inputs from the LF. The LFs will

also establish model gardens to practice the new techniques demonstrated at the school garden and support the PGs to implement the improved practices in their own homestead gardens. The LF packages are estimated to cost up to US\$1,000 over two years of support.

Sub-component 1.3 Agriculture support for school-based nutrition services (Lead sector: Agriculture) (US\$0.93 million)

15. To build the use of the primary school as a platform for knowledge transfer to the broader community, this sub-component will support strengthened linkages between agriculture crop extension agents and participating primary school demonstration gardens. The agriculture crop extension agents will provide technical support for demonstrations of micronutrient-rich food production, including supporting the development of the PSNAP, associated decisions about procurement, and delivery of a pre-developed curriculum based on the UNAP priorities¹¹. Curricula are already available from previous experiences with school gardens¹² and existing projects promoting home production of nutrient-rich foods. Following initial district consultations, MAAIF will identify district-specific selection of 3-4 locally available nutrient-rich seed varieties to be promoted through the project. This builds upon the findings from existing projects that homestead garden promotions should have simple and consistent messaging regarding dietary diversification¹³. Considerations for seed variety selection will include local availability, local food preferences, and agro-ecological zone and growing conditions. In addition to these locally available seed varieties, MAAIF will follow a similar process to identify 1-2 context-appropriate improved nutrient-rich seeds/vines for promotion by this project (e.g. orange fleshed sweet potato, iron-rich beans, protein-rich maize). The primary criteria for these improved seeds/vines will be their availability and appropriateness for the district context. Districts (or, where appropriate, NGOs) will be responsible for identifying local sources for the identified improved seeds/vines, procurement, and distribution to LFs.

Sub-Component 1.4 Strengthened nutrition services through Village Health Teams (VHTs) and Health Centre Level II (HCII) (Lead sector: Health) (US\$2.37 million)

16. The VHTs (formally designated Health Centre Level I (HCI)), were established by MOH to mobilize communities for health and nutrition programs and strengthen delivery of health and nutrition services at household level. This sub-component will support community-based nutrition services in all selected districts under this mandate. VHT nutrition activities will be integrated into the Health Sub-district annual workplans (developed from the Health Centre) and supervised by the HCII In-Charge, and will include the following:

a) Focused nutrition interventions to target groups

17. The VHTs will promote nutrition interventions focused on the priority “first 1000 days” (children under 2 and pregnant/lactating women) including behavior change communication, monthly community-based growth monitoring and promotion (GMP) sessions for children under 23 months (under supervision of the HCII In-Charge), promotion of age-appropriate optimal infant and young child feeding practices, and improved care-seeking behaviors. The VHTs will

¹¹ To include seed selection, use of improved seeds, and seed storage; improved water and soil management; use of organic and inorganic fertilizer and pesticides; year-round production of nutrient-rich crops; labor saving technologies and innovations; and post-harvest handling/value addition and storage

¹² SNV, School Gardens; FAO

¹³ USAID Community Connector (implemented by FHI 360), Robert Mwadime,

promote key micronutrients: IFA supplements during pregnancy, deworming during pregnancy and for children 6-59 months, and therapeutic zinc supplements as part of diarrhea management for children 6-59 months. The project will finance procurement and operations/logistics to meet demand that exceeds existing MOH supply of these commodities in project areas (relevant capacity building is covered under Component 2).

b) School-based nutrition services

18. In addition to the community-based nutrition activities that will be strengthened across participating districts, this project will support three aspects of school-based health/nutrition services in all selected primary schools: (i) Increased linkages between primary schools and VHTs. VHTs, who have the responsibility for coordinating community-level health interventions¹⁴, will link with the School Nutrition Committee for nutrition education for PGs, which will be delivered by the VHTs at monthly community outreach sessions. These will follow a pre-developed curriculum to facilitate behavior change in use of health and nutrition services, household consumption of nutrient-rich foods, maternal nutrition, sanitation and hygiene, food safety, linkages to relevant maternal and child health services, and cooking demonstrations to promote micronutrient-rich foods (training for VHTs will be financed under Component 2). Nutrition education activities requiring resource inputs will be included in the PSNAP so that necessary inputs can be procured by the School Nutrition Committee.

COMPONENT 2 STRENGTHENING CAPACITY TO DELIVER NUTRITION INTERVENTIONS (US\$5.20 Million)

19. To improve capacity of sectoral institutions to deliver nutrition interventions relevant to this project, this component will complement and scale-up ongoing initiatives under UNAP, including technical assistance, training, coordination, and supportive supervision, and materials to build capacity to deliver multisectoral nutrition services to communities.

20. The strengthening of district capacity in nutrition is essential, as the district is the basic unit of local government. It is responsible for major functions and services previously carried out by the central government (The footnote below provides more information on the structure and responsibilities at sub-national levels¹⁵). The District Nutrition Coordination Committee (DNCC), which is the basis for multisectoral coordination and accountability. The DNCC falls under the District Council and its Planning and Technical Committees. The DNCC then provides guidance and oversight, feeding into the Sub-county planning and technical mechanisms and Sub-county nutrition coordination committee (mechanisms for lower level

¹⁴ Ministry of Health. Village Health Team Strategy and Operational Guidelines. March 2010.

¹⁵ The Local Governments Act, as amended, is the basis for the devolution policies for Uganda. A central feature of Uganda's decentralization is that local councils are responsible for the delivery of the majority of public functions and services. District councils are responsible for functions and services including but not limited to: primary, secondary, trade, special and technical education; hospitals other than hospitals providing referral and medical training; health centers, dispensaries and aid posts; the construction and maintenance of feeder roads; the provision and maintenance of water supplies; agricultural extension services, land administration and surveying; and community development. Local government and administrative units are collectively known as local councils. Rural Local Councils are composed of a District Council, County Council, Sub-County Council, Parish Council, and Village Council. Administrative unit councils are distinct from local government and consist of a County Council, Parish, Council and Village Council.

planning and implementation). This project will support planning, review meetings, and monitoring and evaluation for the DNCC and the Sub-county nutrition coordinating committee, and for relevant technical staff at national, district, and sub-county levels.

21. *Training to equip extension agents and school- and community-level workers from key sectors (agriculture, education, and health) with necessary competencies to deliver this project.* The project will build upon the considerable training materials already developed to support nutrition in all three sectors. Key resources that have been identified include: MAAIF training and education materials supporting micronutrient-rich crops (e.g. OFSP); the MOH's VHT nutrition module; MOH community mobilization tools and guidelines for hygiene and sanitation developed under the Water and Sanitation Program (WSP); materials and guidelines for supporting school gardens from both SNV and FAO; and MOH/USAID/UNICEF resources from the Community Connector project. Support will include consultancy services as needed to develop additional training materials for each sector (and for each area); sector workshops to finalize training and support materials; and printing and distribution of necessary support materials for each sector.

22. A third party provider will be contracted for development of training materials and training of trainers, which will be used as a resource for training and capacity building. The specifications for the capacity building will be detailed in the PIM. Key stakeholders will be sensitized to the overall project and objectives for relevant stakeholders. At district level this will include the CAO and DNCC members (relevant sector heads and nutrition focal persons including District Education Officer, District Health Officer, and Crop Production Officer). At sub-county level this will include the chiefs and community development officers. Secondly, training for sector-specific technical persons from participating sub-county levels and lower. This will include agriculture crop extension (MAAIF), head teachers and agriculture teachers (MOES), and HCIII and HCII (to include the designated person in charge of VHTs and the designated environment health worker), and VHTs. Supervision and support of the training process will be provided by the central ministries (MAAIF, MOES, and MOH) as required.

23. Refresher training will be conducted from district level (relevant sector heads and nutrition focal points) cascading down to sub-county level (including chiefs and community development officers, and technical service providers). Within health, refresher training will cascade from HCIII and HCII (to include the person in charge of VHTs and the designated environment health worker), then to the VHTs within each HCII catchment.

24. *Supportive supervision and monitoring of nutrition activities at district level and below.* The project will follow existing structures for supervision and monitoring in each sector department and project supervision reports will be provided to the CAO via the DNCC and will be sent to MAAIF for consolidation. As these sectors may not include community nutrition related indicators, the PIM will develop an M&E plan and specify nutrition monitoring indicators to be incorporated into routine supervision.

COMPONENT 3. PROJECT MANAGEMENT, MONITORING, EVALUATION AND KNOWLEDGE GENERATION (US\$4.64 million)

25. This component will include 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. Under this component goods, services, and specified incremental operating costs (for all components) will be financed with project resources. Overall project oversight and strategic planning will be the responsibility of the Inter-Ministerial Project Steering Committee. Coordination and management of the project will be the responsibility of the Inter-Ministerial Project Implementation Committee. Government systems will be strengthened to meet project needs, as necessary.

26. Monitoring of district level and below activities that fall under each sector will be reported by that sector. Sectors may decide to simultaneously provide information through sectoral channels and to the district. Information must be provided to the district which will compile, consolidate and produce reports by the Project Nutrition Focal point, shared with the DNCC (under supervision of the CAO) and reported to the Inter-ministerial Project Coordination Unit in MAAIF. This component will finance the following broad categories of activities:

Sub-component 3.1 Project management and coordination

27. This sub-component will support critical project-related implementation capacity, including support for the designated project coordinator and key areas such as fiduciary and M&E specialists, for the Project Coordination Unit (PCU). To the extent there is reliance on central ministries and districts to perform tasks which require new activities not currently readily handled by their procurement and financial management systems including management information systems, as well as auditing, and reporting, they will be assisted to respond to their project mandated requirements. Districts and their sub-entities will also be supported to strengthen their fiduciary management and service delivery contracting capabilities, including staff training, as well as supplemental operational funds to carry out explicit project-related mandates. This support is not expected to be a major undertaking as project activities all fall within existing Government mandates and district responsibilities.

Sub-component 3.2 Project monitoring, evaluation, and knowledge generation:

28. This sub-component shall ensure that the three sectors are able to actively engage in strategic planning of project activities and in making any adjustments to assure cross-sectoral project execution success. This will involve regular review under the auspices of the Inter-ministerial Project Implementation Committee of lessons learned in the course of project implementation, shared information exchanges, workshops, and training programs. The Inter-ministerial Project Steering Committee will be comprised of Permanent Secretaries and chaired by the Head of Public Service/Secretary to the Cabinet (or a designee), will review project progress reports, provide project oversight and align their semi-annual meetings to coincide with World Bank supervision missions, to the degree feasible.

29. Monitoring of project results will be based on sectoral activity and fiduciary data under Components 1 and 2, reported through normal government systems, consolidated in quarterly reports produced by the Project Coordination Unit described above, which is headed by a project

coordinator (funded by the project) as well as an M&E specialist, accountant, and procurement specialist, housed at MAAIF. The consolidated project system will monitor and track progress and effectiveness in implementing the project (inputs, activities, processes, outputs, intermediate outcomes, and Project Development Objective (PDO) indicators). Intermediate indicators from all three sectors were identified to monitor progress in the chain of results expected to contribute to the PDO, including community mobilization, nutrition-relevant community demonstrations, community multiplication of promoted crops, and smallholder use of micronutrient-rich planting materials. The project will also monitor progress in utilization of nutrition services at primary schools and in communities. A detailed baseline study will be conducted within three months of starting the project and findings will be used to set the baseline values for the PDO indicators, strengthen the results chain, and revise implementation plans if needed.

30. A rigorous impact evaluation will be conducted to evaluate the extent to which the project influences year-round micronutrient-rich crop production and consumption, and dietary behaviors and nutritional status of targeted populations. Midline and endline surveys will be conducted and the final results of the project will be assessed through an impact evaluation which will be carried out supported by a separate GAFSP grant (US\$800,000 supplemented with Project financing) specifically for this purpose. The findings from the evaluation will inform the planned scale-up of the project in other districts in Uganda and also contribute to the evidence base on the interactions between agriculture, nutrition, and stunting reduction. Taking advantage of strong local capacity in public health evaluation, Makerere University will be engaged in conducting the impact evaluation with support of other academic institutions, the GoU and the World Bank. The impact evaluation plan has already been developed jointly by Makerere University and Partnership for Child Development (based in Imperial College, London).

31. The project will also support priority areas of policy analysis and operational research. The Office of the Prime Minister (OPM) will receive input from the Inter-ministerial Project Implementation Committee, sectors, and districts. Proposed research will be evaluated using criteria which prioritize those topics that produce findings that address how activities can be improved to achieve project objectives and understand results. Partnerships will be explored with local universities to engage local expertise and build practical research capacity

Annex 3: Implementation Arrangements
Uganda Multisectoral Food Security and Nutrition Project

Project Institutional and Implementation Arrangements

1. Overview

A. National

1. At national level, the Office of the Prime Minister (OPM) is responsible for Uganda Nutrition Action Plan (UNAP) oversight, coordination and strategic and policy guidance, including research priorities. OPM chairs the Uganda Food and Nutrition Council (“Council”) and serves as the Council’s secretariat, including the UNAP sub-body, the Uganda Nutrition Multisectoral Technical Committee (“Technical Committee”). Project activities are an integral and contribute to the UNAP effort and regularly presented to the Council and in integrated into UNAP annual discussions. The Inter-ministerial Project Steering Committee, comprised of the three Permanent Secretaries and chaired by the Head of Public Service/Secretary to Cabinet (or designee) has responsibilities with regard to review of project progress reports, project oversight, and policy linkages. It will be supported by an Inter-ministerial Project Implementation Committee that will meet at least monthly to assure effective coordination for project implementation, the selection of additional Districts in year 2, and review District Nutrition Action Workplans/Budgets, and recommend for review and approval by the PS MAAIF, who will then consolidate project AWP/B for submission to MFPED. Each of the three sectoral implementing ministries at national level have explicit project responsibilities relating to policy, technical guidance and information, and provision of goods and services, and have a designated ministerial focal point. The Table below provides detail on project arrangements at national level, which will be further developed in the PIM.

Table 1: National Arrangements

Task	Principal Responsible Entity (ies)	When	Who
I. UNAP Support			
A. UNAP Strategic and Policy Guidance	Office of the Prime Minister (OPM), Uganda Food and Nutrition Council	Annually	MAAIF, MOES, and MOH Permanent Secretaries; World Bank and Development Partners
B. UNAP knowledge generation and dissemination	OPM, Uganda Food and Nutrition Council	Annually	UNAP Sectoral Ministries, World Bank and Development Partners
C. UNAP Technical guidance	Uganda Nutrition Multisectoral Technical Committee	Annually	MAAIF, MOES, MOH and other UNAP Ministry

			signatory technical experts
II. Project Support			
A. Project oversight	Inter-ministerial Project Steering Committee (chaired by Head of Public Service/Secretary to Cabinet (or a designee), Comprised of MAAIF, MOES, and MOH PS)	Semi-annually	MAAIF, MOES, MOH Permanent Secretaries, District CAOs, PCU
B. PIM dissemination and application	MAAIF Permanent Secretary and the Project Coordination Unit (PCU)	At Project effectiveness and revised during mid-term	Relevant offices of the MAAIF, MOH, MOES, and Participating Districts
C. Inter-ministerial implementation coordination; District selection approval of AWP/Bs; Phase 2 District Selection (Project year 2); District AWP/B	Inter-ministerial Project Implementation Committee	Meeting: At least monthly; Phase 2 District Selection (Project year 2); District AWP/B: annually/quarterly	PCU, MAAIF, MOES, MOH focal points and technical experts
D. Procurement	MAAIF PCU	At Project effectiveness, annually and as needed	Submissions by MAAIF, MOES, MOH, and Participating Districts
E. Disbursement	MAAIF PCU	Every three Months	Disbursement requests Participating Districts, consolidated by MAAIF for submission by MAAIF Permanent Secretary to the Accountant General
E. Reporting	MAAIF PCU	Monthly	Submissions from MOES, MOH, MAAIF and Participating Districts to PCU

B. District Level

2. At District level, the Chief Administrative Officer (CAO) and the District Directorates are responsible for virtually all activities within the jurisdiction. The District Nutrition Coordination Committee (DNCC), with the District Nutrition Coordinator (DNC) as principal focal point, will develop and oversee the District Nutrition Action Plan (DNAP) which is included in the five year rolling District Development Plan. Annual project workplans and budgets (AWP/B) for the District will be produced and will include Project activities to be undertaken by both the District Directorates and selected Primary Schools. To assure timely availability of funds, approximately six months estimated funding will be available in the District account for access by primary schools or District Directorates, as needed and justified. The agriculture, education and health Directorates will have Project Focal Points (PFPs) who will meet regularly with the DNC and provide activity and fiduciary reports. At the Primary School level a Primary School Nutrition Action Plan (PSNAP) will have been developed by the School Nutrition Committee a sub-committee of the SMC and submitted for approval to the DNCC. The PSNAP will be implemented by the primary school leadership, s PGs, and LFs.

3. At community level existing community groups will be made aware of and carry out, nutrition agricultural, health, and improved nutrition behavioral practices which are promoted by the project. Depending on the district and the community, these will be existing or newly established small farmer, PGs, health groups organized around village health teams, LFs, or otherwise.

Table 2: District, Primary School and Community Arrangements

Task	Principal Responsible Entities	When	Who
I. Project Planning			
DNAP to be included in the five year District Development Plan and incorporated into District AWP/Bs	DNCC	Before District approval for project participation	CAO, DNC, District Agriculture, Health, Education Directorate PFPs
PSNAP with AWP/B which is submitted to District for inclusion in its AWP/B	School Nutrition Committee	Year 1 (project Preparation) before District approval for project participation and annually thereafter to continue participation	Head Teacher, science/agricultural teacher, School Nutrition Committee, District agriculture, health and education technical experts
Action Plan reviews	CAO	Every 2 months during first year, then quarterly	DNCC, DNC
II. Project Implementation			
A. District			
Technical Review and	CAO	Monthly	DNCC, DNC and PFPs,

Administrative Support for the DNAP		coordination/decision meetings	
District Goods and Services Procurement	CAO	As needed	DNC and District procurement staff
District Financial Management (separate District Project bank account)	CAO	Quarterly disbursement submissions	DNC, District fiduciary staff (Chief Accounting Officer and Internal Auditor)
Project Reporting	CAO	Monthly	DNCC, DNC and PFPs (for CAO submission to MAAIF PCU)
B. Primary School			
PSNAP preparation, execution, an administrative support for the PSNAP	School Nutrition Committee	Monthly coordination/decision meetings	Head Teacher, School Nutrition Committee, consultant
Creation of separate Project Primary School Bank Account	SMC	As part of Primary School request for Project Participation	Head Teacher, School Management Committee
Demonstration Garden Planning	School Nutrition Committee	As part of Primary School request for Project Participation	Head teacher, agriculture/science teacher, School Management Committee, District agriculture and education technical experts, and/or consultants, as advisors
Demonstration Garden Operations	School Nutrition Committee	After Project participation approval	Community Leader, LFs, PGs
Enhanced nutrition student education	Head Teacher	Project effectiveness	Teachers, agriculture/science teacher, MOES District supervisors
Community (PGs) crop diversity and nutrition education	Head Teacher	Project effectiveness	Teachers, agriculture/science teacher, agriculture extension, health (HCII) and VHTs, District technical experts in health, education, and agriculture and/or consultants
Primary School Financial Management	Head Teacher, School Management	Quarterly submission based on AWP/B to be incorporated into	Head Teacher, School Management Committee, District Chief Accounting

including disbursement requests	Committee	District quarterly disbursements	Officer, District Internal Auditor, District PNC, and CAO
C. Community			
Community sensitization, mobilization and group formation		After Project effectiveness	District Community Development Officer or NGO contracted community facilitators, DNCC
LF Selection	PGs	After community approved selection	District community facilitators (and/or NGO consultants), PGs
Small farmer adoption of demonstration garden crops	MAAIF	One year after demonstration garden and LF multiplication	LFs, MAAIF agricultural specialists
Basic Nutrition/Health Services	MOH	After District Selection to Participate in Project	VHTs, HCII staff, District MOH staff

II. Project Administration Mechanisms

4. This section is organized by sectoral ministries. With respect to MAAIF as the lead entity, it addresses both overall project administrative responsibilities and sector administration. As such it is extensively detailed.

A. Agriculture

i) Project Administrative Responsibilities

5. MAAIF has two important functions for the project namely, overall responsibility for the project lies with the MAAIF and its Permanent Secretary, and it has implementation responsibility for the agricultural sector. Both of these functions will be detailed in the Project Implementation Manual (PIM) which will serve as the key referral document for all project activities.

(a) Overall Project Responsibility:

6. Day-to-day project-wide implementation will be under the aegis of a dedicated Project Coordination Unit (PCU) which reports to the MAAIF Permanent Secretary. The PCU will be housed in MAAIF, comprised of a Project Coordinator, Accountant, Procurement Specialist, and M&E Specialist (Technical support will be provided particularly for financial and procurement management, and monitoring and evaluation). Its role and responsibilities will be described in detail in the PIM. PCU establishment including terms of reference and staffing will be an Effectiveness Condition for the Project. Its key functions are to:

(i) Facilitate project implementation and linkages across sectors with respect to project planning, inter-sectoral dialogue, administration, financial and procurement management, flow of information and knowledge sharing, and monitoring and evaluation;

(ii) Disseminate, follow-up, and discuss application of the PIM operational guidelines and procedures with project stakeholders at national level;

(iii) Prepare quarterly disbursement requests based on sectoral and district submissions which reflect how prior funds were allocated and justification for new funds for the Permanent Secretary's review and approval, and forwarding a consolidated instruction to the Accountant General for disbursement from the project Designated Account; and

(iv) Serve as the support unit for national level coordination, organize and administer meetings of the national coordinating structures, as well as joint World Bank/Government project reviews. It will prepare and maintain the official project records, which will be accessible to participating ministries and the World Bank; and

(v) Liaise with other Government sectors and programs, and Development Partners to share Project progress and to benefit from others.

7. Funds will be transferred from the MAAIF project allocation directly to districts under the existing Local Government guidelines and structures. The district's Chief Accounting Officer (CAO) will oversee project procurement and financial accountability. The CAO will report progress to the PCU on a monthly basis.

(b) Agriculture Sector Responsibilities:

Sectoral implementation will be done at two levels:

8. At national level the relevant MAAIF Departments, Committees, Working Groups, and programs will be drawn on to provide technical and fiduciary support to implement and administer project activities. The existing MAAIF systems will be used for financial reporting and governance considerations that apply to the project, and environmental concerns.

9. At District level and below, in each district the Agricultural Directorate will appoint a lead member or members to the DNCC (and relevant sub-body implementation committees), and they will regularly participate in district execution of the District Nutrition Action Plan. Agriculture Directorate representation should consist of at least the subject specialist most pertinent to performing MAAIF responsibilities at Primary School, LF, and community levels.

10. With respect to agriculture service delivery, for the primary schools, sub-county agricultural program specialists will provide technical support to eligible primary schools in the preparation of their demonstration garden with respect to crop selection, planting inputs and technology, and supportive supervision. With respect to the LFs (chosen by the community), the sub-county program specialist will similarly provide technical inputs and supportive supervision. Pest management safeguard responsibilities will be at this level.

11. In each district the Agricultural Directorate will appoint a lead member or members to the DNCC (or implementation sub-committee), and they will regularly participate in district execution of the District Nutrition Action Plan. Agriculture Directorate representation should consist of at least the subject specialist most pertinent to performing MAAIF responsibilities at Primary School, LF, and community levels. Funds will be transferred from the MAAIF project allocation directly to districts under the existing Local Government guidelines and structures. The district's Chief Accounting Officer will oversee project procurement and financial accountability. The CAO will report progress to the PCU on a monthly basis.

12. With respect to agricultural capacity building, selected district and sub-county agricultural staff focal persons will be trained as part of the initial training delivered by the consultancy. Refresher training will be provided from district level (nutrition focal points) down to sub-county technical service providers. The nutrition focal point within the District Agriculture Directorate will be responsible for supportive supervision and monitoring of the lower level nutrition services covered under this project, which will be integrated into ongoing supervision and monitoring structures in the District Agriculture Directorate.

13. At national level, the MAAIF nutrition unit will provide approval of training modules and supervision and support of the initial training process delivered by the consultancy. The MAAIF nutrition unit will be responsible for collecting activity performance information and consolidating reporting related to key performance indicators.

B. Districts

14. The CAO is responsible for all activities and fund management undertaken in the district. The CAO has nine Directorates which include sectoral specialists, planners, monitoring specialists, inspectors, internal auditors, and sub-county units, all recipients of funds from a District Nutrition Project Account to its sub-recipients. Each district will have an approved District Nutrition Action Plan (DNAP), developed by the DNCC, chaired by the CAO and composed of the implementing sectors of agriculture, education, health and complementary sectors such as gender, community development, water and sanitation, key district fiduciary staff, and a designated staff person responsible for managing and coordinating fiduciary and reports of the DNAP, a District Nutrition Coordinator. The DNCC (or project implementation sub-committee) will meet regularly to review implementation progress, identify problems, and coordinate efforts. At the end of each month the district agriculture, education and health sector PFPs will provide the DNC with their activity and fiduciary reports, which will then be consolidated into a district monthly report, and submitted to MAAIF in line with the PIM.

C. Health

15. In each District the District Health Officer will appoint a lead member or members to the DNCC (and relevant sub-body implementation committees), and they will regularly participate in district execution of the District Nutrition Action Plan, which will consolidate and harmonize sector workplans for nutrition. Representation should consist of at least the specialist most pertinent to delivery of VHT services and the nutrition focal person.

16. For the health service delivery, for selected primary schools, a VHT representative will be part of each School Nutrition Committee and will coordinate the health activities that take place at each school, which will be included in the PSNAP. The primary responsibility of the VHTs regarding primary schools will be the provision of monthly nutrition education sessions for PGs and other community members. Any activities within these sessions requiring inputs (e.g. cooking demonstrations) will be included in the PSNAP so necessary goods can be procured by the School Nutrition Committee. For community-level nutrition services, the VHTs will follow existing service delivery modalities. The VHTs will deliver agreed nutrition interventions including community mobilization; focused activities targeting under-2 children and pregnant/lactating women; household visits; and referrals. These activities will be supervised by the appointed HCII health worker, who will also be responsible for distribution of the minimum VHT nutrition kit (includes weighing scales and registers).

17. For the health capacity building, selected nutrition focal persons from the District Health Directorate will be trained as part of the initial training delivered by the consultancy, as well as selected focal persons from District Health Office, HCIII, and HCII levels, to include the designated person in charge of the VHTs and designated person in charge of sanitation and hygiene (environmental health worker, or assigned person). Refresher training will be provided from district level (nutrition focal points) down to VHTs. The district nutrition focal point within the District Health Directorate will be responsible for supportive supervision and monitoring of the lower level nutrition services covered under this project, which will be integrated into ongoing supervision and monitoring structures in the District Health Directorate.

18. At national level, the MOH nutrition unit will provide review, revision, and approval of relevant training modules; quality assurance for the initial training process delivered by the consultancy; and will be responsible for collecting activity performance information and consolidating reporting related to key performance indicators. Relevant departments will be involved as needed to ensure that activities follow the existing structures in MOH.

D. Education

19. At the primary school level, existing Government systems acceptable to the Bank will be used to receive, supervise and report on both its activities and use of project funds: A sub-committee of the School Management Committee (SMC), the School Nutrition Committee, will develop a Primary School Nutrition Action Plan, and associated workplan and budget, which will be reviewed and adopted by the SMC before submission to the district for approval, similar to the process in place for UPE funds but with a new account. The funds will be primarily used for the establishment and maintenance of the demonstration garden and the nutrition demonstrations for PG and students. In addition, a teacher or teachers (preferably the agriculture/science teacher) will be assigned to deliver practical nutrition learning in the curricula. To do so the primary schools will receive materials from MOES and the selected teacher will be provided with supplemental in-service training. Supervision and reporting will follow the existing system to the District Education Directorate/District Education Officer.

20. In each district the representation on the DNCC from the District Education Directorate should include at least the District Inspector of Schools because that is the position most linked to the primary school in terms of planning, monitoring workplans, and ensuring compliance to

government policies and initiatives. As a member of the DNCC, the District Inspector of Schools (DIS) will be responsible for planning and execution of the aspects of the District Nutrition Action Plan, namely activities linked to primary schools.

21. For the education capacity building component, selected focal persons chosen by the District Education Officer will be trained as well as the DIS or designee, relevant focal staff in the District Education Directorate, and head teachers and selected agriculture/science teachers in the participating primary schools. Refresher training will be provided from district level (nutrition focal point) down to the head teachers and agriculture/science teachers in the participating primary schools.

22. At the national level, the MOES nutrition focal team (reporting to the Director, Basic and Secondary Education) will be responsible for the review, revision, and approval of training materials specific to MOES service delivery. With engagement and support from the appropriate district focal point inspector at the regional level (Regional Directorate of Education Standards), MOES will ensure quality assurance of the training; supportive supervision; and the collection and consolidation of the key performance indicators of the project.

Financial Management, Disbursements and Procurement

Financial Management

23. The Bank has carried out an assessment of the proposed financial management arrangements for the Uganda Multi-Sectoral Nutrition Improvement Project (P149286) to be implemented by the Ministry of Agriculture Animal Industry and Fisheries (MAAIF). The other collaborating Ministries include Ministry of Education and Health. The assessment also covers sampled four district local governments (Bushenyi, Bugiri, Kiryandongo and Nebbi) and five primary schools (Bugiri Primary School, Waluwerere Primary School, Kiryandongo Primary School, Agwok Primary School and Abindu primary school) that will be in the first phase of project implementation. The objective of the assessment is to determine under OP/BP 10.00: (a) whether have adequate financial management arrangements to ensure the project funds will be used for purposes intended in an efficient and economical way; (b) project financial reports will be prepared in an accurate, reliable and timely manner; and (c) the entities' assets will be safeguarded and (d) are subject to auditing arrangements acceptable to the Bank. Under OP/BP 10.00, recipient and project implementation entities are supposed to have and maintain adequate financial management systems which include budgeting, accounting, internal controls, funds flow, financial reporting and auditing arrangements to ensure that they can readily provide accurate and timely information regarding the project resources and expenditures.

24. These arrangements are deemed acceptable if: (a) they are capable of correctly and completely recording all financial transactions and balances relating to project resources; (b) if they can facilitate the preparation of regular, timely and reliable financial statements; (c) safeguard the project's assets; and (d) are subject to auditing arrangements acceptable to IDA. The financial management (FM) assessment was carried out in accordance with the Financial Management Practices Manual issued by the Financial Management Sector Board on March 1, 2010.

25. Actions outlined in the Financial Management Action Plan will be undertaken by MAAIF and districts to strengthen the financial management system.

26. In order to ensure that the project is effectively implemented, MAAIF and the districts will ensure that appropriate staffing arrangements are maintained throughout the life of the project.

27. The proposed financial management arrangements satisfy the Bank's minimum requirements under OP/BP 10.0 and are adequate to provide, with reasonable assurance, accurate and timely information on the status of the project resources required by IDA. With the implementation of the action plan, the financial management arrangements will be strengthened.

A) Country Issues

28. The Public Expenditure and Financial Accountability (PEFA) Report of 2012 indicate that the Government has carried out key reforms including public service reform, decentralization and public financial management. The National Development Plan provides the overarching strategy for all GoU reforms. The public service reforms aim to improve services delivery by instilling modern management practices into Uganda's public service and properly motivating and tooling the public servants. Decentralization is meant to improve the services delivery that local governments provide to the people through taking services close to the people and empowering them to have a say in deciding and monitoring the services that are provided to them. The Office of the Prime Minister coordinates all GoU programs and MDA activities and carries out an annual performance management assessment to ensure that they are achieving their agreed objectives and outputs. The public financial management reforms support and benefit all the other GoU reforms because they provide the means of ensuring that the resources allocated to the various reforms are applied effectively and efficiently to achieve the intended purposes and attain value for money. The PFM reforms cover the whole of the budgeting cycle functions: budget preparation, budget execution and oversight and scrutiny. The reforms have been pursued since the early 1990s and are continuing. The current reforms build on past achievements and are currently concentrating on: improving the credibility of the budget; ensuring that public financial management legislation is complied with; and ensuring that audit recommendations are implemented. GoU is carrying out the PFM reforms with the support of several donors. The more notable reforms include the ongoing review and revision of the Public Finance and Accountability Act, the upgrade of the IFMS, and many other initiatives that are being supported by FINMAP in the implementation of the PFM reform strategy. The 2012 corruption in the OPM and Ministry of Public Service among others as reported by the Auditor General indicates that corruption is still a major challenge. The Government has addressed some of these challenges through the High Level Matrix.

B) Risk Assessment and Mitigation

29. The following are necessary features of a strong financial management system:

- an adequate number and mix of skilled and experienced staff in the accounting and internal audit unit;
- the internal control system should ensure the conduct of an orderly and efficient payment and procurement process, and proper recording and safeguarding of assets and resources;
- the accounting system should support the project's requests for funding and meet its reporting obligations to fund providers including Government of Uganda, IDA, other donors, and local communities;
- the system should be capable of providing financial data to measure performance when linked to the output of the project; and
- An independent, qualified auditor should be appointed to review the Project's financial statements and internal controls.

30. The following table identifies the key risks that the project management may face in achieving these objectives and provides a basis for determining how management should address these risks.

<i>Risk</i>	<i>Risk Rating</i>	<i>Risk Mitigating Measures Incorporated into Project Design</i>	<i>Mitigated Risk</i>
Inherent Risk			
<p>■ Country Level- The 2012 PEFA report identified weaknesses in government PFM systems. Enforcement of Procurement rules is still weak. Governance issues including the scandals in the OPM and Public Service Ministry is still presenting a major challenge. June 30, 2012 audit report identifies major weaknesses in FM across the Government departments.</p>	S	Weaknesses in accounting capacity, budget classification, payroll rules and procurement compliance are being mitigated under a government PFM reform program called FINMAP. High level matrix agreed between development partners and Government is being implemented to address the governance issues.	S
<p>■ Entity Level- The Auditor General's reports of 30th June 2012 for MAAIF was qualified with material weaknesses and accountability challenges that need to be addressed. FM weaknesses noted on the ongoing EAAPP by the FM Supervision. Major weaknesses were noted during in-depth audit of ATAAS mainly due to implementation of activities outside the work plan. Delays may be experienced in submission of reports by the districts as noted in ongoing bank financed projects. Shortage of fiduciary and technical staff at the MAAIF and districts may affect project implementation especially accounting, reporting and supervision.</p>	H	The MAAIF will develop action plan to address the several accountability and institutional weaknesses in the audit and FM Supervision reports. Reporting deadlines will be incorporated in the project documents with close follow up by the Ministry and adequate facilitation of district fiduciary staff to ensure compliance. Staffing gaps to be addressed by the recruitment of a project accountant at the Ministry and also recruitment / filling vacant positions of CFOs, accountants and internal auditors at district level.	S

<i>Risk</i>	<i>Risk Rating</i>	<i>Risk Mitigating Measures Incorporated into Project Design</i>	<i>Mitigated Risk</i>
<p>■ Project Level- The project will be having districts and sub counties implementing the project. Capacity constraints at the LG level in managing projects. Delays in project completion and variations and non-adherence to contract conditions. The risk of poor quality and premature failure of activities.</p> <p>Risk of duplication of other programs already being implemented by the Government and development partners.</p>	H	<p>LG capacity on project management will be complemented by training in addition to consultants to be hired to offer support and capacity building.</p> <p>Project identification process will be inclusive with a bottom up approach with all stakeholders on board.</p>	S
		Overall Inherent Risk	Substantial
Control Risk	Risk Rating		
<p>■ Budgeting Inadequate funding of approved budget and budget cuts affecting approved work plans resulting in increased outstanding payables and exposing districts to risk of higher cost and litigation by suppliers and contractors. Ministry and districts charging expenditure on different votes without following due process. Delays in execution of budgets resulting in cost overruns. Poor feasibility studies resulting in unrealistic budgets that calls for frequent revisions. The chart of accounts as provided by the MoFEPD is inconsistent with project costing as per expenditure components and categories. Manipulation of manual vote books in ensuring expenditure within approved votes and budget. Implementation of activities outside approved budget under ATAAS by NAADS, and districts.</p>	H	<p>Project budget will be ring fenced as to guard against diversion or budget cuts. Budgeting under the project will be aligned to the activities. The project to be on IFMS to enhance budgetary control.</p>	S

<i>Risk</i>	<i>Risk Rating</i>	<i>Risk Mitigating Measures Incorporated into Project Design</i>	<i>Mitigated Risk</i>
<p>Accounting The June 30, 2012 audit reports for the Ministry and districts identified several accounting weaknesses, irregularities and non-compliance with financial regulations. They included doubtful accountabilities, depositing activity funds in individual staff bank accounts, unaccounted for advances, duplication of activities, procurement irregularities, value for money issues and suspected fraudulent practices were also noted in the reports. There are also accounting staffing gaps at the Ministry and districts sampled. Similarly the internal audit staffing in some districts was also inadequate The Ministry is on IFMS whereas three districts sampled are on IMFS and one on a manual accounting system. The manual system exposes the districts to the risk of manipulation of manual accounting system, errors, delays in reporting and missing out the internal controls inbuilt in IFMS.</p>	H	The Ministry will release funds to the district after the recruitment or deployment of CFOs. Enhance districts on manual reporting at districts with use of excel and streamlined records management. The weaknesses in the external audit report have been mitigated in the project by having dedicated project accountant to ensure above weaknesses are avoided and also by having regular internal audit and Bank reviews.	S

<i>Risk</i>	<i>Risk Rating</i>	<i>Risk Mitigating Measures Incorporated into Project Design</i>	<i>Mitigated Risk</i>
<p>■ Internal Control: Management delays in response and follow up on the internal control weaknesses reported by the external and internal audit. Non adherence to the internal audit work plan and irregular audit committee meetings. Inadequate internal audit staffing and lack of adequate budget for department activities. Weak technical audit skills and experience. The internal audit has also limited capacity to audit the IFMS due to limited training and access to the system. In effective district PACs. Implementation of activities outside approved budget under ATAAS by NAADS.</p> <p>The June 30, 2012 audit reports for the Ministry and districts noted numerous cases of management override of the controls as provided for in the Treasury Accounting Instructions 2007.</p>	H	Recruitment or deployment of Head of Internal Audit at the districts within 6 months after project effectiveness. Management action on Auditor General and Internal Audit reports to be monitored through the quarterly internal audit reports submitted to the Bank by the Ministry (including those from districts). Adherence to internal audit work plans. Provision of adequate internal audit budget under the project.	S
<p>■ Funds Flow: Delays in disbursement of funds to the districts by the Ministry. Diversion of project funds to meet other non-project activities were noted in the internal and external audit reports exposing the project to the risk of loss of funds or delay in project activities.</p>	S	Districts to open project specific bank accounts and disbursement to be done directly from the MAAIF to the accounts.	S
<p>■ Financial Reporting: Delays in submission of quarterly reports in the desired format by the Ministry and districts. Inaccurate and incomplete financial statements by the districts on manual system.</p>	H	Reporting format agreed between Ministry, districts and Bank. Training to be undertaken before disbursement. District accounting staff to be facilitated with monitoring resources to ensure timely reporting.	S

<i>Risk</i>	<i>Risk Rating</i>	<i>Risk Mitigating Measures Incorporated into Project Design</i>	<i>Mitigated Risk</i>
<p>■ External Audit: Delay in submission of financial statements for audit and delay in submission of audited financial statements as noted in other projects implemented by agencies under the Ministry.</p> <p>The Auditor General’s reports of 30th June 2012 for MAAIF were qualified with material weaknesses and accountability challenges that need to be addressed.</p>	H	<p>Project to submit the draft financial statements for audit within the submission deadline of September 30 of each year.</p> <p>This have been mitigated in the project by having dedicated project accountant to ensure above weaknesses are avoided and also by having regular internal audit and Bank reviews.</p>	S
Overall Risk Rating	H		Substantial

H – High S – Substantial M – Moderate L – Low

31. The overall residual risk is assessed as Substantial upon meeting the conditions in the risk assessment and mitigation table above.

C) Institutional and Implementation Arrangements

32. MAAIF will be responsible for the overall implementation of the project. During project execution MAAIF, shall coordinate project implementation and manage: (i) Procurement, including purchases of goods, works, and consulting services except those to be procured at the districts; (ii) Project monitoring, reporting and evaluation; (iii) Contractual relationships with IDA and other co-financiers; and (iv) Financial management and record keeping, accounts and disbursements.

33. MAAIF will constitute the operational link to the IDA and Government of Uganda on matters related to the implementation of the project.

34. The Permanent Secretary MAAIF will be the “Accounting Officers” for the project assuming the overall responsibility for accounting for the project funds.

D) Budgeting Arrangements

35. Budgeting for the project in the Ministry and districts will be in line with the Government budgeting cycle and as per The Public Finance and Accountability Act, 2003 and Treasury Accounting Instructions 2003. The project will be 100 percent funded by IDA except for cost elements such as contract committee sitting allowances and honoraria that will be budgeted under the Ministry / district general budget. The assessment noted the inadequate funding of

approved budget and budget cuts by the MoFEPD affecting implementation of approved work plans at the Ministry and district local governments. This results in increased outstanding payables and/or exposing Ministry / districts to risk of higher cost and litigation by suppliers and contractors. They have also not been able to fully achieve the intended objectives. However, this may not affect the project as all activities are 100 percent funded by the project. The Ministry and some districts are charging expenditure on different votes without following due process. There are delays in execution of budgets resulting in cost overruns for projects. The chart of accounts as provided by the MoFEPD is not compatible with project costing per components and categories as provided in the project documents (FA and PAD). Manipulation of manual vote books in districts operating manual accounting system resulting in expenditure outside approved votes and limits. The project accountant will be expected to ensure compliance to the approved AWPB.

E) Accounting Arrangements

36. The accounting function will be managed as documented in The Public Finance and Accountability Act, 2003, Treasury Accounting Instructions 2003, Local Government Financial and Accounting Manual 2007, Local Government (Financial and Accounting) Regulations 2007 and the provisions of the PIM that will include requirements specific to the Bank financed projects. The Ministry Principal Accountant will be responsible for the financial management of the project. The Ministry will recruit a project accountant at the PCU to support the Ministry accounting staff assigned to the project. Districts without a substantive Chief Finance Officer will have the position filled before the Ministry releases funds for project activities. Staffing gaps identified in the sampled districts are as below:

	District	Staffing Gap
1	Bushenyi	Chief Finance Officer
2	Kiryandongo	Chief Finance Officer and Finance Officer
3	Nebbi	Accountant (Expenditure)

37. The Ministry and three sampled districts are on IFMS while one district is on manual accounting system. The district on manual is exposed to the risk of manipulation of manual accounting system, errors, delays in reporting and missing out the internal controls inbuilt in IFMS. This will be mitigated by enhancing the manual system including use of Excel spreadsheets and regular reviews to ensure accuracy and reliability. Records management will also be enhanced to ensure adequate storage of accounting records. The June 30, 2012 audit reports for the Ministry and districts identified several accounting weaknesses, irregularities and non-compliance with financial and procurement regulations. They included doubtful accountabilities, depositing activity funds in individual staff bank accounts, unaccounted for advances, duplication of activities, procurement irregularities, value for money issues and suspected fraudulent practices were also noted in the reports. The FM Supervision on the East Africa Agricultural Productivity Project (EAAPP) noted weaknesses such as poor records management resulting in unsupported expenditure, lack of advances ledgers, overdue advances and failure to submit quarterly reports on the project. This could be attributed mainly due to lack of accounting staff dedicated to the project. This will be mitigated by recruitment of a project

accountant dedicated to the project to address the weaknesses. The Chief Finance Officers at the districts will also offer support to the schools and community groups implementing the project.

F) Internal Controls & Internal Auditing

Internal Controls

38. The internal controls are documented in The Public Finance and Accountability Act, 2003, Treasury Accounting Instructions 2003, Local Government Financial and Accounting Manual 2007, Local Government (Financial and Accounting) Regulations 2007 and the provisions of the PIM that will include requirements specific to the Bank financed projects. This will include a comprehensive fixed assets register, staff advances ledger and maintenance of vehicle movement log books and fuel consumption statements. The June 30, 2012 audit reports for the Ministry and districts noted numerous cases of management override of the controls as provided for in the government regulations. The internal audit both at the Ministry and districts will be facilitated under the project to carry out quarterly reviews and report of the effectiveness or otherwise of the existing internal controls.

Internal Audit

39. The Ministry Internal Auditor in collaboration with the district internal auditors will be required to conduct semi-annual internal audit reviews on the project and submitting the report to the Bank within 45 days after the end of each semester. The district internal auditors will also carry out reviews at the participating schools and community groups. The resources for the reviews by the Ministry and district internal auditors will be provided for under the project. The assessment noted frequent management delays in response and follow up on the internal control weaknesses reported by the external and internal audit. The districts are guided by the Local Government Internal Audit Manual 2007. Non adherence to the internal audit work plan and irregular district PAC meetings were noted at the districts. In one district, the district PAC term expired and has never been renewed. The district internal audit department lack adequate budget for audit activities which has limited their reviews. There is inadequate internal audit staffing in the districts sampled as follows:

	District	Staffing Gap
1	Bugiri	Senior Internal Auditor
2	Kiryandongo	Principal Internal Auditor and Internal Auditor
3	Nebbi	Principal Internal Auditor

40. The Districts will ensure the vacant positions of the Head of Internal Auditor are filled within 6 months of project effectiveness.

G) Funds Flow Arrangements

Bank Accounts

41. The MAAIF will open a Designated Account denominated in US dollars in BoU in which disbursements from the grant will be deposited. It will also open a Project Account denominated

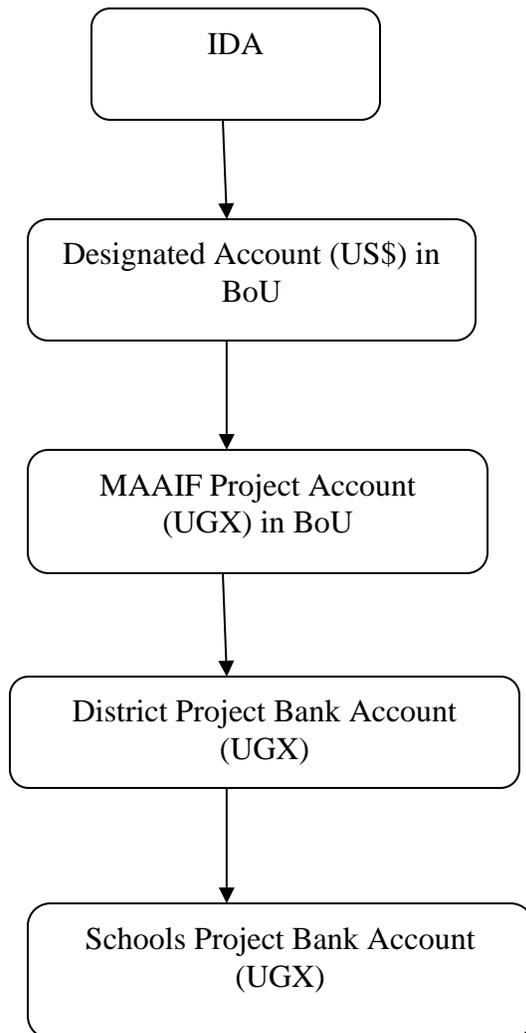
in local currency in the BoU into which transfers from the Designated Account (for payment of transactions in local currency) will be deposited. The MoES and MoH will be accessing funds for their quarterly monitoring activities through MAAIF as advances. The district will also open project specific bank accounts denominated in local currency in commercial banks acceptable to the Bank in which transfers from MAAIF will be made for project activities. The signatories for the project will be done in accordance The Treasury Accounting Instructions 2003. The participating schools will also open project specific bank accounts in commercial banks acceptable to the Bank. Community groups will also open project bank accounts at sub county level through which the Disbursements to LFs will be made.

Flow of Funds

42. MAAIF will be using the report-based disbursement procedure and funds flow arrangements for the project (through the two bank accounts above) will be as follows; (i) MAAIF will prepare a six monthly cash flow forecasts for project based on the work plan and submit the Withdrawal Applications and cash forecasts together with the cash request to the Bank after the effectiveness of the project. Subsequent withdrawal applications should be submitted quarterly with Interim Financial Reports (IFRs) within 45 days after the end of the quarter accompanied by a cash forecast for the next six months. The quarterly periods follow the calendar year quarters hence IFRs should be prepared as of end of March, June, September and December. (ii) IDA will make an advance disbursement from the proceeds of the Credit based on the cash flow forecast by depositing into a Recipient Recipient-operated Designated Account held at Bank of Uganda denominated in US Dollars. (iii) Funds can be paid from the designated account or transferred to the project account denominated in Uganda Shillings to make payments in this currency.

43. Funds to the schools and community groups will be phased and releases will be based on the initial approved work plan and budget. Any subsequent disbursement will be dependent on satisfactory accountability of first releases as certified by district team.

Funds Flow Chart



H) Disbursement Arrangements

44. The MAAIF with implementation of the agreed actions will provide effective financial management and accounting systems, which will facilitate the use of report based disbursement where cash flow forecasts based on work plans are submitted for a period of six months every quarterly period along with IFRs. The IFRs will be submitted for disbursement on a quarterly basis. In compliance with the report based guidelines, the project will be expected to, (a) sustain satisfactory financial management rating during project supervision; (b) submit IFRs consistent with the agreed form and content within 45 days of the end of each reporting period, and (c) submit a Project Audit Report by the due date.

45. Upon effectiveness, MAAIF will be required to submit an IFR with the six month cash flow forecast to IDA in order to make a deposit to the Designated Account. Replenishment of funds from IDA to the Designated Account will be made upon receipt of the quarterly IFRs

which will contain the 6 monthly cash flow forecast for the subsequent period. If ineligible expenditures are found to have been made from the Designated Account, the Recipient will be obligated to refund the same. If the Designated Account remains inactive for more than six months, the Recipient may be requested to refund to IDA amounts advanced to the Designated Account.

46. IDA will have the right, as reflected in the Grant Agreement, to suspend disbursement of the Funds if reporting requirements are not in compliance.

I) Financial Reporting Arrangements

47. The financial reports will be designed to provide quality and timely information to the project management, implementing agencies, and various stakeholders monitoring the project's performance. The reporting format by the Ministry and the districts has been agreed upon with the Bank.

48. The following will be included in the quarterly IFRs that will be produced by MAAIF: (i) A statement of sources and uses of funds for the reported quarter and cumulative period (from project inception) reconciled to opening and closing bank balances; and (ii) A statement of uses of funds (expenditure) by project activity/component comparing actual expenditure against the budget, with explanations for significant variances for both the quarter and cumulative period.

49. In addition to the above IFRs, MAAIF will also have to submit to the Bank the following information in order to support report-based disbursement: (i) Designated Account (DA) Activity Statement; (ii) DA Bank Statements; (iii) Summary Statement of DA Expenditures for Contracts subject to Prior Review; (iv) Summary Statement of DA Expenditures for contracts not subject to Prior Review; and (v) Aging analysis for advances to the districts.

50. The financial statements should be prepared in accordance with International Public Sector Accounting Standards (which inter alia includes the application of the cash basis of recognition of transactions). The IDA Financing Agreement will require the submission of audited financial statements to the Bank within six months after the financial year end.

51. These Financial Statements will comprise of: (i) A Statement of Sources and Uses of Funds/Cash Receipts and Payments; (ii) A Statement of Affairs/ Balance Sheet; (iii) Statement of Fund Balance; (iv) Designated Activity Account Statement; and (v) Notes to the Accounts.

J) External Auditing Arrangements

52. The Auditor General is primarily responsible for auditing of all government projects. Usually, the audit may be subcontracted to a firm of private auditors, with the final report being issued by the Auditor General. The private firms to be sub-contracted should be acceptable to the Bank. In case the audit is subcontracted to a firm of private auditors, IDA funding may be used to pay the cost of the audit. The audits are done in accordance with International Standards on Auditing. The appropriate terms of reference for the external auditor have been agreed

between the Bank and MAAIF. MAAIF will submit the project Audit Report together with the Management Letter to the Bank within six months after the end of each financial year.

53. The June 30, 2012 Annual Audit Report released by the Auditor General identifies across MDAs persistent misuse of public funds including corruption and misappropriation of funds; by-passing controls by government officers; diversion of funds including transferring large sums of money to officials' personal accounts, manipulation of the procurement process; inadequate accountability; override of budgetary controls by MDAs through mischarging expenditure against wrong codes, among others. Financial losses in government agencies were attributed to failure to follow regulations. These have been mitigated in the project by having dedicated project accountant to ensure above weaknesses are avoided and also by having regular internal audit and Bank reviews.

K) Social Accountability

54. To enhance social accountability on the project, both the participating schools and community groups will be required to display the resources received under this project and the utilization at the schools and district and/ sub county levels.

L) Financial Management Action Plan

55. The action plan below indicates the actions to be taken for the project to strengthen its financial management system and the dates by which they are due to be completed.

	<u>Action</u>	<u>Date due</u>	<u>Responsible</u>
1	Filling vacant district positions of CFO	Before Ministry releases funds to the districts	MAAIF/ MoLG/DLG
2	Filling of vacant district positions of Head of Internal Audit	6 months after effectiveness	MAAIF/ MoLG/DLG
3	Training of project accounting and auditing staff at MAAIF HQ and districts including schools and community groups	6 months after effectiveness for HQ and before release of funds to districts, communities and schools.	MAAIF/ DLG/ MoES and WB
4	Annual Fiduciary Reviews	Annually	MAAIF/ MFPED – Internal Audit

M) Effectiveness Conditions and Financial Covenants

Effectiveness Conditions

56. There are no financial conditionalities to be included in the legal agreement.

Financial Covenants

57. Financial covenants are the standard ones as stated in the Grant Agreement Schedule 2, Section II (B) on Financial Management, Financial Reports and Audits and Section 4.09 of the General Conditions.

N) Supervision Plan

58. A supervision mission will be conducted twice a year based on the risk assessment of the project in accordance with the Financial Management Practices Manual issues by the Financial Management Sector Board. The mission's objectives will include ensuring that strong financial management systems are maintained for the project throughout its life. However, reviews arising out of the Interim Financial Reports will be carried out regularly to ensure that expenditures incurred by the project remain eligible for IDA funding. The Implementation Status Report (ISR) will include a financial management rating for the components.

O) Conclusion of the Assessment

59. A description of MAAIF's and districts financial management arrangements above assesses the financial management risk as Substantial and indicates that although the project does not satisfy the Bank's minimum requirements under OP10.00, there are key time bound actions to be effected for the system to be adequate to provide, with reasonable assurance, accurate and timely information on the status of the Project as required by the Bank. The recommended improvements are detailed in the Financial Management Action Plan above

Procurement

60. **Procurement Agencies and packages:** Procurement under the project will be conducted by the following agencies for the different components and below is a summary of the major procurements:

Component	Agency Responsible for procurement	Summary of Major procurements Expected
Component 1 – Delivery of Multi-Sectoral Nutrition Services at Primary School and community levels	Primary Schools through their School Management Committees	1. Improved seeds, farming tools, and fertilizers for the schools 2. Cooking utensils, Rain water harvesting systems and fencing of gardens (estimated as up to \$10,000 over 3 years)

	Farmer Groups represented by LFs National Medical Stores District	3. Improved seeds, farming tools, and fertilizers for the LFs estimated at up to \$1000 for each LF over 2 years 4. Zinc, Iron and deworming 5. Consultants/NGOs to support mobilization and consultants to supplement extension services
Component 2 strengthening capacity to deliver nutrition interventions	Ministry of Agriculture Animal Industries and Fisheries	1. Consultants to provide training to key project actors 2. Training manuals and materials
Component 3. Project management, monitoring, evaluation and knowledge generation	Ministry of Agriculture Animal Industries and Fisheries	1. Consultants to support project implementation 2. Motor Vehicles, Furniture, office equipment 3. Manuals and Dissemination materials

61. **Applicable Guidelines:** Procurement under the project will follow the *Guidelines: Procurement under IBRD Loans and IDA Credits* dated January 2011 and *Guidelines: Selection and Employment of Consultants by World Bank Recipients* dated January 2011. *Guidelines On Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants* dated October 15, 2006 and as revised, will be applied.

Use of National Procurement Procedures

62. All contracts procured following National Competitive Bidding (NCB) and other lower procurement procedures such as Shopping, may follow the national public procurement law (the Procurement and Disposal of Public Assets Authority (PPDA) Act, 2003) and attendant regulations. **These procedures have been reviewed by the Bank and found to be acceptable, except for the following provisions, which will not be applicable under this project:**

- (i) Application of Domestic Preference under NCB. Domestic Preference shall only be applied under ICB.
- (ii) Charging of fees for dealing with bidder complaints at procuring entity level. The procuring entities shall not be allowed to charge fees for dealing with complaints.

- (iii) Selection of Consultants: The procedures for Selection of Consultants under the PPDA Act shall not apply. Only the Bank's guidelines shall apply for selection of all Consultants under the project.
- (iv) Disqualification of Bidders for not purchasing the bidding documents from the Government shall not apply.
- (v) Ineligibility shall in addition to firms suspended by PPDA extend to firms debarred or suspended by IDA.
- (vi) Paragraph 6 (1) (b) of the 4th schedule of the Act restricting contract amendments to an aggregate amount of 25 percent of the original contract amount.
- (vii) Regulation 48 requiring the rejection of a bid submitted by a bidder obtained the bidding document directly from the procuring and disposing entity shall not apply.
- (viii) Regulation 53 (9) Restricting the use of bid securing declarations to restricted domestic bidding and quotations procurement. The declaration may also apply for National Competitive Bidding.

63. Under the proposed project, procurement processing under the project shall also in addition to the World Bank guidelines comply with the national approval system except where the two conflict, that is when the World Bank Guidelines will take precedence. Specifically, the Contracts Committees shall perform their oversight functions at every key procurement stage as required by the PPDA Act, and contracts shall be subjected to the Solicitor General's clearance where applicable.

64. Procedure *for Shopping*: Shopping shall follow the Quotations Procurement Method procedures as defined in the PPDA Act and attendant regulations. These procedures have been reviewed by the Bank and found to be satisfactory subject to the exceptions under para above.

Procurement Arrangements, Risks and Mitigation Measures

Ministry of Agriculture, Animal Industries, and Fisheries (MAAIF)

65. The Procurement to be done at national level will be done by MAAIF. This will include any sensitization materials required by the other participating agencies, consultants (firms and individuals) to support project implementation and other minor goods. The volume of procurement is expected to be relatively small. The items to be procured are readily available with sufficient bidders to generate adequate competition. *Guidelines On Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants* dated October 15, 2006 and as revised, will be applied.

66. The Ministry of Agriculture has a long established Procurement and Disposal Unit and a Contracts Committee that adjudicates procurement. The Unit has participated in procurement

under IDA financed projects. The main risks are (i) delayed preparation of procurement plans and initiation of procurement leading to delays in completion of procurement, (ii) lack of a reliable system for monitoring progress on procurement with available tools such as the PPMS not being utilized, (iii) inadequate technical staff to support procurement with the Ministry generally understaffed with over 40 percent of the positions vacant, (iv) Inadequately prepared bidding documents with qualification requirements not properly completed and evaluation not consistent with the published criteria in some cases (v) inadequate staff in the Procurement Unit to pay attention to preparing communities for procurement. The detailed risks and mitigation measures are indicated below:

Risk Factor	Risk	Mitigation Measure	Timing and Responsibility for Implementation
<i>Internal Manuals and Clarity of the Procurement Process</i>	Insufficient practical experience among the procurement Unit and the Contracts Committees leading to delays or wrong implementation	Prepare manual to elaborate procurement arrangements as part of project preparation as a condition of project effectiveness	Prior to Effectiveness/MAAIF
<i>Staffing</i>	Insufficient staff in the Procurement Unit to pay attention to preparing communities for procurement	MAAIF to hire a Procurement Specialist to conduct project procurement as well as oversee and guide community procurement	Prior to Effectiveness/MAAIF
<i>Procurement Planning and Procurement Oversight</i>	Inadequate oversight on procurement and monitoring of progress against plan leading to delayed procurement and implementation Delayed preparation of procurement plans and initiation of procurements leading to delayed procurement	Dedicated Procurement Specialist to focus on this. In addition Project Coordinator to monitor procurement progress monthly Procurement Plan was agreed at appraisal	Throughout implementation Completed
<i>Procurement Cycle Management</i>	Insufficient technical staff to support procurement leading to poor quality bidding documents, providers and contract management	Additional Technical Staff to be hired as part of the PCU (this shall include a Project Coordinator, Accountant, M&E Specialist and Procurement Specialist)	Within 6 months of effectiveness

Risk Factor	Risk	Mitigation Measure	Timing and Responsibility for Implementation
<i>Governance, Fraud and Corruption</i>	Falsification of bidder qualifications and bank guarantees leading to hiring of unqualified providers	Due diligence to be conducted on veracity bidder qualifications prior to contract award. Also verify guarantees prior to release of funds	Through Implementation/MAAIF

Primary Schools

67. As per the procurement law, Primary Schools are not supposed to conduct their own procurement and are expected to rely on the districts to procure on their behalf. For purposes of this project, the primary schools shall conduct procurement. Within the schools, The School Nutrition Committee shall be responsible for conducting procurement under the oversight of the head teacher. Specifically the School Nutrition Committee shall solicit quotations or prices, compare them and recommend to the head teacher for issuance of the order and payment. Goods shall be received in the presence of at least 2 School Nutrition Committee members and the head teacher or his designate. The procedures shall be detailed in a School Nutrition Committee procurement manual. The key risks to procurement at the schools as well as the mitigation measures are indicated below:

Risk Factor	Risk	Mitigation Measure	Timing and Responsibility for Implementation
<i>Internal Manuals and Clarity of the Procurement Process</i>	Lack of clarity of the procurement procedures leading to indecision or wrong decisions resulting in delays and loses	Prepare School Procurement Manual and illustrative charts for the project clarifying procurement arrangements and responsibility and disseminate this as part of the broader sensitization program	Prior to Effectiveness / MAAIF, MoES/District
<i>Elite Capture</i>	Elites interfere with the procurement process leading to losses	Adequate sensitization of procurement committees and other stakeholders about their roles in the process	Prior to disbursement of funds
<i>Non availability of some varieties of technologies in some areas</i>	Procurement of the wrong technology or high purchase cost due to this non availability or the lack of information	MAAIF in collaboration with the districts to identify potential sources of required technologies (based on district selection of crops and livestock). This will include	Throughout implementation

Risk Factor	Risk	Mitigation Measure	Timing and Responsibility for Implementation
		providing indicative prices; Extension workers to also provide guidance to the committees in identifying the right varieties; Items not available within the participating districts to be procured from NARO while in parallel putting in place arrangements for ensuring multiplication of these materials locally	
<i>Insufficient oversight of community procurement by the schools</i>	Noncompliance with the guidelines and manuals leading to misprocurement and compromising objectives	MAAIF shall hire Auditors to do joint procurement and financial management audits in schools and among the farmers on a sample basis. District Internal Audit departments shall also conduct regular risk based reviews and the districts shall ensure adequate facilitation for them to play this role including verifying of accountability	MAAIF, Districts

Farmers

68. Farmers will receive smaller grants that will be mainly for purchase of inputs and farm tools. Like the primary schools the beneficiary farmers shall conduct their own procurement. For purposes of procurement, all the LFs within each participating sub-county shall constitute themselves into a community to receive the grant and conduct procurement. The member farmers shall then constitute a Procurement Committee of at least 5 people to be responsible for conducting procurement. The risks to their procurement are similar to the ones on the schools and the same mitigation measures shall apply with a manual prepared to guide them on group formation and procurement. Each sub-county group shall thereafter open an account and receive funds to conduct their own procurement. They shall also benefit from the technical support of the advisory service providers. The farmers will be required to submit accountability through the sub-county. The details of the required accountability forms shall be part of the manuals.

National Medical Stores

69. The National Medical Stores (NMS) shall be responsible for procurement of deworming and supplements and their distribution to the districts for utilization. The MOH will determine the types and quantities that each district shall receive and advise NMS in order for them to make the arrangements for procurement. The National Medical Stores is already procuring these and other drugs and delivering them to the districts and health facilities and has built extensive experience in doing these. Relative to the volume of procurement done by NMS the procurement required is small and does not present any substantial risks. The quantities of some items will however be significantly increased and shall therefore be subject to procurement by ICB and with the option to use framework agreements. The major risks envisaged with this procurement are (i) delayed needs identification and communication by the Ministry of Health and (ii) delayed procurement and delivery of these items to the intended beneficiaries, (iii) inadequate staffing within MoH to support development of specifications and procurement of the small equipment to be procured. To mitigate this, the MoH in collaboration with MAAIF has prepared a procurement plan reflecting the quantities for the first 2 years. The Ministry shall also designate an officer to be responsible for coordination between the districts and NMS in doing the needs identification and verification of delivery.

Participating Districts

70. Participating districts shall conduct procurement under the project which will be limited to hiring of (i) consultants/NGOs to support community mobilization, sensitization and implementation and (ii) consultants to supplement the extension services within the districts. This procurement shall be done in collaboration with MAAIF which will agree with the districts requiring these consultants and prepare a consolidated advert to be published by MAAIF but with submissions made to the individual districts. Thereafter districts shall complete the procurement and contracting with support and oversight from MAAIF.

71. **Procurement Risk:** Given the complexity of procurement arrangements, with the procurement being conducted at various levels, the risk for procurement is rated **High**.

Procurement Thresholds to be applied in the Procurement Plan

Expenditure Category	Contract Value Threshold (US\$)	Procurement Method	Contracts Subject to Prior Review (US\$)
1. Works	No works expected under the project		
2. Goods and Non Consulting Services	US\$ 500,000 and above Below US\$500,000	ICB NCB ¹⁶	All contracts As specified in PP

¹⁶ Where the goods are not locally available, ICB may be applied

Expenditure Category	Contract Value Threshold (US\$)	Procurement Method	Contracts Subject to Prior Review (US\$)
	Below US\$50,000	Shopping	None
		Community Procurement	None
3. Consulting Services ¹⁷ and Training	With firms above US\$300,000	Quality and Cost Based Selection	All contracts
	With individuals above US\$100,000	Individual	All Contracts
	With firms up to US\$200,000	Qualifications/Other	None
	With Individuals up to US\$100,000	Individual	None
4. Non-consulting Services	US\$500,000 and above	ICB	All contracts
	Below US\$500,000	NCB	As specified in PP
	Below US\$50,000	Shopping	None
5. All types of contracts	All contracts	Sole source / direct contracting and terms of reference	As specified in PP ¹⁸

Procurement Plan and Procurement Packages

72. A procurement plan has been prepared by MAAIF and reviewed by the Bank. There are no major contracts subject to international competition.

Frequency of procurement supervision

Supervision / Implementation Support (frequency)	6 months
Post Review (Frequency)	12 months
Post Review of Contracts (%)	10%

¹⁷ A shortlist of consultants for services estimated to cost less than US\$300,000 equivalent per contract may consist entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

¹⁸ Consultancy services estimated to cost below US\$5,000 equivalent will not be subject to prior review by the Bank subject to their inclusion in the agreed Procurement Plan.

IV. Environmental and Social (including safeguards)

A. Environment

73. The Project has been assigned Environmental Category B. The Project has triggered Environmental Assessment (OP 4.01) and Pest Management (OP 4.09) because of the environmental, health and safety impacts that may be associated with the likely use of pesticides in selected primary schools and LF demonstration gardens. However, the use of pesticides will be very limited because the project will only cover demonstration gardens for an estimated 60 percent or less of primary schools (those that meet the criteria for participation) in a district. Furthermore, the demonstration garden size will be roughly at least 0.5 acres. Therefore the environmental impact will be of very low-intensity, minor, and site-specific at primary school vegetable gardens and as inputs for the use of LFs (estimated 2 per primary school). The pesticides should be readily managed by farmers with guidance from the respective project agricultural extension specialists. Since the project is closely linked with ACDP (currently under preparation) in that the project will be implemented in a sub-set of ACDP districts, the Environmental and Social Management Framework (ESMF) for ACDP has been adapted and revised for use under the Multisectoral Food Security and Nutrition Project. In order to guide the use of pesticides, a Pest Management Plan has been prepared as part of the ESMF. The ESMF was disclosed on November 19, 2014, both at Infoshop and in-country. Once specific information for individual sub-projects is available, site/project specific ESMPs and PMPs will be prepared during implementation and prior the start of any physical works. In addition, specific guidance on the handling and use of pesticides and disposal of empty pesticide containers shall be included in the PIM.

B. Social

74. The project will have several positive social impacts. It will bring needed collective technical support to smallholder farm households and strengthen the role of PGs so that both can better be aware of, and engage in nutrition enhancing farming and household dietary practices. The project has been designed with activities to ensure the inclusion of women, PGs, and the broader community.

75. The positive social impacts will be further strengthened by including institutional capacity building support to primary schools so that they have the required administrative capacity to manage grant funds for school demonstration gardens with the primary School Management Sub-committees, so that there is community ownership and transparent accountability. The school-based project activities will also strengthen parental involvement in primary schools and corresponding accountability of teachers to their surrounding communities. Similarly the project will promote increased engagement and accountability of VHTs and agriculture extension agents to their community constituents.

76. The project will support a range of sub-components, including the support for demonstration gardens in primary schools that have sufficient (0.5 acre) arable and conflict free

land. The project will not involve acquisition of land. Therefore the Bank's Policy on Involuntary Resettlement (OP/BP 4.12) is not triggered.

77. The implementing agencies that include MAAIF, MOH and MoES have no Environmental and Social Development personnel to handle environmental and social aspects. Therefore as the Responsible Agency, MAAIF will hire an Environment Officer on a priority basis. This staff will be provided with targeted and focused training to help build their knowledge and skills to address environmental and social issues arising out of project activities. The local governments have District Environment Officers and Community Development Officers who will support project activities to address both environmental and inclusion related concerns at that level.

78. A summary description of safeguard policies triggered is shown in table below:

Safeguard Policies	Triggered	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	Component 1 involves establishment and operation of demonstration gardens of selected farmer groups and primary schools, of selected crops. In the process, pesticides may be used to enhance production of selected crops. Since the Multisectoral Food Security and Nutrition Project is closely linked with ACDP under preparation in that both projects will be implemented in the same Cluster Districts, Environmental and Social Management Framework (ESMF) for ACDP was revised to cover the MNP. The ESMF was disclosed before appraisal, both at Infoshop and in-country. Specific guidance on the handling, use of pesticides and disposal of empty pesticide containers shall be included in the Project Implementation Manual.
Natural Habitats OP/BP 4.04	No	N/A. The Project will be implemented in Primary Schools Land and selected farmers' gardens. It will therefore not affect any Natural Habitat.
Forests OP/BP 4.36	No	N/A. The project will not support activities which may affect any forest.
Pest Management OP 4.09	Yes	Component 1 involves establishment and operation of demonstration

		gardens of selected farmer groups and primary schools, of selected crops. In the process, pesticides may be used to enhance production of selected crops. A Pest Management Plan has been prepared as part of the ESMF. Specific guidance on the handling, use of pesticides and disposal of empty pesticide containers shall be included in the Project Implementation Manual.
Physical Cultural Resources OP/BP 4.11	No	N/A. The project does not involve any civil works that would affect PCRs.
Indigenous Peoples OP/BP 4.10	No	N/A. The target project areas under ACDP from which the project will draw participating districts does not have known IPs in Uganda.
Involuntary Resettlement OP/BP 4.12	No	N/A. Schools that will be selected to host the demonstration gardens shall be chosen after confirming availability of at least one half acre of available arable land within the school boundaries and therefore there will be no land acquisition and therefore OP4.12 is not triggered.
Safety of Dams OP/BP 4.37	No	N/A. The project does not concern dams.
Projects on International Waterways OP/BP 7.50	No	N/A. No international waterways will be affected by the project.
Projects in Disputed Areas OP/BP 7.60	No	N/A. The project will not be implemented in disputed areas.

C. Monitoring & Evaluation

79. The Project's results framework for is included in Annex 1 (Results Framework and Monitoring) and arrangements are detailed under Component 3. The results framework will be tracked and a one-year review will be held to assess progress and to inform the initiation of Phase 2 districts. A midterm review will provide another opportunity to assess progress and make appropriate mid-course corrections. The agreed PDO indicators and set of key intermediate outcome indicators are to be monitored during the life of the project. The PCU will be responsible for monitoring Project implementation and results. A study of the determinants of malnutrition was done, which informed the selection of intermediate outcome indicators. An impact evaluation has been designed and which will provide baseline information, a smaller scale mid-term evaluation will be done to inform the mid-term review, and an end line analysis

as basis for deciding on future scaling up of the project approach. GAFSP has approved an additional US\$800,000 to finance the impact evaluation.

D. Role of Partners

80. DPs are not direct financiers of the project. There are technical areas in carrying out the UNAP such as methods for community mobilization, school-based nutrition activities, behavioral change communication, utilization of non-government service providers, information tracking where information sharing and lessons learned will contribute to project execution. As the project moves forward, discussions with DPs and the Government to scale up the methodology to reach additional districts, is seen as possible through integrated or parallel financing.

Annex 4
Operational Risk Assessment Framework (ORAF)
Uganda: Uganda Multisectoral Food Security and Nutrition Project (P149286)

Project Stakeholder Risks						
Stakeholder Risk	Rating	Substantial				
Risk Description: There is unfamiliarity with new roles and responsibilities for sectoral ministries MAAIF, MOH and MOES, and mixed capacity to implement the project. The evolving decentralization policy has meant expanded district planning, budgeting, supervision, and monitoring responsibility without commensurate adequate staffing and/or not fully trained staff to do so.	Risk Management:					
	Roles and responsibilities of project implementers will be clarified in the Project Implementation Manual and closely followed by the Bank team. There is already broad agreement on the appropriateness of the proposed interventions and close linkages to the national nutrition action plan. A mechanism for resolving working relationships at central level will be established, namely the Nutrition Project Steering Committee composed of the relevant sectors. Capacity development at various levels has been prioritized in the project design to ensure quality and timely project implementation. District, primary school, and community capacity will be given particular attention.					
	Resp:	Status:	Stage:	Recurrent:	Due Date:	Frequency:
				<input checked="" type="checkbox"/>		
Implementing Agency (IA) Risks (including Fiduciary Risks)						
Capacity	Rating	Substantial				
Risk Description: MAAIF does not have a strong record in project implementation, especially in fiduciary management. Major deficiencies were found in the ATAAS project performance highlighted in an August 2014 in-depth review of financial management. Further, their capacity to serve as lead Ministry for a complex multisectoral project, to coordinate other sectors and disciplines, to submit	Risk Management:					
	The project will support strengthening the Project Coordination Unit, housed at MAAIF as the lead agency, as well as technical support and training to other public sector implementers, especially district entities. Districts selection will be based on project readiness and past ATAAS performance. Critical human resource capacity, including staffing and in-service training, for both technical and fiduciary requirements, will be developed and detailed in the project implementation manual. District supervision will include a robust program of unannounced visits. World Bank fiduciary specialists will provide intensive support and oversight.					

Project Risks

Design	Rating	Substantial				
<p>Risk Description:</p> <p>The project involves many sub-components, different geographic areas, and multiple implementing entities, which in itself, makes implementation challenging. Further, the linkages between ministries, and between ministries and districts, as well as with other implementers, is largely untested generally and specifically in nutrition, and there will be difficulty in coordinating project inputs between sectors and ensuring that extension workers and teachers are not overburdened by additions to their workloads.</p>	<p>Risk Management:</p> <p>Project design was undertaken through an extended participatory process with the Government and DPs. Strong commitment has been shown from all involved sectors (key staff) in the course of project development. Reliance will be on existing institutions, systems and implementing mechanisms, to the extent possible. Roles and responsibilities of each Ministry, district, county, sub-county and other implementing partners will be clarified in the PIM. Coordinating mechanisms will be put in place with the ministries and various components to ensure progress is made along the various dimensions of the project. The design allows for work in each sector to progress at its own pace at community level; delays in one sector or District should not halt the progress of the other sectors, and underperformance by one ministry will not prevent additional disbursements to others. Still, harmonization of sector activities will be important for the project to fully meet its goals. Work plans will be developed for each sector to allow for efficient execution, to prevent overburdening of community-level workers and teachers, and to enable sharing of progress with others. Project design includes a process to reallocate resources among project components and sub-components, if necessary.</p>					
	Resp:	Status:	Stage:	Recurrent:	Due Date:	Frequency:
			<input checked="" type="checkbox"/>		Yearly	
Social and Environmental	Rating	Low				
<p>Risk Description:</p> <p>Social and environmental risk is low due to the strong focus of the project on systemic improvements. No civil works are envisioned under the project. Lack of safeguards capacity may limit supervision, monitoring and reporting on the use of pesticides</p>	<p>Risk Management:</p> <p>Social and environmental assessments have been undertaken, and an ESMF that includes a pest management plan prepared for purposes of this project. Project staff at both national and district levels will be trained in the application of the instruments.</p>					
	Resp:	Status:	Stage:	Recurrent:	Due Date:	Frequency:
			<input type="checkbox"/>			
Program and Donor	Rating	Moderate				

<p>Risk Description:</p> <p>There are ongoing donor- supported initiatives in agriculture, health and nutrition, which bear on project activities.</p>	<p>Risk Management:</p> <p>The project has drawn on DP models in formulating its approach. Continued leveraging and complementarity with ongoing DP initiatives, particularly to the extent they continue to engage in community-based and school based nutrition activities, is built into the design. The nutrition dialogue between Government and DPs is positive and will enable informed programming to avoid duplication. Nutrition is a core objective of the National Development Plan and the Government continues to encourage donor support in its efforts to achieve the MDGs and Scaling Up Nutrition.</p>										
Resp:		Status:		Stage:		Recurrent:		Due Date:		Frequency:	
						<input checked="" type="checkbox"/>					
<p>Risk Management:</p> <p>Country Management Unit will provide advice and guidance on any negative effects on proceeding with the project.</p>											
Resp:		Status:		Stage:		Recurrent:		Due Date:		Frequency:	
						<input checked="" type="checkbox"/>					
Delivery Monitoring and Sustainability			Rating		Substantial						
<p>Risk Description:</p> <p>Description: The Project's innovative interventions call for new indicators, and this may pose a challenge to sector monitoring processes. Logistical and human resource constraints at various levels may also substantially constrain regular project field oversight of project activities.</p> <p>Chronic undernutrition and its debilitating impact on human development is a neglected and under-budgeted Ugandan policy priority.</p>	<p>Risk Management:</p> <p>A results framework has been developed with clear and measurable indicators. A detailed monitoring plan will be developed in consultation with stakeholders during initial implementation. Technical supervision missions of the World Bank and full involvement of the DPs will further contribute to this area.</p> <p>Heightened and continued policy dialogue with the GoU and DPs so that the GoU gradually takes greater ownership by increasing GoU's budget contribution for nutrition</p>										
Resp:		Status:		Stage:		Recurrent:		Due Date:		Frequency:	
						<input checked="" type="checkbox"/>					
<p>Risk Management:</p> <p>Heightened and continued policy dialogue with the GoU and DPs so that the GoU gradually takes greater ownership by increasing GoU's budget contribution for nutrition.</p>											

	Resp:	Status:	Stage:	Recurrent: <input type="checkbox"/>	Due Date:	Frequency:
Other (Optional)	Rating	Substantial				
Risk Description: .Insufficient gender mainstreaming given the importance of gendered differences in labor, resource control, and intra-household bargaining.	Risk Management:					
	Gender participation in PGs and LFs will be monitored through project reporting, and activities adjusted to ensure appropriate female participation. In addition, gender dimensions will also be included in the community nutrition mobilization and education materials. The Ministry of Gender, Labour and Social Development will be involved in an advisory capacity to ensure appropriate technical inputs.					
	Resp:	Status:	Stage:	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency:
Overall Risk						
Overall Implementation Risk:	Rating	Substantial				
Risk Description:						
The main risks are: The subject matter and manner of addressing nutrition is new and untested in the public sector; the community and parent beneficiaries will need to be sensitized and internalize the importance of diet diversity and micronutrient supplementation--and this is done without "seeing" improvements (sometimes called the problem of "hidden hunger"); there may be corresponding difficulties in initiating and sustaining community time and effort in infant growth monitoring and nutrition promotion activities; smallholders may be reluctant to diversify crops, even if beneficial to the household but not seen as income generating; communities may not invest the necessary time and labor in school-based activities; and the Government may not move beyond nutrition strategy and planning, to incremental budgeting and staffing for nutrition interventions across sectors, and progressively scaling up its efforts nationally over time. Fiduciary performance is a major area of risk, given past experience with the agriculture sector. There have been changes in MAAIF intended to address such issues, and there will be close monitoring by the World Bank in terms of procurement and financial management.						

Annex 5: Implementation Support Plan
Uganda Mutisectoral Food Security and Nutrition Project

Strategy and Approach for Implementation Support

1. The project will require substantive technical and administrative support given the innovative, complex nature of activities to be financed and the extent to which ministerial cooperation and district performance will be essential in achieving project objectives. Most of the World Bank implementation team members are based in Uganda which will ensure timely, efficient and effective support to the client. While ongoing Bank implementation support will take place with frequent contact with the PCU (housed within MAAIF), field visits by country-based Bank staff will take place to review progress and provide ongoing assistance to selected district and implementing entities. Formal implementation support missions will be carried out at least every six months, and jointly with the Inter-ministerial Project Steering Committee to the degree feasible. Annually, one of the implementation support missions will be conducted as a joint annual project review with OPM and the National Nutrition Coordinating Committee, and there will be a mid-term review.

Implementation Support Plan

<i>Time</i>	<i>Focus</i>	<i>Skills Needed</i>	<i>Resource Estimate</i>	<i>Partner Role</i>
<i>First twelve months</i>	Institutional modalities, training, sub-component implementation. (Overall supportive supervision by Team Leaders)	Team technical leadership, sector specialists in nutrition-related disciplines, finance, procurement, environment, and M& E specialists	<i>26 staff weeks</i> <i>3 trips</i>	a) Partners: UNICEF, USAID, European Union, Korea, BRAC, Netherlands (SNV), Danida b) Role: Principally technical and implementation knowledge sharing; exploration of in-kind or financial resource contributions
<i>12-36 months</i>	Annual project performance review including Phase 1 districts; selection of Phase 2 at annual joint review.	Team technical leadership, sector specialists in nutrition-related disciplines, finance,	<i>20 staff weeks</i> <i>6 trips</i>	Same as above

<i>Time</i>	<i>Focus</i>	<i>Skills Needed</i>	<i>Resource Estimate</i>	<i>Partner Role</i>
	<p>Institutional modalities, training, sub-component implementation. (Overall supportive supervision by Team Leaders)</p> <p>Mid-term review including midline database</p>	<p>procurement, environment, and M& E specialists</p>		
<i>36-60 months</i>	<p>Institutional modalities, training, sub-component implementation. (Overall supportive supervision by Team Leaders)</p> <p>Annual and final project joint review, impact evaluation and implementation completion report preparation</p>	<p>Team technical leadership, sector specialists in nutrition-related disciplines, finance, procurement, environment, and M& E specialists</p>	<p><i>18 staff weeks</i> <i>4 trips</i></p>	<p>Same as above</p>

Annex 6: Economic Analysis

Uganda Mutisectoral Food Security and Nutrition Project

1. The interventions included in this project do not fall within the purview of the private sector and therefore public sector action is required to demonstrate the benefits to be derived. In addition to economic and health benefits described below, the project will also contribute to enhancing agricultural production and productivity through strengthened institutions and will contribute to addressing gender issues in the agriculture sector. The proposed activities are focused on improving and diversifying household food production of smallholder farms which are traditionally controlled by women, through increasing access to agricultural inputs and extension services and promoting use of labor-saving technologies. The Bank's major value added is its global technical knowledge and the complementary financing to be made available to the Government. The project will provide evidence to improve effectiveness and efficiency of the Government's own investments and that of other development partners to reduce chronic malnutrition

2. The focus on under nutrition in Uganda is based on evidence-based research. One out of three children in Uganda are stunted and an estimated 82% of all cases of child undernutrition go untreated. Around 15% of all child mortality cases in Uganda are associated with undernutrition. With an estimated 110,220 cases of child mortality associated with child undernutrition from 2004-2009, it is estimated that child mortality associated with undernutrition has reduced Uganda's workforce by 4% (Cost of Hunger in Uganda 2013). Malnutrition slows economic growth and affects human capital and productivity through several routes: (i) direct loss in productivity from poor physical status; (ii) indirect loss from poor cognitive function and deficits in schooling; and (iii) losses owing to increased health care costs (World Bank, 2006). Height has been shown to be related to productivity and final height is determined in large part by nutrition from conception to age two. A one percent loss in adult height as a result of childhood stunting is associated with a 1.4% loss in productivity. In addition, stunting also has medium to long-term effects on cognitive development and school achievement. Students who were stunted before the age of five are more likely to underperform in school and to drop out of school. Undernourished children face challenges in competing favorably in school due to lower cognitive and physical capacities. Lower education levels attained by stunted children often make them less qualified for work, thus significantly reducing income-earning potential when they reach working age.

3. Malnutrition's economic costs for Uganda are substantial: at the macroeconomic level, the total economic loss is estimated at 1.8 trillion UGX which is equivalent to 5.5% of the GDP in 2009. Health cost of undernutrition is estimated at 525 billion UGX with 87% of cost borne by families and the remaining 13% by the health system. An estimated 44% of the health costs associated with undernutrition occur before the child turns 1 year-old. On impact on education, 7.3% of all grade repetition cases in 2009 are estimated to be associated with the higher risk of stunting. Cost of grade repetitions associated with stunting is 19.6 billion UGX or 1.8% of the total national investment in education (Cost of Hunger in Uganda 2013). At the individual level, the productivity losses are estimated at more than 66 percent of lifetime earnings, based on direct estimates of the impact of stunting in early life on later life outcomes (Hoddinott et al 2011).

4. The project is expected to generate significant health and nutrition benefits. An investment of US\$27.64 would save 115,455 Disability-Adjusted Life Years (DALYs) and avert 65,000 cases of stunting annually. A DALY is equivalent to a year of healthy life lost due to a health condition. It counts the gains from both mortality (how many more years of life lost due to premature death are prevented) and morbidity (how many years or parts of years of life lost due to disability are prevented). Cost-effectiveness analysis of selected high impact nutrition interventions in Uganda suggest that the cost/DALYs saved in Uganda is relatively competitive. For community nutrition programs the cost/DALYs saved is US\$77, while the global estimates are ranging from US\$53 to US\$153. The overall results of cost-benefit analysis demonstrate that the proposed project will be a sound investment for Uganda. The present value of benefits related to improved child nutrition is estimated to be US\$59.5 million. The present value of costs is estimated to be US\$26.1. This translates to net present value of benefits is estimated to be US\$33.4 million and the benefit-cost ratio of US\$2.3. This implies for every US\$1 invested through this project, it will generate benefits of US\$2.3.

5. Cost-benefit analysis is 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 is calculated by assuming that a statistical life year saved is valued at 1.5 times the country's GDP per capita. The cost-benefit analysis also reveals a high internal rate of return of 24% and annual contribution to GDP of US\$85 million. The annual increase in GDP attributable to scaling up high impact interventions is calculated based on the estimates of future benefits. Although the benefits occur several years after the investment, it is assumed that these benefits serve as an approximation of the present value of economic productivity lost each year as a result of mortality and morbidity that would otherwise be prevented by scaling up interventions. Values presented are taken from a year in which all beneficiaries have reached productive age. The estimated benefits in this analysis are likely to be underestimated due to several reasons: (i) the economic benefits are calculated mostly from nutrition interventions for children under five and do not take into account potential benefits from other sources, such as improved cognitive skills for school-age children that benefit from more nutritious food and better care practices; (ii) it does not include benefit of increased life-years of children saved before they become active in the labor force. Many other benefits are also excluded because they cannot be measured or easily translated to monetary values.

6. The "program experience" methodology employed in the World Bank (2010) was used for calculating the cost of the project. The "program experience" approach generates unit cost data that capture all aspects of service delivery (e.g. costs of commodities, transportation and storage, personnel, training, supervision, monitoring and evaluation, relevant overhead, wastage) for each intervention from actual programs that are in operation in Uganda and considers the context in which they are delivered.

7. The expected benefits from scaling up nutrition interventions are calculated in terms of: (i) DALYs saved; (ii) number of lives saved; and (iii) cases of childhood stunting averted. To calculate the number of DALYs, we use the method employed by Black et al. (2008) to estimate the averted morbidity and mortality from scaling up different nutrition interventions. The method uses population attributable fractions (PAF) based on the comparative risk assessment project (Ezzati et al. 2004; Ezzati et al. 2002) to estimate the burden of infectious diseases attributable to

different forms of undernutrition using most recent Global Burden of Disease study (2010). The projected number of lives saved and cases of childhood stunting averted are calculated using the Lives Saved Tool (LiST), which translates measured coverage changes into estimates of mortality reduction and cases of childhood stunting averted.

8. Cost-benefit analysis is conducted based on the estimated economic value of the benefits attributable to nutrition specific interventions. In order to arrive at a dollar value for the impact on mortality and morbidity of a one-year investment in reaching full national coverage, we use estimates of number of lives saved and reduction in stunting prevalence produced by the LiST tool. Consistent with the methodology used to quantify the benefits of health and nutrition interventions in Stenberg et al. (2013), a statistical life year saved is valued at 1.5 times the country's GDP per capita, which is considered to be a conservative estimate. However, valuing years of life saved alone does not account for the economic benefits of reduced morbidity, which includes the long-term, non-lethal impacts of malnutrition on individuals. While there are a number of long-term impacts of nutritional deficiencies, the benefits estimation is focused on stunting given the availability of country-specific impact estimates produced by the LiST tool.

9. In order to estimate the value of a case of childhood stunting averted, the methodology used in Hoddinott et al. (2013) was applied. The stunted individuals are assumed to lose an average of 66 percent of lifetime earnings, based on direct estimates of the impact of stunting in early life on later life outcomes found in Hoddinott et al. (2011). This point estimate for the effects of stunting on future consumption is used as a proxy for the effect of stunting on lifetime earnings. Additionally, Hoddinott et al. (2013) account for uncertainty by assuming that only 90 percent of the total gains will be realized. The calculations were adjusted to reflect the country's labor force participation rate. Furthermore, it was assumed that the reduction in under 5 stunting prevalence estimated by LiST is entirely attributable to a reduction in stunting among children under 2, as it is widely accepted that nutrition interventions have a limited impact on stunting after the first 1,000 days.

10. For both lives saved and cases of stunting averted, the benefits of a one year investment in scaling up each intervention are grouped according to the age cohort to which they are attributable (under 2 and under 5). It is assumed that these children enter the labor force at age 15 and exit the labor force at age 59, which is equivalent to Uganda's life expectancy at birth. Benefits from both stunting and lives saved are then multiplied by a lifetime discount factor (LDF) derived at 5 percent), an adjustment for age at the time of investment, as well as the years of lifetime productivity expected. The LDF represents the years of productivity that are "counted" in the calculation, discounted back to their present value in the year in which the investment in nutrition is made. For benefits attributable to interventions that target children under two years of age, we use an LDF that assumes that all children will enter the labor force in 13 years, while for interventions that target children under five years of age, we use an LDF that assumes that all children will enter the labor force in 10 years.

11. The annual increase in GDP attributable to each package of interventions is calculated based on the same estimates of future benefits. Although these benefits occur several years after the investment, it is assumed that these benefits serve as an approximation of the present value of economic productivity lost each year as a result of mortality and morbidity that would otherwise

be prevented by scaling up nutrition interventions. Values presented are taken from a year in which all beneficiaries have reached productive age.

12. The following values and sources were used in the above benefit calculations for this project::

Indicator	Value	Source
GDP per capita	\$480	World Bank 2012
Life expectancy at birth	59 years	World Bank 2012
Labor force participation rate	78%	World Bank 2012
Coefficient of deficit (stunting)	0.66	Hoddinott 2011
Actual gains realized	90%	Hoddinott 2013
Lifetime discount factor by discount rate (5%)	9.31	Estimated
Lifetime discount factor by discount rate (Under 5 Cohort)	16.99	Estimated

Annex 7: Regional Data on Prevalence of Stunting and Dietary Diversity

1. The selection of project districts is based on regional rankings of 2011 Demographic and Health Survey (DHS) estimates of: (i) the prevalence of stunting in under-five children, and (ii) low dietary diversity, selected because they indicate both the severity of the problem and potential to benefit from the focus on increasing production and consumption of micronutrient-rich foods. Further, the project is designed to mitigate the potentially negative effects of increased agriculture commercialization on nutrition by focusing on homestead production of micronutrient-rich crops, which is essential to food security and nutrition. The districts in the ACDP were ranked by stunting and dietary diversity. Fifteen districts with a combined score of these two criteria below 10 were identified as having both high undernutrition and high need for interventions to improve dietary diversity.

	<i>Agro-ecological zone</i>	<i>DHS Regions</i>	<i>District</i>	<i>Population</i>	<i>Child stunting¹⁹</i>	<i>Stunting rank²⁰</i>	<i>Dietary Diversity²¹ (DD)</i>	<i>DD rank²²</i>	<i>Combined DD + Stunting Score²³</i>
	IX SW Farmland and X Highland Ranges	Southwest	BUSHENYI	241,500	41.7	2	6.7	2	4
	IX SW Farmland and X Highland Ranges	Southwest	ISINGIRO	396,700	41.7	2	6.7	2	4
	IX SW Farmland and X Highland Ranges	Southwest	NTUNGAMO	436,400	41.7	2	6.7	2	4
	III NW Savannah Grassland	West Nile	NEBBI	336,657	37.8	3	7	3	6
	III NW Savannah Grassland	West Nile	YUMBE	453,176	37.8	3	7	3	6
	III NW Savannah Grassland	West Nile	ARUA	727,100	37.8	3	7	3	6
	III NW Savannah Grassland	West Nile	MARACHA		37.8	3	7	3	6
	V Kyoga Plains	East Central	NAMUTAMB A	198,686	33.5	5	4.3	1	6
	VI Lake Victoria Crescent	East Central	BUGIRI	387,000	33.5	5	4.3	1	6
	VI Lake Victoria Crescent	East Central	IGANGA	466,200	33.5	5	4.3	1	6

¹⁹Child stunting: prevalence, of children 0-59 months with stunting (HAZ<-2 SD) (From DHS, 2011: Regional data)

²⁰ Ranked from high to low (i.e. 1 = highest stunting)

²¹Dietary diversity: prevalence of children (6-23 months) fed 4+ food groups in previous 24 hours (From DHS, 2011: Regional data)

²² Ranked from low to high (i.e. 1= lowest dietary diversity)

²³ Low score reflects both high prevalence of stunting and low prevalence of dietary diversity

	<i>Agro-ecological zone</i>	<i>DHS Regions</i>	<i>District</i>	<i>Population</i>	<i>Child stunting¹⁹</i>	<i>Stunting rank²⁰</i>	<i>Dietary Diversity²¹ (DD)</i>	<i>DD rank²²</i>	<i>Combined DD + Stunting Score²³</i>
	VIII Western Savannah Grassland	Western	KYEGWEGW A	150,000	43.9	1	15.3	6	7
	VII West Savannah Grassland and VIII Pastoral Grassland	Western	KIRYANDON GO	285,300	43.9	1	15.3	6	7
	VIII Western Savannah Grassland	Western	KAMWENGE	317,000	43.9	1	15.3	6	7
	VII West Savannah Grassland and VIII Pastoral Grassland	Western	MASINDI	352,400	43.9	1	15.3	6	7
	VIII Western Savannah Grassland	Western	KYENJOJO	356,200	43.9	1	15.3	6	7
	VIII Western Savannah Grassland	Western	KABAROLE	403,200	43.9	1	15.3	6	7
	IX SW Farmland and X Highland Ranges	Western	KABALE	490,000	43.9	1	15.3	6	7
	VII West Savannah Grassland and VIII Pastoral Grassland	Western	HOIMA	499,000	43.9	1	15.3	6	7
	VIII Western Savannah Grassland	Western	KIBAALE	613,300	43.9	1	15.3	6	7
	VIII Western Savannah Grassland	Western	KASESE	695,500	43.9	1	15.3	6	7
	VIII Western Savannah Grassland	Central 2	MUBENDE	566,600	36.1	4	19.5	7	11
	V Kyoga Plains	Eastern	BUKWO	67,500	25.3	7	13	5	12
	V Kyoga Plains	Eastern	KAPCHORWA	104,000	25.3	7	13	5	12
	V Kyoga Plains	Eastern	BUTALEJA	206,200	25.3	7	13	5	12
	V Kyoga Plains	Eastern	SERERE	279,100	25.3	7	13	5	12
	V Kyoga Plains	Eastern	SOROTI	290,000	25.3	7	13	5	12
	V Kyoga Plains	Eastern	PALLISA	343,218	25.3	7	13	5	12
	V Kyoga Plains	Eastern	MBALE	453,900	25.3	7	13	5	12
	V Kyoga Plains	Eastern	TORORO	463,600	25.3	7	13	5	12
	III. NW Savannah Grassland and IV. Para Savannah	North	NWOYA	51,100	24.7	8	7.6	4	12
	V. Kyoga Plains and II/III NE/NW Savannah Grassland	North	DOKOLO	162,100	24.7	8	7.6	4	12
	III. NW Savannah Grassland and IV. Para Savannah	North	AMURU	174,000	24.7	8	7.6	4	12

	<i>Agro-ecological zone</i>	<i>DHS Regions</i>	<i>District</i>	<i>Population</i>	<i>Child stunting¹⁹</i>	<i>Stunting rank²⁰</i>	<i>Dietary Diversity²¹ (DD)</i>	<i>DD rank²²</i>	<i>Combined DD + Stunting Score²³</i>
	V. Kyoga Plains and II/III NE/NW Savannah Grassland	North	KOLE	216,900	24.7	8	7.6	4	12
	V. Kyoga Plains and II/III NE/NW Savannah Grassland	North	APAC	326,300	24.7	8	7.6	4	12
	V. Kyoga Plains and II/III NE/NW Savannah Grassland	North	OYAM	353,700	24.7	8	7.6	4	12
	III. NW Savannah Grassland and IV. Para Savannah	North	GULU	374,700	24.7	8	7.6	4	12
	V. Kyoga Plains and II/III NE/NW Savannah Grassland	North	LIRA	389,300	24.7	8	7.6	4	12
	VI Lake Victoria Crescent	Central 1	MPIGI	212,401	32.5	6	23.6	8	14
	VI Lake Victoria Crescent	Central 1	MASAKA	247,000	32.5	6	23.6	8	14
	VI Lake Victoria Crescent	Central 1	RAKAI	466,900	32.5	6	23.6	8	14