



Ministry of Agriculture, Animal Industry and Fisheries

Republic of Uganda

## **Uganda Multi-Sectoral Food Security and Nutrition Project (P-149286)-ADDITIONAL FINANCE**

# **Environmental and Social Management Framework**

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## GLOSSARY OF TERMS

- ❖ **Cumulative impacts/effects:** The total effects on the same aspect of the environment resulting from a number of activities or projects.
- ❖ **Direct impacts:** An effect on the environment brought about directly by the ACDP projects.
- ❖ **Disclosure:** Information availability to all stakeholders at all stages of the development of projects. Includes disclosure of project documents.
- ❖ **Environmental impact assessment (EIA):** A comprehensive analysis of the project and its effects (positive and negative) on the environment and a description of the mitigation actions that will be carried out in order to avoid or minimize these effects.
- ❖ **Environment:** physical, biological, and social components and processes that define our surroundings.
- ❖ **Environmental Monitoring:** The process of examining a project on a regular basis to ensure that it is in compliance with an Environmental Management Plan (EMP).
- ❖ **Gender Based Violence (GBV):** an umbrella term for any harmful act that is perpetrated against a person's will and that is based on socially ascribed (gender) differences between males and females.
- ❖ **Gender equality:** Means that all human beings, both men and women, are free to develop their personal abilities and make choices without the limitations set by stereotypes, rigid gender roles and prejudices. That the different behaviour, aspirations and needs of women and men are considered, valued and favoured equally. That their rights, responsibilities, and opportunities will not depend on whether they are born male or female.
- ❖ **Gender equity:** Fairness of treatment for women and men, according to their respective needs. This may include equal treatment or treatment that is different, but which is considered equivalent in terms of rights, benefits, obligations and opportunities. Equity is a means to gender equality.
- ❖ **Gender roles:** these are learned activities, tasks and responsibilities which people are conditioned to perceive as male or female. Gender Roles can be categorized into 3; productive gender roles, reproductive gender roles, and community management gender roles. Also known as the women's triple role.
- ❖ **Grievance:** An issue, concern, problem, or claim related to the project (perceived or actual) that an individual or community group wants a company or contractor to address or resolve.
- ❖ **Involuntary resettlement:** The forceful loss of land resources resulting from project activity that requires individuals, families and/or groups to move and resettle elsewhere.
- ❖ **Impact:** A positive or negative effect that a project/an activity can have on an aspect of the environment.
- ❖ **Indirect impact:** A positive or negative effect that a project indirectly has on an aspect of the environment.
- ❖ **Integrated Pest Management (IPM)** –Use of a variety of biological, cultural, and chemical control methods in a cohesive management scheme designed to maintain pest populations at levels below those causing economic injury.
- ❖ **Lead Agency:** The agency with primary responsibility for the protection of the environment. For instance, the lead agency for environment matters in Uganda is Uganda Environment Management Authority (NEMA).
- ❖ **Micro-Nutrient Deficiencies:** Also known as “hidden-hunger”, a consequence of inadequate intake of essential micronutrients. Key micronutrients include: Iron, Zinc, Vitamin A and Iodine.
- ❖ **Mitigation measures:** The actions identified in an ESIA to negate or minimize the negative environmental and social impacts that a project may have on the environment.
- ❖ **Multi-sectoral factors:** Factors and pathways leading to undernutrition are diverse, complex, and most often interconnected.
- ❖ **Food security:** exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life

- ❖ Nutrition is a broad term referring to processes involved in eating, digestion and utilization of food by the body for growth and development, reproduction, physical activity, and maintenance of health. The term ‘malnutrition’ technically includes undernutrition and over-nutrition.
- ❖ Nutrition-specific interventions: Interventions that address the immediate determinants of fetal and child nutrition and development—adequate food and nutrient intake, feeding, caregiving and parenting practices, and low burden of infectious diseases.
- ❖ **Nutrition security:** is an outcome of good health, a healthy environment, and good caring practices as well as household food security; it is achieved when all household members, have physical, social and economic access to sufficient, safe and nutritious food that meet their dietary needs and food preferences, combined with a sanitary environment, access to clean water, adequate health services, and appropriate care and feeding practices to ensure an active and healthy life.
- ❖ **Operational policies (OPs):** Are environmental and social policies of the Bank are also known as the “safeguard policies” the mechanism for addressing environmental and social issues in our project design, implementation and operation, and they provide a framework for consultation with communities and for public disclosure.
- ❖ **Overweight and obesity:** A condition characterized by excess body fat, typically defined for children as a weight-for-height  $\geq 2$  SD or for adults, a Body Mass Index (BMI)  $\geq 25$
- ❖ **Patriarchy:** The word ‘Patriarchy’ comes from Latin word Pater, which means Father; most often refers to political power and authority of males in society. Father rule, it is the structuring of society on the basis of family units where fathers have primary responsibility for the welfare of and hence authority over their families.
- ❖ **Pollution:** contamination altering the state of purity (e.g., chemical effluent discharge into a surface water body).
- ❖ **Perpetrator:** A person, group or institution that inflicts, supports or condones violence or other abuse against a person or groups of persons.
- ❖ **Pest Management** – Any deliberative action to prevent or reduce the density or harmful effects of a pest population
- ❖ **Pesticide** – From “pest” and “cide” (a Latin derivative meaning killer), a natural or synthetic chemical agent that kills or in some ways diminishes the action of pests. It is a general term that includes herbicides, insecticides, nematocides, fungicides, antibiotics, rodenticides, plant growth regulators, etc.
- ❖ **Pesticide Management** – Deliberative actions to reduce the harmful effects of pesticides; includes legislation and regulations as well as safe application, storage, and disposal.
- ❖ **Pesticide Resistance** – Genetic qualities of a pest population that enable individuals to resist the effects of certain types of pesticides that are toxic to other members of that species.
- ❖ **Pests** – Commonly include harmful insects, mites, ticks, weeds, bacteria, fungi, rodents, birds, and others.
- ❖ **Project Brief:** The initial submitted document to NEMA to initiate the process that will lead to the issuance of the EIA certificate of approval.
- ❖ **Sexual abuse:** Refers to the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions. Therefore, SEA occurs against a beneficiary or vulnerable member of the community.
- ❖ **Sexual exploitation:** Consists of any actual or attempted abuse of a position of vulnerability, differential power, or trust, for sexual purposes, including but not limited to, profiting monetarily, socially, or politically from the sexual exploitation of another.
- ❖ **Sexual Harassment:** Defines any behavior of a sexual nature that affects the dignity of women and men, which is considered as unwanted, unacceptable, inappropriate and offensive to the recipient, and that creates an intimidating, hostile, unstable or offensive work environment.<sup>1</sup>
- ❖ **Survivor:** A preferred term for a person who has lived through an incident of Gender-Based Violence and Violence against Children.



- ❖ **Scoping:** The initial stage in an environmental assessment that determines the likely major environmental parameters that will be affected and the aspects of the project that will bring upon these effects
- ❖ **Screening:** An initial step when a project is being considered for environmental assessment. The screening is the determination of the level of assessment that will be conducted.
- ❖ **Significant effect:** An important impact on an aspect of the environment.
- ❖ **Stakeholder:** Any person or group that has an interest in the project or is likely to be affected by the project,
- ❖ **Stunting:** Also known as chronic malnutrition, stunting is a low height-for-age defined as more than 2 SD below the mean of the sex specific reference data;
- ❖ **Suspect:** A person believed to be guilty of a specified offence or crime without proof.
- ❖ **Undernutrition:** in general terms, is the outcome of the insufficient quantity and quality of food intake associated with diseases and poor childcare practices. It describes a range of conditions that can be classified as: stunting, or chronic undernutrition; wasting, or acute undernutrition; underweight; and micronutrient deficiencies.
- ❖ **Violence Against Children (VAC):** Refers to “any act of violence that results in, or is likely to result in, physical, sexual and psychological harm to children, whether occurring in private or in public. Other harmful acts are included such as early marriage”.
- ❖ **Wasting:** Also known as acute malnutrition, wasting is low weight-for-height defined as more than 2 SD below the mean of the sex specific reference data.

## ACRONYMS

ACDP	Agriculture Cluster Development Project
ACF	Action <i>contre La Faim</i>
APP	Acute Pesticides Poisoning
ATAAS	Agricultural Technology and Agribusiness Advisory Services
BCC	Behavioral Change Communication
BMI	Body Mass Index
CEDAW	Convention on Elimination of All Forms Discrimination Against Women
Cfs	Community Facilitators
COVID-19	Coronavirus Disease, 2019
CDOs	Community Development Officers
CSA	Climate Smart Agriculture
CSO	Civil Society Organization
DAOs	District Agricultural Officers
DEOs	District Environment Officers/District Education Officers
DEVAW	Declaration on Elimination of Violence Against Women
DHS	Demographic Household Survey
DNCC	District Nutrition Coordination Committee
DPs	Development Partners
DPAs	Districts Project Assistants
DPOs	District Production Officers
DRC	Democratic Republic of Congo
E&S	Environmental and Social
ESSF	Environmental and Social Screening Form
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESMT	Environmental and Social Management Team
GAFSP	Global Agricultural and Food Security Program
GBV	Gender Based Violence
GIIP	Good International Industry Practice
GMP	Growth Monitoring Promotion
GoU	Government of Uganda
GRM	Grievance Redress Mechanism
IEC	Information Education and Communication
HB	Hemoglobin
HIV/AIDS	Human Immuno Virus/Acquired Immuno Deficiency Syndrome
IR	Intermediate Returns
IRB	Iron Rich Beans
IS	Implementation Support
IMDG	International Maritime Dangerous Goods
IMPIC	Inter-Ministerial Project Implementation Committee
IPPC	International Plant Protection Convention
LF	Lead Farmers
LGs	Local Governments
LM	Lead Mothers
MDAs	Ministries, Departments and Agencies
MDD	Music Dance and Drama
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries

MoES	Ministry of Education and Sports
MoH	Ministry of Health
MoLHUD	Ministry of Lands, Housing and Urban Development
MoLG	Ministry of Local Government
MoWE	Ministry of Water and Environment
M&E	Monitoring and Evaluation
MNR	Micro-Nutrient Rich
NARO	National Agricultural Research Organization
NEMA	National Environment Management Authority
NEMP	National Environment Management Policy
NGOs	Non-Government Organizations
NWSC	National Water and Sewerage Corporation
OFSP	Orange Fleshed Sweet Potatoes
OHS	Occupational Health Safety
OP	Operational Policies
OPM	Office of the Prime Minister
PCU	Project Coordination Unit
PDO	Project Development Objective
PPE	Personal Protective Equipment
PIM	Project Implementation Manual
PG	Parent Groups
PMP	Pest Management Plan
SAICM	Strategic Approach to International Chemicals Management
SC	Steering Committee
SEA	Sexual Exploitation and Abuse SEP      Stakeholder engagement Plan
SH	Sexual Harassment
SOPs	Standard Operation Procedures
STR	Systematic Technical Review
UBOS	Uganda Bureau of Statistics
UIA	Uganda Investment Authority
UMFSNP-AF	Uganda Multi-Sectoral Food Security and Nutrition Project-Additional Financing
UPE	Universal Primary Education
USAID	United States Agency for International Development
VAC	Violence Against Children
VHT	Village Health Teams
WAHS	Water Sanitation and Hygiene
WHO	World Health Organization
WUC	Water Use Committees

**UGANDA MULTISECTORAL FOOD SECURITY AND NUTRITION PROJECT – (P149286)****Project Background**

Since January 15, 2015, the World Bank Group has been supporting the Uganda Multisectoral Food Security and Nutrition project, a five-year project implemented by the Ministries of Agriculture Animal Industry and Fisheries (MAAIF), Ministry of Education and Sports (MoES), Ministry of Health (MoH) and Ministry of Local Government (MoLG). The Office of the Prime Minister (OPM) is the coordinating entity. The project is financed through a US\$27.64 million Global Agricultural and Food Security Programme (GAFSP) grant and is aimed at increasing production and consumption of micronutrient-rich foods and utilization of community-based nutrition services in smallholder households. Albeit achieving significant progress to date, completion of the project implementation activities has been affected by COVID-19 in multiple ways making it uncertain and difficult to meet some of its targets with the limited remaining time and resources. Some of the activities have been either postponed or repeatedly delayed due to factors caused by COVID-19 Pandemic situation which were beyond the control of the project task team. These have included delays in procuring goods and services; conducting remaining operational research studies; designing & advancing the project end line, organizing regular financial management training, facilitating monthly nutrition education forum, inter-district knowledge sharing workshops, community gathering to receive agro-inputs for timely production/harvesting and marketing of Micro-Nutrient Rich (MNR) crops, and so on. These activities were affected as the project implementation complied with the Government's lockdown directives to manage the COVID-19 pandemic, including ban on public transport and implementation of standard operating procedures such as social distancing. Most of these activities were postponed several times in anticipation of the opening of lockdown. The resultant delays consumed time and resources. The affected activities are, however, critical for the achievement of the project development objective, improving adoption of project interventions, and ensuring sustainability of project results beyond the project life.

This multisectoral project is designed to demonstrate best practices around diversified nutritious crop production and consumption, and desirable health and hygiene practices at schools, adoption of those practices by surrounding communities and utilization of agriculture, health and nutrition services by households. The project uses a school as an entry point to transfer knowledge and skills to both the pupils and community members. In total, the project works through 1500 Universal Primary Education (UPE) schools located in 15 districts with high stunting burden and low dietary diversity score, and delivered its multisectoral nutrition services at primary schools and communities especially through the key community actors e.g., lead farmers (LFs), village health teams (VHTs), lead mothers (LMs), parent groups (PGs). The project is considered as a national flagship and offers multiple lessons as to how stunting can be addressed through a multisectoral approach in Uganda and elsewhere. In addition to delivering a range of agriculture, health and nutrition services, the project has built nutrition planning, implementation, monitoring and evaluation capacity of each participating sector and already established an institutional mechanism at all levels which allows multiple sectors to collectively achieve a common agenda of stunting reduction. Although the project has been working with both women and men, the two-year project extension period intends to integrate gender and build capacity around it at school, community and family levels to promote gender inclusiveness in all aspects of the project and bridge the gender gap between women and men. The key idea here is that aspects of nutrition and family dietary needs in most communities are often left to be determined by the female gender since they are the primary producers, processors and preparers of family meals and are charged with the responsibility of storage for

the sustenance and wellbeing of their families. This responsibility results from the women's reproductive role and it is mainly so because women are often entrusted with the roles of feeding and nurturing in most Ugandan societies. Thus, gender integration for this project is a key aspect.

The project has made good progress in achieving the overall implementation targets including progress towards achieving the project development objective, disbursement of US\$ 26.70 million representing 96.6% of the total grant amount as of August 08, 2020, and implementation of the approved work plan and budget. All the three project development objectives (PDO) indicators are on track; and among the intermediate Results (IR) indicators five have exceeded their targets, five are on track and only one is not on track but barring COVID-19, the end target may still be achieved. The PDO and overall IP rating have been maintained at Satisfactory following implementation support missions, a recent systematic technical review (STR) of project progress and results beyond the project's results framework undertaken, and regular follow-up that registered progressive improvement in internal financial control, capacity building, and project uptakes by the communities.

The project was originally scheduled to end on 31<sup>st</sup> December 2020. However, the COVID-19 pandemic affected the implementation of the project activities as indicated above. Considering the strong results of the UMFSNP, and following a request from the Government of Uganda, a one-year no-cost extension of the project closing date to December 15, 2021 was approved in October 2020, to mitigate the adverse effects of the COVID-19 pandemic. In response to a call for expression of interest to apply for additional GAFSP funding, the GoU submitted a formal application for additional funding to fully accomplish the planned activities, deepen the project's achievements, and implement new activities designed to strengthen the short- and medium-term responses to the impacts of COVID-19, thus enhancing sustainability of the results achieved to date. A total of US\$7,000,000 million has been approved from the GAFSP's Public Sector Window: COVID-19 Additional Financing. In addition, the GAFSP Steering Committee (SC), approved an extension of the project closing date to December 31, 2022. The Additional Financing is intended to support the short and medium-term responses to impacts resulting from the COVID-19 pandemic which will enhance the adoption of project interventions, ensuring sustainability of outcomes of outcomes beyond the project life.

The proposed AF will expand and build on the on-going UMFSNP activities to offset the above-mentioned COVID-19 impacts in the project areas, in the short to medium term. Specifically, the proposed additional financing seeks to address the COVID-19 impacts including: inadequate community awareness on importance of building immunity to fight COVID-19 through sufficient Water Sanitation and Hygiene (WASH) activities, relevant training, consumption of fruits/vegetables/micro nutrient rich foods; generation of income for continuation of nutrition improving activities through Nutrition Sensitive Saving schemes; and, establishment of certified multiplication centers for micronutrient rich crops to ensure availability of seed/planting material production, value addition, marketing and distribution. The planned activities under additional financing are fully aligned with the core project interventions, will sustain project operations with adequate support, and, will help retain and ultimately improve short-term changes in high-impact nutrition behaviors and practices known to contribute to reduction of stunting and underweight in under-2-year-olds in the medium-term.

**Proposed changes.** The AF will result in (3) major changes:

- a. an extension of the project closing date from *December 15, 2021 to December 31, 2022* to provide adequate time to implement the proposed activities;
- b. a change in component costs to reflect the expenditures for the additional activities; and

- c. a revision in the results framework (RF) that includes upward revision in the intermediate results (IR) targets and addition of new IR indicators to reflect the additional project activities

**The following key project elements remain unchanged:** The PDO; project components and sub-components; implementation arrangements, fiduciary, and environmental and social safeguards arrangements; and environmental and social safeguards category.

### **Project Target Areas and Beneficiaries**

The Uganda Multi-sectoral Food and Nutrition Project (UMFNP-AF) is being implemented in 15 selected districts that have a combined score of below 10 for highest stunting prevalence and lowest prevalence of adequate diversity from 7 agro-ecological zones: southwest farmland, highland ranges, northwest savannah grassland, Kyoga plains, L. Victoria crescent, western savannah grassland, and pastoral grasslands. The 15 were obtained from the 41 potential ACDP Districts under the 12 clusters across ten agro-ecological zones. The districts were ranked based on the following considerations:

- a. High prevalence of stunting in under five children; and
- b. Low dietary diversity.

The National Nutrition Steering Committee selected the following project districts: Iganga, Bugiri, Bushenyi, Isingiro, Kabale, Kabarole, Kasese, Kiryandongo, Kyegegwa, Kyenjojo, Maracha, Namutumba, Nebbi, Ntungamo, and Yumbe. The project will continue to support the current 15 districts and 1,500 primary schools where project implementation arrangements already exist. This strong foundation will allow the project to provide continuous support to project interventions and rapidly address new activities designed to mitigate COVID-19 impacts. The additional funding will target the current direct and indirect beneficiaries of the project.

The primary beneficiaries include;

- 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.

Secondary beneficiaries will include primary school teachers and school children; Village Health Teams (VHTs); agriculture, education, and health line ministry extension workers (at central, district, and sub-county levels); and District Nutrition Coordination Committees.

### **Proposed Additional Financing (AF) Activities and how these Address the Problem Identified**

The proposed AF project will have three components:

- a. Component-1: Delivery of multi-sectoral nutrition services at primary school and community levels (US\$4.0 million);
- b. Component-2: Strengthening capacity to deliver proposed nutrition interventions relevant to this project (US\$2.0 million); and
- c. Component-3: Project management, monitoring, evaluation, and knowledge generation (US\$1.0 million).

**Safeguards implementation status:** Before the UMFSNP appraisal, the ESMF and the PMP were prepared, cleared, and disclosed both locally and through the World Bank's external website in October 2014. The UMFSNP has a committed PCU, and robust strategies, structures, and tools in place at district, schools, and community levels to implement the ESMF and PMP. At district level, District Environment Officers and District Community Development Officers, and at sub-county level, Extension/Community Development Officers are designated as environment & social safeguard officers/focal points to closely

follow and oversee proper implementation of the ESMF. The PCU has organized relevant training on ESMF/PMP for 18,800 participants at different levels, including the environment & social safeguard officers and other key stakeholders of the project. At the schools, SOPs, relevant training manuals and environmental and social screening tools are in place to implement the ESMF/PMP. The project also entails community engagements and therefore the social accountability framework and its requirements are being adhered to, monitored, and reported on. The project conducts annual refresher trainings on the ESMF, and monthly awareness raising training through PG members for the community level project key actors. To directly get the real-time information from the clients/beneficiaries, the UMFSNP team adopted the Geo-Enabled M&E technology, designed to collect data from the project sites using smart phones provided by the project. This monitoring system ensures due diligence in management decisions and has enhanced the environmental and social screening capacity of the project team. The Bank has also strengthened its supervision role to ensure prompt response and advice to any safeguards issues as they arise.

Through this project management arrangement, environment safeguards, especially handling and disposal of agrochemicals have been elaborated in the SOPs and the project's training manual, in line with the provision in the ESMF, PMP, PIM and establishment of woodlots and fruit orchards has been encouraged. Following recommendations from the implementation support (IS) missions, the key project stakeholders and community actors have participated in the relevant orientation and refresher training. There is follow-up with the districts to regularly collect waste from the project's sites (school and community) for safe disposal; ensure regular (quarterly) environment and social screening of the project sites by the districts; and recording the screening using the Environment and Social Impact Assessment Form developed by the Ministry of Agriculture Animal Industry and Fisheries (MAAIF) the lead implementing ministry. The project also made improvements in the safeguards' compliance report template to improve project compliance with safeguards requirements.

The project has in place a robust and fully functional GRM at district, sub-county, and school levels in compliance with the PIM. It is also gender sensitive and accessible to the project affected people as confirmed by the registers and logbooks at the districts and schools. GRM committees are in place and operational at all levels of project implementation. A local GRM at schools caters to the community. Complaints have been handled and signed-off by the village leaders and complainants. The cases/complaints are forwarded upwards, if not resolved at community level. The GRM has also been included in the monitoring tool of the project and is being continuously followed up on through the multisectoral supportive supervision. The UMFSNP GRM will be strengthened and sustained to continue to better serve communities by leveraging the existing grievance management system and will benefit from the Geo-Enabled M&E technology, designed to collect data from the project sites using smart phones provided by the project. It will also continue to be accessible to local communities and other stakeholders to allow for a clear communication channel for any individual or group of people who believe that they may have been adversely impacted by the UMFSNP interventions. Operationally, the PCU will update the GRM for better reporting, tracking, and logging of grievances, and further inform the key project actors about the stakeholder engagement to reduce thematic grievances through different meetings e.g., nutrition forum, refresher training, etc. The mechanism will be used regularly to receive, review, and resolve any issues and concerns related to the UMFSNP activities. All grievances will be monitored and reported monthly.

### **Key Project Activities with Environmental Safeguards Implications**

**Details of AF Activities and Scope of Assessment:** The project description, PDO, project components and activities and implementation arrangements will remain the same. New project activities will continue to focus on providing access to nutrition services as well as finance for the project districts, primary schools, and project beneficiaries at community level, but with a focus on mitigating the impact of COVID-19. As the current UMFSNP is almost fully (97%) disbursed, the additional financing will allow for a scaling up of project activities in the existing project geographies to address emergency needs triggered by COVID-19.

In summary, the salient physical project activities relevant to environmental and social safeguards analysis apply to all the project components including but not limited to upscaling of community-based nutrition interventions, extension and capacity building services, sustainability, M&E, and Project management. The main activities involve establishment and operation of demonstration gardens both in selected progressive farmer homes and at primary schools (Components 1&2) and capacity building activities across all components. However, though these demonstration gardens are expected to be limited in size to 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. The Capacity building related activities have a bearing on COVID-19 risks of spreading the infection among community members if the established Standard Operating Procedures are not mainstreamed and followed/implemented. Overall, the environmental and social impacts are expected to be minimal and not adverse, site specific and readily manageable, including the COVID-19 related impacts, provided the mitigation measures are implemented. Schools hosting the demonstration gardens were 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. The respective District Agricultural Extension services shall continue to be rendered to the schools and selected farmers to provide technical guidance for the management of the demonstration gardens.

The overall past environmental and social safeguards performance rating is **‘Satisfactory’**, which has been the same rating since effectiveness. It has commendably managed project-related risks through the set up and implementation of a robust Environmental and Social Management Framework (ESMF). According to its ESMF and Pest Management Plan (PMP) which is attached to the former, the project implementation teams monitor, assess, and proactively manage/mitigate potential environmental risks of the project activities. The project closely follows a detailed Project Implementation Manual (PIM) that outlines project related roles and responsibilities, eligibility, and procedures related to the implementation and monitoring of the UMFSNP’s nutrition services in compliance with the World Bank safeguard policies. Over the past five years, the project has significantly improved the capacity of key multisectoral project actors such as District Environment Officers, Sub-county Extension Officers, Science Teachers, and Lead Farmers in the project areas, to comply with and strengthen environmental and social safeguards through initial basic and periodic refresher trainings. The project developed Standard Operating Procedures (SOPs) as a guiding tool for establishing school demonstration gardens and a comprehensive training manual that elaborated relevant sections in line with the provision in the Environment and Social Management Framework and Pest Management Plan.

The key actions taken to manage environmental and social risks comprise: effective implementation of the Environment and Social Management Plan (ESMP) including environmental and social screening of



all demonstration gardens and adoption of good practices in handling and disposal of agrochemicals<sup>2</sup> as described in the SOPs; establishment of woodlots and agroforestry (including fruit trees) practices at Lead Farmers' (LFs) land and school gardens; proactive implementation of integrated pest management options including early planting, improved and pest resistant varieties; purchasing and providing all schools with safe storage boxes for chemical containers while awaiting collection for safe disposal; mandatory use of protective gear at all schools; training on ESMF for up to 18,840 key actors of the project; improve systematic project's safeguards compliance reporting; adherence of the Grievance Redress Mechanism (GRM) at all levels of implementation; and ensuring active participation by more women (approximately 60% of direct project beneficiaries) as lead mothers and community stakeholders in project activities; and promotion of climate smart agriculture (CSA) practices at schools and household levels. All these are managed by strong project monitoring through geo-enabled M&E technology in smartphones.

## **THE ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK**

### **Its Purpose and Scope**

One of the requirements for the processing of this additional financing is to update the Environmental and Social Management Framework (ESMF) to guide the assessment and management of Environment and Social Aspects associated with the project. This assignment therefore is aimed at updating the ESMF of the UMFSNP as a requirement for receiving the additional financing, with specific objective of realigning the management project Environmental and Social aspects of the proposed AF-activities to conform to the requirements of World Bank's Environmental and Social Safeguards Policies, including management of COVID-19 related impacts.

The parent project has been under implementation for over five years using the previous safeguards policy framework. The proposed AF activities will build on and strengthen on-going activities which will not raise the environmental and social safeguards category of the Project above the current Category B as defined under OP/BP 4.01. The remedial environment and social risks and impact of the AF activities would not be significant as described under OP/BP 4.01. They will continue to be site-specific, predictable, short-lived and can be managed through the existing Environment and Social Management Framework and Pest Management Plan, and other instruments as needed, and therefore remain "Moderate". No other environmental risks are expected. The UMFSNP is substantially in compliance with all the environmental and social safeguards requirements and there will be little material change in the activities under the three components which will be implemented under additional financing, and the existing safeguards framework has proven entirely satisfactory to cover UMFSNP activities to date.

Since the proposed AF project activities are largely meant to upscale and consolidate the ongoing UMFSNP activities while mainstreaming COVID-19 impacts and measures, it was deemed appropriate to update ESMF of UMFSNP to guide implementation of AF-Activities as well. Component 1 involves use of pesticides in school demonstration gardens and selected farmer groups/homes in order to improve productivity. The ESMF provides guidance on how environmental and social aspects of proposed AF-project activities shall be identified, assessed, and managed. The ESMF provides a framework to assist project implementers to screen the projects at planning stage and institute measures to address adverse environmental and social impacts during implementation, including COVID-19 Standard Operating Procedures as guided by Ministry of Health.

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<sup>2</sup> For example, waste containers, such as pesticide sachets and bottles that have been collected by LFs/ teachers and they have been handed over to the districts for safekeeping and sound disposal.

This ESMF has therefore been updated as appropriate to largely cater for this focus/purpose, and especially in line with the World Bank's Environmental and Social Safeguards Policies. This ESMF outlines the framework and mechanisms for environmental and social impact screening, determining extent of required environmental assessment and assessment of environmental and social impacts arising from proposed project implementation including stakeholder engagement and grievance redress, and gives generic guidance on appropriate mitigation measures, and institutional arrangements for monitoring. Where necessary, site specific Environmental and Social Management Plans shall be prepared during project implementation. In terms of COVID-19 outbreak response, a National Response Plan has been prepared by Government of Uganda (Ministry of Health) and follows set Standard Operating Procedures (SOPs) recognized by World Health Organization, which this project will refer to and make use of.

### **Preparation of ESMF**

The ongoing UMFSNP ESMF has been adapted for AF-Activities and accordingly updated to take into consideration COVID-19 risks and impacts and in accordance with applicable World Bank Environmental and Social Safeguards Policies. The ESMF was also updated while taking into consideration the Uganda environmental impact assessment requirements. The update of the ESMF involved data-literature reviews; field studies, key stakeholder and public consultations and discussions with relevant sector institutions, including districts, private sector, statutory agencies, local communities and primary schools in project Districts.

The ongoing UMFSNP has robust occupational health and safety procedures in place to protect the projects' key actors and a grievance redress mechanism to track and address identified issues. In collaboration with the implementing ministries, the project will engage various stakeholders and provide training on environment and social management requirements (based planned project activities and field observations) for the project staff, the District Environment Officers and District Community Development Officers at district and sub-county Extension/Community Development Officers at sub county levels, as environment & social safeguard officers/focal points to follow and implement the ESMF properly. The training covers relevant aspects on environment and social management requirements, health impacts and tips if/while handling agrochemical waste. Additionally, relevant training manuals and SOPs have been disseminated to all beneficiary districts, schools, and communities. The new activities to be financed under the AF will cause little material change in the activities under the three components. The expected impact of the scale-out to additional areas will be within the 15 districts implementing the parent project and therefore are similar. The AF is proposed to trigger the same policies as the parent project, including: Environmental Assessment (OP/BP 4.01) and Pest Management (OP 4.09). An environmental and social screening tool currently in use will be reviewed and updated for appropriateness.

### **COVID-19 Specific Risk Considerations.**

Based on the task team and PCU's assessment to date, the additional environmental risk posed by COVID-19 to the additional financing activities is very limited. Additional information on indirect impacts will be collected through the assessments described in the previous paragraph above.

**As mandated by the GoU, the UMFSNP is adhering to the national COVID-19 containment protocols.** Project monitoring has shown that UMFSNP districts, schools and other project sites are complying with the Government of Uganda's hand washing (with soap or sanitizers) and social distancing policies by reducing the number of people gathered in the project activities at any given time where applicable, and temporarily halting operations where health risks are posed. All the participating 1,500 primary

schools of the 15 project districts remained closed from mid-March to December 2020. These schools are re-opening sequentially, following the protective health measures guided by the Ministry of Health (MoH) and Ministry of Education and Sports (MoES). Given that UMFSNP interventions are largely school centered and community focused they need to abide by the hand washing, social distancing, and other health requirements during interactions at different nutrition forum/meetings. Based on project monitoring and survey data 10% of planned activities in the delivery of multisectoral nutrition services at primary schools and communities, 11% of capacity enhancing activities to deliver nutrition interventions, and 14% of project management activities including knowledge generation were either postponed or repeatedly delayed due to factors caused by the COVID-19 pandemic situation and/or due to COVID-19 related directives by the government.

**Standard labor related risks are covered by the Occupational Health Safety (OHS) provisions in the existing safeguard instruments. The Occupational Health Safety Act, 2006** provides for the prevention and protection of persons at all workplaces from injuries, diseases, death, and damage to property. The existing ESMF provides for provision of safety gear for workers during implementation at UMFSNP schools and selected Farmer Groups activities. In addition to supporting clients' access to finances during the COVID-19 crisis, the project also supports UMFSNP-AF activities in building resilience and compliance with social distancing practices. This includes a transition from in-person to remote project meeting and training; reduced number of participants in community nutrition forum; using Personal Protective Equipment (PPE, including those against COVID-19 such as nose masks) and WASH facilities when/if needed (e.g. handling agro-chemical waste, cooking demonstrations, etc.); increasing remote monitoring & supervision for data collection using geo-enabled smart phone apps; and intensifying community sensitization through radio & other media messages. The PCU and UMFSNP district project assistants (DPAs) are also maintaining contact with the community facilitators (CFs) via zoom meeting, phone calls, and messaging. This assistance is aiding districts and communities to continue operations while complying with health and safety directives by the government of Uganda. Further actions will be taken as the situation evolves to encourage and support safe approaches to operating under COVID-19 conditions.

**Gender based violence (GBV).** A GBV/Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH) assessment would not be necessary as GBV/SEA/SH have been criminalized in Uganda through the National Gender Policy of 1997 and law enforcement mechanisms are in place and operational, up to the lowest administration level. In the Project, the ESMF is to guide and direct the planning, resource allocation and its implementation with a gender perspective. The adoption of the gender policy has facilitated Uganda's gender mainstreaming programs in all sectors of the economy. UMFSNP has already mainstreamed gender dimensions into its formulation, planning and implementation framework, hence, its compliance with the National Gender Policy for Uganda. Although the assessed GBV risk to this project is low, the survivor centered approach and related referral pathways will be prescribed in the project GRM.

#### **KEY ECONOMIC AND LIVELIHOOD ACTIVITIES IN PROJECT AREA**

Agriculture is the main economic activity in the proposed UMFSNP areas with a bias towards food crops such as beans, sorghum, millet, maize, cassava, sweet potatoes, Irish potatoes, ground-nuts, bananas; cash crops such as coffee; fruits and vegetables, such as passion fruits, tomatoes, onions, pineapples and cabbage in addition to cattle keeping. Important to note here is the vital role women play in agricultural production among small scale farmer households in Uganda where women make more than half the work force, producing food for both subsistence and commercial purposes, thus contributing greatly to family

livelihood, sustenance and nutritional needs. A higher proportion of women (77%) than men (62%) work in farming. Hence the need to integrate gender concerns into the project so as to ensure sustainability beyond project life.

### **Policy Framework**

Under the project the following applicable policies have been reviewed:

- a. The National Environment Management Policy 1994 (NEMP);
- b. The National Development Plan 2010-2015;
- c. The Uganda Vision 2040;
- d. National Guidelines for management of covid-19
- e. Uganda Food and Nutrition Policy, 2003
- f. National Agricultural Policy (NAP) 2013
- g. National Strategy for youth Employment in Agriculture 2014
- h. Gender Analysis Report for Project Components and Commodity Value-Chains 2014
- i. National Agri-food Systems and COVID-19 in Uganda: effects, policy responses, and long-term implications 2020
- j. The National Gender Policy, 1997; and
- k. The National HIV/AIDS Policy, 2004.

### **The Legal Framework**

The applicable legal instruments to the UMFSNP-AF project include:

- a. Constitution of the Republic of Uganda, 1995
- b. The National Environment Act, 2019
- c. The Agricultural Chemicals (Control) Act, No. 1 of 2006
- d. The Occupational Safety and Health Act, 2006
- e. Control of manufacture, etc. of agricultural chemicals Act Cap 29
- f. The Agricultural Seeds and Plants Act (Cap 28)
- g. Environmental Impacts Assessment Regulations, 1998
- h. National Environment (Waste Management) Regulations, 1999
- i. The Local Governments Act (Cap 243)
- j. The Public Health Act, 1964
- k. Uganda National Bureau of Standards Act, Cap 327

### **Related International Conventions and Agreements**

- a. The Basel Convention on the Control of Trans-boundary Movement of Hazardous Wastes and their Disposal 1989;
- b. Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous
- c. Chemicals and pesticides in International Trade, 2004;
- d. The International Maritime Dangerous Goods (IMDG) Code;
- e. Strategic Approach to International Chemicals Management (SAICM);
- f. IFC EHS Guidelines for Pesticide Manufacturing, Formulation, and Packaging;
- g. FAO Guidelines on Good Practice for Ground Application of Pesticides, 2001; and
- h. The Convention on Elimination of All forms of Discrimination Against Women (CEDAW).

### **World Bank Environmental and Social Safeguards Policies**

In accordance with the World Bank Environmental and Social Safeguards Policies, the following Operational Policies are applicable to the UMFSNP project: OP 4.01 Environmental Assessment, and

OP 4.09 Pest Management. The Project has been assigned **Environmental Assessment (EA) Category B**, given the fact that project activities do not pose high or substantial risks and impacts. The major safeguards focus in UMFSNP-AF will be on the minimal use and management of pesticides and agricultural chemicals at the selected farmers and schools' gardens, which are small in size (half-acre per selected school or homestead). While implementing these activities (COVID-19 risks associated with community gatherings), the project shall follow set operational guidance by the Ministry of Health, and in general by the Government of Uganda, while cognizant of WHO overall guidelines on management of COVID-19 pandemic. Overall, the environmental and social impacts are expected to be minimal and not adverse, site specific and readily manageable. Given this explanation, the project is considered to pose Moderate E&S risks and impacts, and therefore continues to be placed under EA Category B. Since site specific assessments cannot be carried out for the many and undefined sites for project activities, an ESMF was prepared for the parent project, and this has been updated to include COVID-19 activities.

## POTENTIAL PROJECT IMPACTS AND MITIGATION MEASURES

### Positive Impacts

The positive impacts of the project activities include amongst others the following:

- a. ***School gardens can be an effective platform for community engagement***, mentorship and social change. Project experience indicates that engagement of parents is important to build the linkage between schools and parents.
- b. ***Increasing agricultural production*** (e.g., increasing commercialization of agricultural outputs) may improve incomes but is not effective at improving nutrition outcomes. One such intervention is integrating gender into the program to help address some of the Gender Based Violence (GBV) issues that might arise as a result of improved incomes from agricultural production for women and men thus, calling for gender inclusive trainings and sensitizations that will lead family cohesion, joint decision making, joint budgeting and general development and improved nutrition.
- c. ***Delivery of multi-sectoral health, agricultural and education interventions***: In particular, the proposed measures under UMFSNP will have longer term impacts in the community by increasing the adoption rates of project interventions; consumption of MNR foods to strengthen immunity; upholding new-normal behavior e.g., sanitation practices, social distancing, etc.; changing superstitious mindset; and therefore, reducing malnutrition among the target groups.
- d. ***Reducing risks of COVID-19 and diarrheal diseases***: Scaling up WASH interventions at community and school levels including procurement of WASH facilities, media campaigns, printing materials for WASH will go a long-way to reducing risks of COVID-19 and associated oral diseases. This will improve the awareness and capacity of the communities on COVID-19 situation and reduce the risk of infection in group meetings and schools.
- e. ***Improvement in Micro-Nutrient Rich Crops in the communities***: This will be facilitated through improved multiplication and adoption rates of the MNR crops among participating community members. Increasing coverage of community level production interventions of Orange Fleshed Sweet Potatoes (OFSP), Iron Rich Beans (IRB), fruits and vegetables and intensifying 'nutrition campaigns' about their consumption will likely have strong linkages to immune system development among project beneficiaries.
- f. ***Potential increased productivity at household levels***: Providing Support to the project's organized community groups with interventions such as planting materials (for MNR crop production) and savings schemes is aimed at boosting livelihoods at households their livelihoods through income generating activities. This will improve the capacity of farmers to afford inputs and therefore increased productivity, production and consumption.

- g. **Improvement in the quality of the food, improve farmers' incomes and promote product diversification:** The planned project interventions targeting strengthening seed systems for multiplication of MNR crops and developing value-chains including strengthening market linkages as well as a focus on capacity building support to organized community groups to intensify value addition for bio-fortified crop varieties in order to boost incomes and improve the quality of the food products to ensure 'food security and nutrition' will all lead to improved nutrition and product diversification which other achievement is better post-harvest handling and food preservation.
- h. **Empowerment of beneficiary groups:** Developing advocacy and behavioral change communication (BCC) strategy towards increased uptake and adoption of project technologies at national and community levels. In addition, the project targets strengthening and sensitization of nutrition related school clubs, organizing nationwide 'Nutrition Olympiad' involving school children, and music dance and drama (MDD) as a channel to disseminate recommended nutrition messages all these will build capacity of beneficiaries and uptake of appropriate innovations and technologies in the communities.
- i. **Enhanced community adoption of nutrition interventions:** This is envisaged to be achieved through the planned strengthening and intensifying community demonstration activities including community mobilization, nutrition forum, cookery demonstrations, growth monitoring and promotion (GMP) and WASH interventions.
- j. **Potential increase production, multiplication and consumption of MNR crops at school and communities:** Supporting schools to replicate production of MNR crops beyond the demonstration gardens using a subsidy-based approach will likely increase production, multiplication and consumption of MNR crops at school and communities.
- k. **Expanding nutrition commodity-specific interventions:** Expanding nutrition commodity-specific interventions, especially IFA supplementation to adolescent girls in schools is new and a much needed, and highly appreciated intervention in Uganda, which has been badly affected by the COVID-19 lockdown. This will involve the procurement of more IFA tablets to meet the huge demand of micronutrient deficiencies in the project areas. This will inform the stakeholders about the impact of IFA on the recipients and therefore inform future interventions.
- l. **Optimal use of existing administration structure in delivery of services:** The existing project will sustain and deepen project outcomes through strategies of using existing Government structures such as districts, sub-counties, schools and health facilities. In addition, the project will strengthen its synergies with other projects including the on-going Agriculture Cluster Development Project (ACDP), which provide agricultural inputs to farmers, and the planned climate smart agriculture (CSA) project. Furthermore, the project also seeks to engage CSOs e.g., SNV Netherlands Development Organization in some districts for community mobilization and effective operationalization of Districts Nutrition Coordination Committees (DNCC) to strengthen monitoring and expedite the implementation.
- m. **Bringing together women and men, boys and girls on board, will promote cohesion** at family level and cohesion between individuals, spouses, families, schools and communities at large which will in turn lead to joint planning and joint decision making. Overall, this inclusive approach will have a positive impact on gender relations leading to improved decision making, elimination of GBV and thus, better quality of life for both men and women resulting from quality decisions jointly made which will result into improved nutrition, improved incomes and general development will be experienced within households and the community at large.

### Negative Impacts

The likely negative environmental impacts of UMFSNP are limited and will mainly arise from the establishment and operation of demonstration gardens at selected schools and lead farmers premises where application and use of pesticides and fertilizers may be undertaken. The main project activities revolve around the establishment and operations of demonstration gardens on at least one-half acre of

land both in each of the selected progressive farmers' plots and primary schools. The demonstration gardens will use fertilizers, pesticides, and herbicides which, when mishandled, may pose negative environmental, health, safety, and social issues. However, largely on account of the small size of the plots to be used, and the expected close supervision on the use of the chemicals planned through the engagement of district agricultural extension agents, the likely impacts are expected to be minimal, not adverse, site specific, and also readily manageable. When not properly applied and handled, pesticides may lead to pollution of water sources, health impacts because of poor safety measures, and so on. A pest management plan as part of the ESMF has been prepared to address potential related issues.

There will be risks and impacts posed by COVID-19 pandemic especially during implementation of capacity building and extension activities which require physical outreach to farmers, pupils and teachers, host communities and officers from the participating MDAs. The risks associated with COVID-19 shall be mitigated by following standard operational standards set by the Ministry of Health, and in general by the Government of Uganda, while cognizant of WHO overall guidelines on management of COVID-19 pandemic.

Family and social tensions may arise if gender and social relation factors like GBV are not taken into consideration during the project life cycle. Such tensions may further marginalize and disadvantage especially the female gender, children, and other vulnerable family members due to long existing historical factors emanating from the patriarchal nature of our society where men are given power over women and naturally inherit property. This has often left women and girls in a marginalized position in terms of access to and control of property, ownership of resources as well as decision making within society. Thus, integrating gender into the projection is bound to lead to a greater sense of inclusion and other positive impacts for men and women, girls and boys and other disadvantaged groups. The risks associated with GBV/SEA will be mitigated with the already existing gender policy in place by Ministry of Gender and other guidelines already in use. These measures will be popularized and disseminated under the SEP along with accessible referral pathways.

### **Institutional and Coordination Arrangements**

The overall responsibility for the implementation of the safeguard requirements will lie with MAAIF through the PCU with leadership to be exercised by the Project Coordinator. The PCU will work in close collaboration with MoWE (NEMA and the Directorate of Environmental Affairs), NGOs, Development Partners (DPs) and International Organizations as well as the relevant District Officials through the DNCC. Depending on existing capacity at each of these institutions and agencies, qualified professionals will have to be assigned the responsibility of managing the implementation of the safeguard activities. These professionals will constitute the Environment and Social Management Team (ESMT) at the national level. At the PCU, ACDP Safeguards Specialists (Environmental and Social) shall support project implementation. At the District level, the District Environment Officers (DEOs) and District Community Development Officers (CDOs) will be designated as Project Environmental and Social Focal Persons and they will work closely with District Production Officers (DPOs), and District Agricultural Officers (DAOs) of each of the beneficiary districts as will be discussed in the project implementation manual.

### **Capacity Building**

Gender inclusive capacity building will be essential for effective implementation of the ESMF. It is also important to note that the UMFSNP is closely linked to the ongoing Agriculture Cluster Development Project (ACDP – P145037) and both projects being implemented simultaneously in some districts. The

Environmental Specialist and Social Development Specialist of ACDP PIU will also support implementation of UMFSNP. To ensure effective implementation of project activities, as provided in this ESMF, capacity enhancement is recommended for Project Task team (PIU), participating MDAs in areas of:

- a. EIA process in Uganda
- b. Environmental Health-impact relationship
- c. World Bank Environmental and Social Framework – Implementation requirements of the specific/applicable Environmental and Social Standards
- d. Environmental monitoring
- e. Stakeholder engagement
- f. Grievance management
- g. Gender Based Violence (GBV), Sexual Exploitation and Abuse (SEA), and Violence Against Children (VAC)
- h. Capacity building on the importance of family cohesion, joint family decision making, joint budgeting and joint marketing at family, community and school level.
- i. Capacity building of staff to have the ability to identify gender issues and concerns and ability to address them
- j. Capacity building on waste management by farmers, schools, host communities and PIU/MDAs.
- k. COVID-19 Standard Operating Procedures.

**Table ES1: Budget estimate for implementing the ESMF**

Item	Cost in USD		Remarks
	Year 1	Year 2	
a. Mobilization and training in ESMF E&S requirements, use of pesticides and general project management including GRM issues coordination (targeted include implementing agencies and LGs)	50,000	40,000	This will be undertaken during the launch of the project and continuous on a quarterly basis in order to ensure the E&S requirements are adhered to during project implementation.
a. Supervision and monitoring by district officers (responsible for social and environment affairs: the DAO, DEO) and coordination by MAAIF & OPM.	40,000	40,000	Close monitoring shall be undertaken by the PIU, MDAs and participating Districts, on monthly and quarterly basis.
a. Gender inclusive social and environmental sensitization and training for communities and participating farmers and schools, about application of and safety measures when using of pesticides, COVID-19 prevention measures and implementation of Standard Operating Procedures (SOPs).	50,000	40,000	Sensitization shall be carried out by the Extension staff, and Health workers from project host districts, backstopped by national level task forces.
a. Lumpsum support for collection and disposal of used pesticide containers, by licensed hazardous waste handling companies, coordinated by MAAIF and Local Governments	40,000	40,000	This will cover all participating districts and regional collection centers shall be established in collaboration with NEMA.
a. Project Closure Environmental and Social Audit		75,000	To ensure systematic documentation of implementation and management of EHS aspects at the end of the project implementation, feeding into the Project Completion Report.
<b>Annual Total</b>	<b>180,000</b>	<b>235,000</b>	



Total Budget Estimate for ESMF Implementation	415,000
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## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

The UMFSNP will have several positive social impacts for people. UMFSNP is expected to have significant positive impact on social and poverty conditions by increasing productivity and production of the selected commodities as well as focusing to reach and promote smallholding farmers. UMFSNP will promote better nutritional practices among the communities and greatly improve the general socioeconomic wellbeing, gender and family relations, health status and reduce stunting plus malnutrition in the long run. The process has been designed to ensure the inclusion of women and youth in decision making and the management of farms (and/or agribusiness) enterprises with a gender focus.

The Project has been assigned **Moderate** Environmental and Social Risk Classification (ESRC), given the fact that project activities do not pose high or substantial risks and impacts. The major safeguards focus in UMFSNP will be on the minimal use and management of pesticides and agricultural chemicals at the selected farmers and schools' gardens, which are small in size (half-acre per selected school or homestead. While implementing these activities (COVID-19 risks associated with community gatherings), the project shall follow set operational guidance by the Ministry of Health, and in general by the Government of Uganda, while cognizant of WHO overall guidelines on management of COVID-19 pandemic. Overall, the environmental and social impacts are expected to be minimal and not adverse, site specific and readily manageable.

### Recommendations

Development of guidelines for pesticides use and management: It is highly recommended that the guidelines be developed as part of the Projects Operational Manual guidelines for use and disposal of pesticides. This will provide quick reference and guidance to the project implementers and beneficiaries on how to purchase, transport, use and apply, safely dispose of pesticides. The Project will undertake extensive sensitization and training of project stakeholders on COVID-19 risks and impacts, including the application of Standard Operating Procedures.

As discussed in the ESMF, there is need to strengthen the mainstreaming of gender concerns in the project so as to achieve a leveled playing ground on which men and women and girls and boys as well as other vulnerable groups can equally, and jointly participate meaningfully in the planned projects which is aimed at enhancing the quality of life of the beneficiary population. However, if gender disparities and GBV are not addressed, this project with its good intentions could do more harm than good. Therefore, improving the well-being of women, families, households, and communities should be a commitment and priority.

It is noted that, the project has made effort to effectively mainstream environmental and social safeguards into its plans and activities including reporting.

## 1 UGANDA MULTI-SECTORAL NUTRITION PROJECT (P149286)

### 1.1 INTRODUCTION

This section provides a brief description of the proposed Uganda Multi-sectoral Food Security and Nutrition Project (UMFSNP-AF), covering its objectives, target areas, project activities, under Additional Financing.

#### 1.1.1 PROJECT DEVELOPMENT OBJECTIVE

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. The project focus is on promoting short-term changes in high-impact nutrition behaviors and practices that are known to contribute to medium- and long-term stunting reduction.

**The following key project elements remain unchanged:** The PDO; project components and sub-components; implementation arrangements, fiduciary, and environmental and social safeguards arrangements; and environmental and social safeguards category.

**Proposed changes.** The AF will result in (3) major changes:

- a. an extension of the project closing date from *December 15, 2021 to December 31, 2022* to provide adequate time to implement the proposed activities;
- b. a change in component costs to reflect the expenditures for the additional activities; and
- c. a revision in the results framework (RF) that includes upward revision in the intermediate results (IR) targets and addition of new IR indicators to reflect the additional project activities.

#### 1.1.2 TARGET AREAS AND BENEFICIARIES

The Uganda Multi-sectoral Food Security and Nutrition Project (UMFSNP) was designed to be implemented in the same areas and districts where the Agriculture Cluster Development Project (ACDP) is being implemented. The ACDP is being implemented in the Districts of Masaka, Mpigi, Rakai, Iganga, Bugiri, Namutumba, Pallisa, Tororo, Butaleja, Kapchorwa, Bukwo, Mbale, Soroti, Serere, Amuru (including Nwoya), Gulu, Apac (including Kole), Oyam, Lira (including Dokolo), Kabarole, Kamwenge, Kasese, Kyenjojo (including Kyegwegwa), Mubende, Kibaale, Hoima, Masindi, Kiryandongo, Ntungamo, Kabale, Bushenyi, Isingiro, Nebbi, Arua (including Nyadri) and Yumbe.

However, UMFSNP project is being implemented in 15 selected districts of ACDP that have a combined score of below 10 for highest stunting prevalence and lowest prevalence of adequate diversity from 7 agro-ecological zones: southwest farmland, highland ranges, northwest savannah grassland, Kyoga plains, L. Victoria crescent, western savannah grassland, and pastoral grassland. The 15 were obtained from the 41 potential Agriculture Cluster Development Project (ACDP) Districts under the 12 clusters across ten agro-ecological zones. The districts were ranked based on the following: high prevalence of stunting in under five children; and low dietary diversity.

Within the ACDP clusters, the Project selected 15 districts to participate based on LG readiness for implementation, using the most recent Ministry of Local Government (MoLG) report, "Annual Assessment of Minimum Conditions and Performance Measures for Local Governments". While most districts met the minimum standards, it was important for the project to give weight to particular performance criteria and staff functional capacity. The elements of performance measures which bear particularly on project selection are those that address staff functional capacity, including: Development planning and linkages

with the district budget; budget allocation performance; procurement capacity and performance; gender mainstreaming performance; council executive and finance and planning committee performance; functionality of the LG agriculture, education, and health Directorates; functionality of Natural Resources Directorate and performance with the LoGICS monitoring system. New commitments and budget planning for a district will be contributing factors. The National Nutrition Steering Committee selected the following district: Iganga, Bugiri, Bushenyi, Isingiro, Kabale, Kabarole, Kasese, Kiryandongo, Kyenjojo, Maracha, Namutumba, Nebbi, Ntungamo, and Yumbe.

The additional funding will target the current direct and indirect beneficiaries of the project. The primary beneficiaries include; (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. Secondary beneficiaries will include primary school teachers and school children; Village Health Teams (VHTs); agriculture, education, and health line ministry extension workers (at central, district, and sub-county levels); and District Nutrition Coordination Committees.

## 1.2 PROJECT COMPONENTS AND ACTIVITIES

### 1.2.1 PROJECT BACKGROUND

Since January 15, 2015, the World Bank Group has been supporting the Ministries of Agriculture (lead implementing ministry), Health, Education and Local Government of the Government of Uganda (GoU) in jointly implementing the Uganda Multi-Sectoral Food Security and Nutrition Project (UMFSNP), which is financed through a US\$27.64 million Global Agricultural and Food Security Programme (GAFSP) grant, and was scheduled to close on December 31, 2020. The project is aimed at increasing production and consumption of micronutrient-rich foods and utilization of community-based nutrition services in smallholder households. The project has three components through which it contributes to the development objectives and intermediate results, specifically: (a) Component-1: Delivery of multi-sectoral nutrition services at primary school and community levels (US\$17.8 million); (b) Component-2: Strengthening capacity to deliver nutrition interventions relevant to this project (US\$5.20 million); and (c) Component-3: Project management, monitoring, evaluation, and knowledge generation (US\$4.64 million). This multisectoral project is designed to demonstrate best practices around diversified nutritious crop production and consumption, and desirable health and hygiene practices at schools, adoption of those practices by surrounding communities and utilization of agriculture, health, and nutrition services by households. The project uses a school as an entry point to transfer knowledge and skills to both the pupils and community members. In total, the project works through 1500 Universal Primary Education (UPE) schools located in 15 districts with high stunting burden and low dietary diversity score, and delivered its multisectoral nutrition services at primary schools and communities especially through the key community actors e.g., LFs (lead farmers), VHTs (village health teams), LMs (lead mothers), PGs (parent groups).

The project is considered a national flagship and offers multiple lessons as to how stunting can be addressed through a multisectoral approach in Uganda and elsewhere. In addition to delivering a range of agriculture, health and nutrition services, the project has built nutrition planning, implementation, monitoring and evaluation capacity of each participating sector and already established an institutional mechanism at all levels which allows multiple sectors to collectively achieve a common agenda of stunting reduction. Similarly, the project aims at integrating a comprehensive gender focus in all project activities to ensure that all project activities are gender inclusive and will address the gender disparities that have for long existed in society.

This will bring about equal decision making between men and women that will lead to equal sharing of resources and the benefits that accrue from their labor.

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### 1.2.2 PROJECT STATUS

The project has made good progress in achieving the overall implementation targets including progress towards achieving the project development objective, disbursement of US\$ 26.70 million representing 97% of the total grant amount as of April 30, 2020, and implementation of the approved work plan and budget. All the three PDO indicators are on track; and among the Intermediate Results (IR) indicators five have exceeded their targets, five are on track and only one is not on track but barring Coronavirus Disease 2019 (COVID-19), the end target may still be achieved. Following implementation support missions, a recent systematic technical review (STR) of project process and results beyond the project's results framework undertaken, and regular follow-up that registered progressive improvement in internal financial control, capacity building, and project uptakes by the communities, the PDO and overall IP rating are maintained as Satisfactory. Despite achieving significant progress to date, the recent COVID-19 global pandemic has adversely affected the continuation of several major activities (e.g., field activities, procurement activities, organizing regular training, community nutrition forum, etc.) that have been either delayed due to factors beyond the control of the task team, or postponed in compliance with the government's lockdown directives.

Some notable progress/outcomes among others that contribute to the development objectives and intermediate results, are mentioned here. To date the project has covered 1.14 million Ugandans with focus on pregnant and lactating women and under-2 children. Through the project interventions, the communities have significantly improved year-round production of MNR crops (from 41.2% of the households at baseline to 47.8% by December 2019), which in turn has improved their consumption of MNR foods and dietary diversity. For example, at baseline, children aged 6-23 months in households with minimum dietary diversity stood at 45.9% compared to 48.44% as of December 2019. Through behavioral change communication, the project has ably changed different social myth (e.g., vegetables food for the rural poor people), and community members across the economic divide have now adopted the behavior of growing and eating vegetables, as part of their daily diet. Additionally, the economic standard of a number of lead farmers and parent group members has been upgraded through vine multiplication and producing MNR crops and vegetables commercially. Notable positive outcomes in enrolment, retention and performance of school children have been observed and reported, which are attributed to availability & accessibility of nutritious foods from school demonstration gardens for the school going children, and nutrition education forum for the parents' group of the community. More to the point, accessing the weekly IFA (iron and folic acid) tablets have significantly reduced the drop-out rate of school-going girls (P4-P7) due to the iron deficiency related illness. The immediate spillover effect beyond project design has also been reflected through the year-round production of MNR crops at the catchment community premises including health centers, churches and mosques. The project has reached around 574,157 direct women beneficiaries with 270,286 under-2 children through nutrition education and promotion sessions. Incorporating gender concerns in the project will further improve social relations and lead to a more gender inclusive and equitable realization of project benefits.

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### 1.2.3 COVID-19 SITUATION

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#### 1.2.3.1 PROBLEM TO BE ADDRESSED, AND TECHNICAL RATIONALE FOR ADDITIONAL FUNDING

Coronavirus Disease 2019 (COVID-19) has continued to spread across the world following the first infections in Wuhan city in Hubei province of China in December 2019. Upon registering its first case, the Government of Uganda came up with a number of containment measures to curb the spread of the virus in the country, including: closure of schools, restrictions on internal and international travel, wearing of protective gear, use of hand sanitizer and lockdown. These measures are believed to have affected the economy in various ways. For instance, due to border closures, Uganda's economy suffered from supply chain disruptions and reduction of visitors who contribute to revenue in the tourism. Consequently, many importers, traders and consumers in Uganda have been seriously affected. The effect is more severe amongst small and medium enterprises, since they live by trading products including processed foods & ingredients, textiles whose importation have been suspended (African Union, 2020). There have also been reports of private employers' laying-off and effecting salary reductions of workers to cut down their costs and also deal with the loss of market opportunities/demand arising from extending the lockdown duration. The social impacts of the Covid-19 pandemic, the lockdown and the resultant economic ramifications have been more severe for women and other vulnerable and already disadvantaged groups.

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#### 1.2.3.2 PROPOSED ADDITIONAL FINANCING (AF) ACTIVITIES AND HOW THESE ADDRESS THE PROBLEM IDENTIFIED

The proposed AF project will have three components: (a) Component-1: Delivery of multi-sectoral nutrition services at primary school and community levels (US\$4.0 million); (b) Component-2: Strengthening capacity to deliver proposed nutrition interventions relevant to this project (US\$2.0 million); and (c) Component-3: Project management, monitoring, evaluation, and knowledge generation (US\$1.0 million).

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#### 1.2.4 PROJECT COMPONENTS

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##### 1.2.4.1 COMPONENT 1: DELIVERY OF MULTI-SECTORAL NUTRITION SERVICES AT PRIMARY SCHOOL AND COMMUNITY LEVELS

Under this component. the Objective is to:

- a. Scaling up Water, Sanitation and Hygiene (WASH) interventions at community and school levels;
- b. Rehabilitation of existing school demonstration gardens;
- c. Building community care groups for school gardens (60% of them are women);
- d. Developing competitive platform for micronutrient-rich (MNR) crop production & consumption linking students, teachers, parents, extension workers, lead farmers, & lead mothers of the community;
- e. Establishment of school seed banks increasing coverage of community level production interventions of Orange Fleshed Sweet Potatoes (OFSP), Iron Rich Beans (IRB), fruits and vegetables and intensifying 'nutrition campaigns' about their consumption.
- f. Having majority of community group members replicating the lead farmers' technology;
- g. Providing Support to the project's organized community groups (e.g., lead farmers, parents group, etc.) to boost their livelihoods through income generating activities. These will include strengthening saving schemes and providing matching grants for nutrition related gender and vulnerability-sensitive interventions, and input package (planting materials) for MNR crop production and marketing;
- h. Strengthening seed systems for multiplication of MNR crops, including establishing community based viable seed banks as part of the sustainability strategy for MNR production;
- i. Intensifying promotion of climate smart technologies in the community & associated school gardens;
- j. Supporting schools to replicate production of MNR crops beyond the demonstration gardens using a subsidy-based approach;

- k. Enhancing supportive supervision and capacity building orientation;
- l. Expanding nutrition commodity-specific intervention, especially providing Iron and Folic Acid (IFA) supplementation to adolescent girls and deworming tablets in schools; and
- m. Carrying out annual nutrition assessment.

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#### 1.2.4.2 COMPONENT 2: STRENGTHENING CAPACITY TO DELIVER NUTRITION INTERVENTIONS RELEVANT TO THE PROJECT INCLUDING LIVELIHOODS PROTECTION AND RESTORATION

This will focus on:

- a. Capacity building support to organized community groups (including women, youths and vulnerable groups) to intensify value addition for bio-fortified crop varieties in order to boost incomes and improve the quality of the food products to ensure 'food security and nutrition;
- b. Providing technical support through extension workers and inputs (e.g., equipment, etc.) to adapt good postharvest handling practices & food preservation technology;
- c. Developing value-chains for MNR crops produced including strengthening market linkages through collective marketing and 'market agents;
- d. Carrying out extensive community awareness campaigns on food & nutrition (F&N) security guidelines including safety nets in response to COVID-19 (these activities can be included in the SEP and assessed for stakeholder feedback during project implementation);
- e. Developing advocacy and behavioral change communication (BCC) strategy towards increased uptake and adoption of project technologies at national and community levels;
- f. Strengthening and intensifying community demonstration activities including community mobilization, nutrition forum, cookery demonstrations, growth monitoring and promotion (GMP) and WASH interventions to increase consumption of MNR and adoption of nutrition interventions; and
- g. Providing Support to the project's organized community groups (e.g., lead farmers, parents group, etc.) to boost their livelihoods through income generating activities. These will include saving schemes for nutrition related gender and vulnerability-sensitive interventions, and input package (planting materials) for MNR crop production, which may require advanced funds to boost the activities. This will improve the capacity of farmers to afford inputs and therefore increased productivity, production and consumption.

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#### 1.2.5 COMPONENT 3: COORDINATION AND PREPAREDNESS

This will address:

- a. National Policy Dialogue on knowledge dissemination and the sustainability strategy for UMFSNP;
- b. Scale up of COVID-19 compliant supportive supervision and M&E to catch up with lost space; and
- c. Project coordination and management.

**Table 1-1: Proposed Key Activities to Address Problems, and Rationale for Additional Financing**

Proposed activities to address COVID-19 affected interventions	Expected outcome	Linkage with PDO/IR of UMFSNP	Timelines	Justification for funding needs	Additional Funding needs (US\$) million
<b>COVID impacts: Community-based nutrition interventions</b>					
<ul style="list-style-type: none"> <li>a. Scaling up WASH interventions at community and school levels.</li> <li>b. Rehabilitation of existing school demonstration gardens.</li> <li>c. Building community care groups for school gardens.</li> <li>d. Developing competitive platform for MNR crop production &amp; consumption linking students, teachers, parents, extension workers, &amp; farmers of the community.</li> <li>e. Establishment of school seed banks.</li> </ul>	<ul style="list-style-type: none"> <li>a. 1500 school gardens are operational, and WASH facilities procured &amp; established.</li> <li>b. Sustainability strategy for school gardens developed.</li> <li>c. A competitive advantage framework developed and followed-up.</li> <li>d. Student MNR farmer/ 'nutrition champion' identified for each school.</li> </ul>	PDO 1 and 2 IR4, 5	2 years	<ul style="list-style-type: none"> <li>a. Schools have broken off for a long time and many schools are virtually struggling to keep the gardens afloat.</li> <li>b. Currently there is little emphasis in developing younger farmer groups in the school but this can be a starting point and especially in this covid time when they (pupils) are at home.</li> </ul>	1.0
<ul style="list-style-type: none"> <li>a. Increasing coverage of community level production interventions of OFSP, IRB, fruits and vegetables and intensifying 'nutrition campaigns' about their consumption.</li> <li>b. Having majority of community group members replicating the lead farmers' technology.</li> </ul>	Each lead farmer has an official agreed plan on technology transfer to other member in the group	PDO 1, 2 and 3 IR2, 4, 5 and 11	2 years	<ul style="list-style-type: none"> <li>a. As the project comes to its end, sustainability calls for intensified community adoption campaigns and establishment of self-financing will add value to the community economy and to develop SMEs.</li> <li>b. Supply of quality seed is a key challenge to produce MNR crops</li> </ul>	0.7

Providing Support to the project's organized community groups (e.g., lead farmers, parents group, etc.) to boost their livelihoods through income generating activities while paying attention to gender and vulnerability concerns. These will include saving schemes for nutrition related interventions, and input package (planting materials) for MNR crop production.	a. Ensured Sustainability of MNR production by the farming community; b. Saving groups developed for each school MNR farming community; c. Improved incomes of MNR farming communities with regard gender inclusivity.	PDO 1, 2 and 3 IR2, 4, 5	2 years	This will improve livelihoods of farming communities and fosters sustainability of project interventions	0.3
Strengthening seed systems for multiplication of MNR crops, including establishing community based viable seed banks as part of the sustainability strategy for MNR production.	Certified community seed multiplying center (s) developed for each school community	PDO 1, 2 and 3 IR2, 4, 5	2 years	There is need for availing seed and planting materials closer to the farmers. This improves adoption and multiplication of planting materials.	1.0
Intensifying promotion of climate smart technologies in the community & associated school gardens.	Scaled up community adoption of MNR crops	PDO 1, 2 and 3 IR2, 4, 5	2 years	This mitigates the effects of climate change which has become a danger for production.	0.2
Supporting schools to replicate production of MNR crops beyond the demonstration gardens using a subsidy-based approach. Enhancing supportive supervision and capacity building orientation.	Increased production of MNR foods and availability of planting materials to communities	PDO 1, 2, 3 IR 4 and 5	2 years	School activities have been closed for prolonged periods and these interventions have been adversely affected.	0.3
Expanding nutrition commodity-specific intervention, especially providing IFA supplementation to adolescent girls and deworming tablets in schools. Carrying out annual nutrition assessment.	Reduced Anemia among girls of reproductive age Improved school retention of adolescent girls.	IR 7 and 8	2 years	Due to closure of schools, administration of IFA and deworming activities have been postponed.	0.5
<b>COVID impacts: Capacity Building</b>					



<p>a. Capacity building support to organized community groups (including women and youths) to intensify value addition for bio-fortified crop varieties in order to boost incomes and improve the quality of the food products to ensure 'food security and nutrition.</p> <p>b. Providing support to adapt good postharvest handling practices &amp; food preservation technology.</p> <p>c. Developing value-chains for MNR crops produced including strengthening market linkages.</p>	Steady supply of quality MNR crops in the market	<p>PDO 1, 2 and 3</p> <p>IR2, 4, 5</p>	2 years	Food safety is key in promoting nutrition interventions. Ensuring improved livelihoods of farming communities through value addition and access to markets will ensure product diversification, and sustainability of project interventions.	1.0
<p>a. Carrying out extensive community awareness campaigns on food &amp; nutrition (F&amp;N) security guidelines including safety nets in response to COVID.</p> <p>b. Developing advocacy and behavioral change communication (BCC) strategy towards increased uptake and adoption of project technologies at national and community levels.</p>	<p>Community based F&amp;N information established to track vulnerability in the project areas</p> <p>Project district supported to implement awareness campaigns thru different media.</p> <p>Advocacy and BCC strategy developed.</p>	<p>PDO 3</p> <p>IR 2</p>	<p>Continuous throughout (2 years)</p> <p>1 year</p>	During this global pandemic, countries are warned to put up relevant F&N security interventions. MAAIF of GoU has developed the draft F&N Security Guidelines as part of its COVID community preparedness interventions that among others includes promotion of MNR. Given the nature of this project and the current Pandemic it makes sense for stepping up their dissemination	1.0

Strengthening and intensifying community demonstration activities including community mobilization, nutrition forum, cookery demonstrations, gender sensitization and awareness creation, growth monitoring and promotion (GMP) and WASH interventions to increase consumption of MNR and adoption of nutrition interventions	<ul style="list-style-type: none"> <li>a. Relevant IEC. materials developed/disseminated on the importance of MNR at all project forums.</li> <li>b. Weekly radio programs on key stations carried out for at least one year.</li> <li>c. Increased consumption /demand for MNR foods.</li> <li>d. Refresher training of project implementers at community level.</li> </ul>	PDO 1,2 and 3, IR2 and 11	Continuous	MoH guidelines have pointed out MNR consumption including fruits and vegetable. Good nutrition is key to COVID prevention and control. Extensive demo activities and campaigns needed for demand creation and sustainability of MNR production. Refresher trainings for project implementers has proved effective in delivering project interventions to the beneficiaries and improved adoption.	0.5
<b>COVID impacts: Sustainability, M&amp;E, and Project management</b>					
<ul style="list-style-type: none"> <li>a. Dialogue on the sustainability strategy for UMFSNP.</li> <li>b. Scale up of COVID compliant supportive supervision and M&amp;E to catch up with lost space.</li> </ul>	<ul style="list-style-type: none"> <li>a. National knowledge sharing event organized;</li> <li>b. Increased production &amp; consumption of MNR crops.</li> </ul>	PDO 1, 2 and 3 IR 2, 4, 5 and 11	2 years	Most of the project activities including support supervision & M&E are somewhat paused due to COVID prevention and control. They need to be re-ignited and backstopped in respect to the sustainability of UMFSNP outcomes.	0.5
Project coordination and management	All activities as per work-plan & budget is timely in place	All PDO and IRs, especially IR 10	2 years		1.0
<b>Total estimated amount needed (US\$) million</b>					<b>8.0</b>

### 1.3 CURRENT STATUS OF SAFEGUARDS IMPLEMENTATION

**As per the latest Implementation Status Report (ISR) of February 10, 2021, UMFSNP has an overall environmental and social safeguards performance rating of ‘Satisfactory’.** The environmental and safeguards risks are rated “Moderate”. The existing safeguards instruments and mitigation measures are used appropriately by the Client.

**The Environmental and Social Assessment Category for the UMFSNP is “B”.** The World Bank safeguards policies triggered at project preparation remain relevant and will be applicable to the proposed FA. They are: Environmental Assessment (OP/BP 4.01) and Pest Management (OP 4.09). Additional policies will not be triggered because of the proposed AF. An environmental and social screening tool in use will be reviewed for appropriateness.

**The client’s application of all the approved instruments<sup>3</sup> is satisfactory.** Safeguards monitoring and implementation support provided by the World Bank Team remains consistent. Since the start of the COVID-19 pandemic, all World Bank implementation support has been conducted remotely through virtual meetings and ramped up telephone calls and email exchanges.

**Safeguards implementation status.** Before the UMFSNP appraisal, the Environmental and Social Management Framework (ESMF) and the Pest Management Plan (PMP) were prepared, cleared, and disclosed both locally and through the World Bank’s external website in October 2014. The UMFSNP has a committed Project Coordination Unit (PCU), and robust strategies, structures, and tools in place at district, schools and community levels to implement the ESMF and PMP. At district level, District Environment Officers and District Community Development Officers, and at sub-county level, Extension/Community Development Officers are designated as environment & social safeguard officers/focal points to closely follow and oversee proper implementation of the ESMF. The PCU has organized relevant training on ESMF/PMP for 18,800 participants at different levels, including the environment & social safeguard officers and other key stakeholders of the project. At the schools, Standard Operating Procedures (SOPs), relevant training manuals and environmental and social screening tools are in place to implement the ESMF/PMP. The project also entails community engagements and therefore the social accountability framework and its requirements are being adhered to, monitored and reported on.

Through this project management arrangement, environment safeguards, especially handling and disposal of agrochemicals have been elaborated in the SOPs and the project’s training manual, in line with the provision in the ESMF and PMP, and establishment of woodlots and fruit orchards has been encouraged. Following recommendations from the implementation support (IS) missions, the key project stakeholders and community actors have participated in the relevant orientation and refresher training. There is follow-up with the districts to regularly collect waste from the project’s sites (school and community) for safe disposal; ensure regular (quarterly) environment and social screening of the project sites by the districts; and recording the screening using the Environment and Social Impact Assessment Form developed by the Ministry of Agriculture Animal Industry and Fisheries (MAAIF) the lead implementing ministry. The project also made improvements in the safeguards’ compliance report template to improve project compliance with safeguards requirements.

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<sup>3</sup> Environmental and Social Management Framework was disclosed in country in October 2014; Pest Management Plan was disclosed in country in October 2014 which is integrated in ESMF; Project stakeholders were identified through an extensive Citizen Engagement process documented in the approved ESMF; a GRM is included in the ESMF.

**Safeguards capacity building.** The project conducts annual refresher trainings on the ESMF, and monthly awareness raising training through PG members for the community level project key actors. To directly get the real-time information from the clients/beneficiaries, the UMFSNP team adopted the Geo-Enabled M&E technology, designed to collect data from the project sites using smart phones provided by the project. This monitoring system ensures due diligence in management decisions and has enhanced the environmental and social screening capacity of the project team. The Bank has also strengthened its supervision role to ensure prompt response and advice to any safeguards issues as they arise.

**The project has in place a robust and fully functional Grievance Redress Mechanism (GRM) at district, sub-county, and school levels in compliance with the Project Implementation Manual (PIM).** It is also gender sensitive and accessible to the project affected people as confirmed by the registers and logbooks at the districts and schools. GRM committees are in place and operational at all levels of project implementation. A local GRM at schools caters to the community. Complaints have been handled and signed-off by the village leaders and complainants. The cases/complaints are forwarded upwards, if not resolved at community level. The GRM has also been included in the monitoring tool of the project and is being continuously followed up on through the multisectoral supportive supervision.

The UMFSNP GRM will be strengthened and sustained to continue to better serve communities by leveraging the existing grievance management system. It will also continue to be accessible to local communities and other stakeholders to allow for a clear communication channel for any individual or group of people who believe that they may have been adversely impacted by the UMFSNP interventions. The PCU will update the GRM for better reporting, tracking, and logging of grievances, and further inform the key project actors about the increase in stakeholder engagement to reduce thematic grievances through different meetings e.g., nutrition forum, refresher training, etc. The mechanism will be used regularly to receive, review, and resolve any issues and concerns related to the UMFSNP activities. All grievances will be monitored and reported monthly.

**Safeguards' monitoring.** To ensure compliance with the Environmental and Social Management instruments, a system of bi-annual safeguards monitoring missions was established following an ISM in November 2015. The mission team consists of World Bank Environment and Social Safeguard Specialists and task team members, multisectoral ministries' project Focal Point, and the M&E Specialist and Project Coordinator of the UMFSNP. To date, nine missions have been completed, consisting of visits to project districts and schools to audit screening procedures and checklists, and visits to communities that focus on implementation of occupational, health and safety measures. This supervision team prepares a quarterly monitoring report, and any recommended actions from the reports feed into the bi-annual ISMs/ISRs. These missions further ensure supervision of monitoring systems established by the project, which is responsible for screening and monitoring the funded project interventions accordingly. Furthermore, the quarterly safeguards report template has been recently updated to capture Covid-19 measures and other related safeguards aspects.

The established project risk management structures make UMFSNP well placed to expand project activities through the additional financing and continue project support and remote monitoring through Geo-Enabled technology, zoom calls and survey data collection with UMFSNP beneficiaries/stakeholders and participating project districts/sites during the COVID-19 crisis.

#### 1.4 KEY AF PROJECT ACTIVITIES RELEVANT TO SAFEGUARDS ANALYSIS

New project activities will continue to focus on providing access to nutrition services as well as finance for the project districts, primary schools, and project beneficiaries at community level, but with a focus on

mitigating the impact of COVID-19. As the current UMFSNP is almost fully (97%) disbursed, the additional financing will allow for a scaling up of project activities in the existing project geographies to address emergency needs triggered by COVID-19.

Activities under the Additional Financing will comprise three components with a total amount of US\$7.0 million:

- a. **Component 1: will build on the existing UMFSNP's approach to expand the delivery of multisectoral nutrition services at primary school and community levels**, which will promote sustainability of project outcomes to participating project districts. It will scale up Water Sanitation and Hygiene interventions at community and schools levels to intensify 'new normal' practices especially as the schools get progressively reopened during the course of the year; increase coverage of community level micronutrient rich crops production and consumption to strengthen immunity; provide financial support to the project's organized community groups (e.g. lead farmers, parents group, etc.) to boost their livelihoods through income generating activities; expand nutrition commodity-specific interventions, especially Iron Folic Acid (IFA) supplementation to adolescent girls in schools to fight against micronutrient deficiency; and implement annual nutrition assessments of school going children.
- b. **Component 2 will support strengthening capacity to deliver proposed nutrition interventions** including training to the women beneficiaries. It will support capacity building of organized community groups (including women and youths) to intensify value addition for bio-fortified crop varieties to boost incomes and improve the quality of the food products. The component will strengthen community demonstration activities and develop advocacy and a behavioral change communication (BCC) strategy to support increased uptake and adoption of project technologies at national and community levels.
- c. **Component 3 will support project management, M&E, and knowledge generation.** This includes National Policy Dialogue on nutrition knowledge dissemination and the sustainability strategy for UMFSNP; scale up of COVID-19 compliant supportive supervision and M&E to catch up with lost space; monitoring service delivery and client follow-up through geo-enabled Management Information System (MIS). These activities will be coordinated and overseen by the PCU in MAAIF.

The Government of Uganda has requested expansion of the UMFSNP activities in the existing project areas. The project team has explored and monitored options for expansion over the past year and found conditions conducive there. The scaled-up activities are in line with the PIM. The task team has updated the UMFSNP's ESMF to cover any risks related to the COVID-19 response activities. The project team shall ensure that ESMF procedures are being followed by the participating districts, schools, and community stakeholders, via monitoring and capacity building.

The UMFSNP's PIM and SOPs will be updated to incorporate any further changes introduced in the up-dated ESMF. The PIM presents mostly general guidelines and procedures for the implementation arrangements of the project. Since this manual refers to the ESMF for all relevant sub-components, the updated ESMF will be the guiding document. The updates to the ESMF address all risks and impacts related to environmental and social as well as public health and safety in compliance with all applicable national laws and World Bank policies.

To update the ESMF and ensure the project fully addresses all COVID-19 specific risks, the project task team conducted a review of the framework in partnership with World Bank Environmental and Social Development specialists. The ESMF was to be duly consulted upon and publicly disclosed prior to the AF appraisal.

As part of this exercise, the task team undertook the following:

- a. carried out a social assessment on issues of social discrimination and inclusion, to capture vulnerabilities of disadvantaged groups (such as women especially pregnant & lactating women, and children aged under-2) created or exacerbated by COVID-19. This specific social assessment covered selected existing project districts;
- b. reviewed results from an operational study - a representative survey of UMFSNP stakeholders to track the impact of COVID-19 on UMFSNP interventions;
- c. reviewed results from an assessment, carried out in October-November 2020, of how the UMFSNP's activities have been affected by, and are reacting to the disruptions caused by COVID-19.

The UMFSNP has robust occupational health and safety procedures in place to protect the projects' key actors and a grievance redress mechanism to track and address identified issues. In collaboration with the implementing ministries, the project provides training on environment and social management requirements for the project staff, the District Environment Officers and District Community Development Officers at district and sub-county Extension/Community Development Officers at sub county levels, as environment & social safeguard officers/focal points to follow and implement the ESMF properly. The training covers relevant aspects (as mentioned above) on environment and social management requirements, health impacts and tips if/while handling and applying pesticides, fertilizers and handling generated agrochemical waste. Additionally, relevant training manuals and SOPs have been disseminated to all beneficiary districts, schools, and communities.

The new activities to be financed under the AF will cause little material change in the activities under the three components. The expected impact of the scale-out to additional areas will be within the 15 districts implementing the parent project and therefore are similar. The AF is proposed to trigger the same policies as the parent project, including: Environmental Assessment (OP/BP 4.01) and Pest Management (OP 4.09). An environmental and social screening tool currently in use has been reviewed for appropriateness.

The salient physical project activities relevant to safeguard analysis apply to Component 1, which involves 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 limited in size to 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 arable land within the school boundaries and therefore there will be no land acquisition. 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.

**COVID-19 Specific Risk Considerations:** Based on the task team and PCU's assessment to date, the additional environmental risk posed by COVID-19 to the additional financing activities is very limited. As mandated by the GoU, the UMFSNP is adhering to the national COVID-19 containment protocols. Project monitoring has shown that UMFSNP districts, schools and other project sites are complying with the Government of Uganda's hand washing (with soap or sanitizers) and social distancing policies by reducing the number of people gathered in the project activities at any given time where applicable, and temporarily halting operations where health risks are posed. All the participating 1,500 primary schools of the 15 project districts remained closed from mid-March to December 2020. These schools are re-opening sequentially, following the protective health measures guided by the Ministry of Health (MoH). Given that UMFSNP interventions are largely school centered and community focused they need to abide by the hand washing, social distancing, and other health requirements during interactions at different nutrition forum/meetings.

In summary, the salient physical project activities relevant to environmental and social safeguards analysis apply to all the project components including but not limited to upscaling of Community-based nutrition interventions, Extension and Capacity Building services, Sustainability, M&E, and Project management. The main activities involve establishment and operation of demonstration gardens both in selected progressive farmer homes and at primary schools (Components 1&2) and gender-inclusive capacity building activities across all components. However, though these demonstration gardens are expected to be limited in size to half acre per selected school or homestead, they may involve use of fertilizers and pesticides which may generate some environmental, health, safety, social and gender issues. The Capacity building related activities have a bearing on COVID-19 risks of spreading the infection among community members if the established Standard Operating Procedures are not mainstreamed and followed/implemented. Overall, the environmental and social impacts are expected to be minimal and not adverse, site-specific and readily manageable, including the COVID-19 related impacts, provided the mitigation measures are implemented.

## 2 THE ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

Since the proposed AF project activities are largely meant to upscale and consolidate the ongoing UMFSNP activities while mainstreaming COVID-19 impacts and measures, it was deemed appropriate to update ESMF of UMFSNP to guide implementation of AF-Activities as well. Component 1 involves use of pesticides in school demonstration gardens and selected farmer groups/homes in order to improve productivity. The ESMF provides guidance on how environmental and social aspects of proposed AF-project activities shall be identified, assessed and managed. The ESMF provides a framework to assist project implementers to screen the projects at planning stage and institute measures to address adverse environmental and social impacts during implementation, including COVID-19 Standard Operating Procedures as guided by Ministry of Health.

This ESMF has therefore been updated as appropriate to largely cater for this focus/purpose, and especially in line with the World Bank's Environmental and Social Safeguards Policy requirements. This ESMF outlines the framework and mechanisms for environmental and social impact screening, determining extent of required environmental assessment and assessment of environmental and social impacts arising from proposed project implementation, and gives generic guidance on appropriate mitigation measures, and institutional arrangements for monitoring, stakeholder engagement, feedback and grievance redress. Where necessary, site specific Environmental and Social Management Plans shall be prepared during project implementation. In terms of COVID-19 outbreak response, a National Response Plan has been prepared by Government of Uganda (Ministry of Health) and follows set Standard Operating Procedures (SOPs) recognized by World Health Organization, which this project will refer to and make use of.

### 2.1 PREPARATION OF THE ESMF

The ongoing UMFSNP ESMF has been adapted for AF-Activities and accordingly updated to take into consideration COVID-19 risks and impacts and in accordance with applicable World Bank Environmental and Social Safeguards Policies. The ESMF was also updated while taking into consideration the Uganda environmental impact assessment requirements. The update of the ESMF involved data-literature reviews; field studies, public consultations and discussions with relevant sector institutions, including districts, private sector, statutory agencies, local communities and primary schools in project Districts.

The update of the ESMF involved assessment of any risks not covered by the project's existing ESMF – e.g., risks related to COVID-19 or the expansion of some activities – and updated the ESMF accordingly. The update of the ESMF primarily relied on the following key sources:

- a. A rapid social assessment (potentially remotely) on issues of social discrimination and/or COVID-19 related risks, covering selected project districts;
- b. Results from an operational study – a representative survey of UMFSNP stakeholders;
- c. Ministry of Health and Ministry of Education School Covid-19 Surveillance Tools; and
- d. Results from an assessment of how UMFSNP's activities have been affected by and are reacting to the disruptions caused by COVID-19.

#### 2.1.1 PURPOSE OF ESMF

The ESMF provides guidance on how environmental and social aspects shall be identified, assessed, managed and mitigated. Specific project locations for UMFSNP-AF including districts, schools and farmer groups/households have not been identified at this stage; hence the ESMF provides a general impact identification framework to assist project implementers to screen the projects during identification and institute measures to address any negative environmental and social impacts during implementation.



### 2.1.2 OBJECTIVES

The objectives of the ESMF are:

- a. Establish clear procedures and methodologies for environmental and social planning, review, approval and implementation of sub-projects;
- b. Describe project arrangements for the preparation and implementation of sub-projects in order to adequately address project safeguard requirements;
- c. Assess the potential generic environmental and social impacts of envisaged investments in the project;
- d. Propose generic mitigation measures which will effectively address identified negative impacts;
- e. Specify appropriate roles and responsibilities, and outline the necessary reporting procedures for managing and monitoring environmental and social concerns related to subprojects;
- f. Determine any capacity building and technical assistance that could be needed to successfully implement the provisions of the ESMF in the institutions that have a role in the implementation of the ESMF;
- g. Integrate a comprehensive gender and vulnerability concerns in all project activities to ensure inclusivity and equitable realization of project benefits; and
- h. Establish the funding requirements to implement the ESMF.

### 2.1.3 SPECIFIC TASKS

The specific tasks undertaken during the update of the UMFSNP-AF ESMF included among others the following, as applicable in line with the Terms of Reference (ToRs) for the Assignment:

#### Box 2-1: ToRs Specific Tasks (*Extract*)

- a. *Updating the Environmental and Social Management Framework of UMFSNP. The update of the UMFSNP- ESMF shall be undertaken in line with the World Bank Environmental and Social Safeguards Policies, and in particular following the triggered Environmental and Social Operational Policies and cognizant of the contents of ESMF COVID-19 template. The ESMF shall among other aspects contain guidance on management of the following Environmental and Social aspects:*
  - ❖ *Vulnerable and Marginalized Peoples Plan (VMPP) -discrimination and social inclusion, as it pertains to any disadvantaged or vulnerable groups or individuals, particularly where such groups or individuals are disproportionately affected by adverse impacts or disadvantaged in accessing development benefits and opportunities;*
  - ❖ *Labor Management Procedures (LMP)- labor, including terms and conditions of work and occupational health and safety;*
  - ❖ *Meaningful consultation and participation of project affected people and other stakeholders in project design and implementation;*
  - ❖ *Gender Based Violence (GBV) Action Plan - Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH);*
  - ❖ *Exposure to COVID-19, either within the community or in the workplace;*
  - ❖ *Use of security forces, both private and public during project implementation;*
  - ❖ *Traffic and road safety issues, relating to both communities and project workers;*
  - ❖ *Functioning grievance mechanisms, addressing project-affected people, security issues, labor-related issues and SEA/SH;*
  - ❖ *Loss of income or livelihoods as part of the COVID -19 response;*
  - ❖ *Integrated Pest Management Plan.*
- b. *Updating environmental management tools (including screening forms, checklists, Environmental Social Management Plans, chance finds procedure, environmental reporting formats, grievance redress mechanisms, Voluntary Consent Forms, etc.) in the ESMF in line with the planned*

*component activities. The update should draw lessons from the implementation of recent ESMF of NUSAF3 project.*

- c. Reviewing the implementation / institutional framework proposals for the Project with the objective of re-defining and significantly clarifying the roles and responsibilities in the implementation of environmental and social management framework.*
- d. Undertaking stakeholder consultations with key agencies (local and national levels) to document their input and experience in the use of environmental and social tools and what they would expect to be incorporated in the ESMF for the UMFSNP. Key findings of stakeholder consultations will be mentioned in the ESMF and details presented as an Annex.*
- e. Identifying capacity needs for the implementation of the ESMF and Inclusion in the Project, propose and cost capacity building program.*
- f. Proposing training for the key user agencies in the implementation of the ESMF.*
- g. Incorporating review comments of the both Government (implementing sectors) and World Bank throughout the preparation of the draft ESMF and the subsequent final ESMF.*

#### 2.1.4 APPROACH AND STUDY METHODOLOGY IN THE ESMF PREPARATION

The preparation of this ESMF has been done through a combination of these methodologies:

##### 2.1.4.1 DOCUMENT REVIEW

Review of the existing baseline information and literature material was undertaken to gain an in- depth understanding of the proposed project. A desk review of the Ugandan legal framework and policies was also conducted in order to internalize the pertinent national legislation and policy framework that should be considered during project implementation.

##### 2.1.4.1.1 KEY DOCUMENTS REFERRED

Among the key documents that were reviewed during the study included:

- a. Project Concept Note for Uganda Multisectoral Food Security and Nutrition Project (P-149286);
- b. Project Missions Aide Memoires Agriculture Sector Strategic Plan 2015/16-2019/20;
- c. Working Draft Report on the Operational Study on the on the role of UMFSNP in mitigating COVID-19 impacts;
- d. ESMF for Uganda Multi-Sectoral Nutrition Project, MAAIF 2014;
- e. Uganda Nutrition Profile Report of 2018- USAID;
- f. Draft ESMF report for Emergency Locust Control Project MAAIF 2021;
- g. UGANDA Food Security Outlook June 2020 to January 2021 by USAID;
- h. Third Northern Uganda Social Action Fund Project (NUSAF 3), Office of the Prime Minister, Kampala-Uganda 2015;
- i. ESMF for ACDP Project MAAIF, 2014;
- j. The Uganda Food and Nutrition Policy, 2003
- k. The Global Agriculture and Food Security Program Brief: Public Sector Window: COVID-19 Response Additional Funding Request Template 2021;
- l. UBOS, 2020 the Annual Agriculture Survey Report;
- m. The Third National Development Plan-NDP III 2020/21–2024/25;
- n. Draft Uganda Organic Agriculture Policy, 2009;
- o. Land Use Policy, 2006;
- p. ESMF for Agricultural Technology and Advisory Services (ATAAS) Project, MAAIF-2009; and
- q. Uganda Vision 2040.

Literature and documentation also included cataloguing and analyzing customary rights and practice on water resource use and management were identified and reviewed. These sources were obtained from the sub-county, local district administration, area operational NGOs, line ministry and client field staff and headquarters. The sources will further help in addressing gender related issues, gaps and disparities identified among women and men as well as vulnerable groups in the project communities.

#### 2.1.4.1.2 RAPID SOCIAL ASSESSMENTS

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The Consultant employed rapid social assessment approach to collect and gain information on the key issues of the project. The choice to conduct rapid assessments was based on the need to capture pertinent issues in the areas of the project over the short study period. This process was largely qualitative and was guided by a set questions administered over a relatively short period and aims to answer a couple of questions focused on key anticipated project outcomes and impacts (both positive and negative) on the beneficiary local communities. The investigation mainly followed a Participatory Rapid Appraisal (PRA) procedure to assess the social impact of the project both on the participating schools and the wider communities around them. The methodology focused on both Key Informant Interviews (KIIs) and triangulation of secondary data through informant interviews (mainly with the Project implementing teams at district and national levels). The focus on key informant interview as participatory method was dictated largely by the current COVID-19 pandemic and the resultant restrictions on school sessions, mobility and large social gathering which render alternative methods such as FGDs and participant observations impractical. The combination of triangulation and key informant interview facilitated a comprehensive and reasonable understanding of the existing local condition and practices, knowledge, needs, attitudes, opportunities and challenges to ensure more productive forms of intervention.

#### 2.1.4.1.3 FIELD VISITS

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A sample of the proposed cluster districts were visited and surveyed through deliberate inspection of their respective characteristic features i.e., the environmental and social setup. The visit was done with a view of assessing the values that are likely to be affected or those that will impact the implementation of the project/subprojects. The survey findings informed the assignment in terms of categorization and possible subprojects anticipated as well as pertinent environmental and social impacts in the various phases of the subprojects which is important in terms of the development of screening procedures and checklists.

#### 2.1.4.1.4 STAKEHOLDER CONSULTATIONS

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Consistent with best practices in developing ESMFs, consultations were held during field visits with the key stakeholders and institutions including: Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), Ministry of Education and Sports (MoES), Ministry of Health (MoH), Ministry of Local Government (MoLG), the Project Coordination Unit, District Local Governments and National Environment Management Authority (NEMA). These consultations were intended to ensure that the project design and ESMF addressed existing challenges as captured on the ground. Dialogue and interviews were also held with a sample of smallholder farmers in the different cluster districts to capture the existing pest and pesticides management methods and well as to collect data on the magnitude of pest problems in the country, as well as the COVID-19 status at the grassroots. In addition, gender considerations will be integrated into the project during implementation to reduce the gender gaps and disparities that have historically existed in the various project areas and have for long disadvantaged one gender over the other especially in terms of access to and control of resources as well as decision making in various aspects. Addressing gender concerns will empower especially women to make informed decisions and choices that they could not make before due to the patriarchal nature of our society.

#### 2.1.4.1.4.1 OBJECTIVES OF THE STAKEHOLDER CONSULTATIONS

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The consultations with these stakeholders were carried out to specifically achieve the following objectives:

- a. To provide information about the project and to tap stakeholder information on key environmental and social baseline information in the project area;
- b. To provide opportunities to stakeholders to discuss their opinions and concerns and accordingly inform project design;
- c. To identify specific interests and enhance the participation of women, the poor and vulnerable groups; and
- d. To inform the process of developing appropriate management measures as well as institutional arrangements for effective implementation of the UMFSNP-AF.

#### 2.1.4.1.5 METHODS OF CONSULTATIONS

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##### 2.1.4.1.5.1 VIRTUAL MEETINGS

Cognizant of COVID-19 pandemic, the Consultant adopted largely virtual approach to consult the stakeholders in the study. Through the Project Coordination Unit (PCU), a list of key stakeholder entities was provided to the Consultant together with their telephone contacts. To ensure that stakeholders have a clear understanding of the purpose for being engaged, introductory telephone calls were first made by the Project Coordinator to the stakeholders after which, the Consultant followed with subsequent engagements. This helped the consultant to have an entry point and build rapport with the officers in the various organizations that had been earmarked for consultations. This was done with the use of a checklist to guide the interview sessions.

##### 2.1.4.1.5.2 FACE TO FACE CONSULTATIONS

Where it was deemed feasible and safe and in line with Ministry of Health guidelines on COVID-19 Standard Operation Procedures alongside WHO Guidelines as well as World Bank COVID-19 Guidelines<sup>4</sup>. At its bare minimum, the meetings observed the following:

- a. Those attending were made to ensure that, a distance of at least one meter between each other was observed during the consultation meetings (Figures 2-1 & 2-2);
- b. At the entrance to the meeting places, there were adequate hand washing facilities with soap and water and whoever entered the meeting venue had to hand wash and sanitize before entry to the meeting place;
- c. The meeting areas were clean and hygienic and that, surfaces of plastic chairs and tables were regularly cleaned with disinfectants (soap and water) i.e., at least before and after the meeting;
- d. During the meetings, some meeting DO'S and DON'TS were explained to participants such as:
  - ❖ Covering your mouth and nose with tissue or a handkerchief when coughing and sneezing;
  - ❖ The handkerchief once used is wrapped properly in a polyethene bag for washing and ironing after leaving the meeting. Those with disposable tissues should dispose used tissues into bins to protect others from any virus released through cough and sneezing;
  - ❖ Wash hands with soap and water or use alcohol-based hand rub immediately after using the tissue or handkerchief;
  - ❖ Maintain a distance of at least 1 meter from anyone who is coughing or sneezing and remind participants to have a face mask to avoid infecting others;

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<sup>4</sup> Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings March 20, 2020



- ❖ Avoid touching your eyes, nose, and mouth at all times. Hands touch many surfaces including money which can be contaminated with the virus and you can transfer the virus from the surface to yourself;
- ❖ AVOID hand-shakes and hugging at all times; and
- ❖ DO NOT SPIT in public. Identify secluded places like pit latrines or toilets for purposes of spitting and wash your hands immediately with soap and water.



Figure 2-1: Community consultations in Kabale area



**Figure 2-2: Meeting with MoH Project Coordinator at Ministry's Headquarters.**

#### 2.1.5 SOME OF THE KEY STAKEHOLDER CONCERNS AND VIEWS ABOUT UMFSNP-AF

The stakeholders raised some concerns which are detailed on Table 11-6. Some of the salient issues that emerged include:

- a. The project will require extensive gender sensitization through training of staff, community sensitization and awareness creation on gender using gender sensitive language, gender sensitive and inclusive IEC material and radio talk shows;
- b. Lead farmers should be selected on a rotational basis to avoid fatigue. They should also be gender balanced in nature by giving both women and men opportunity to lead at community level;
- c. Issues of nutrition should not be left to women but a concern for both men and women. Family nutrition is normally relegated to women because of the reproductive role they play where food preparation and family sustenance is assumed to be the prerogative of the women;
- d. Sensitization and awareness of all the schools and farmers involved in the project is key and shall be undertaken before start of the project;
- e. Gender inclusive sensitization targeting radical negative patriarchal beliefs and norms that marginalize women relegating them only to access to land without decision making powers on what to cultivate as well as the proceeds accruing from their labor;

### 3 PROJECT BASELINE DESCRIPTION

#### 3.1 PROJECT BENEFICIARY DISTRICTS

The Project beneficiary districts for the Uganda Multisectoral Food Security and Nutrition project include; Bugiri, Bushenyi, Isingiro, `Kabale, Kabarole, Kasese, Kiryandongo, Kyegegwa, Kyenjojo, Maracha, Namutumba, Nebbi, Ntungamo, and Yumbe (Figure 3-1).



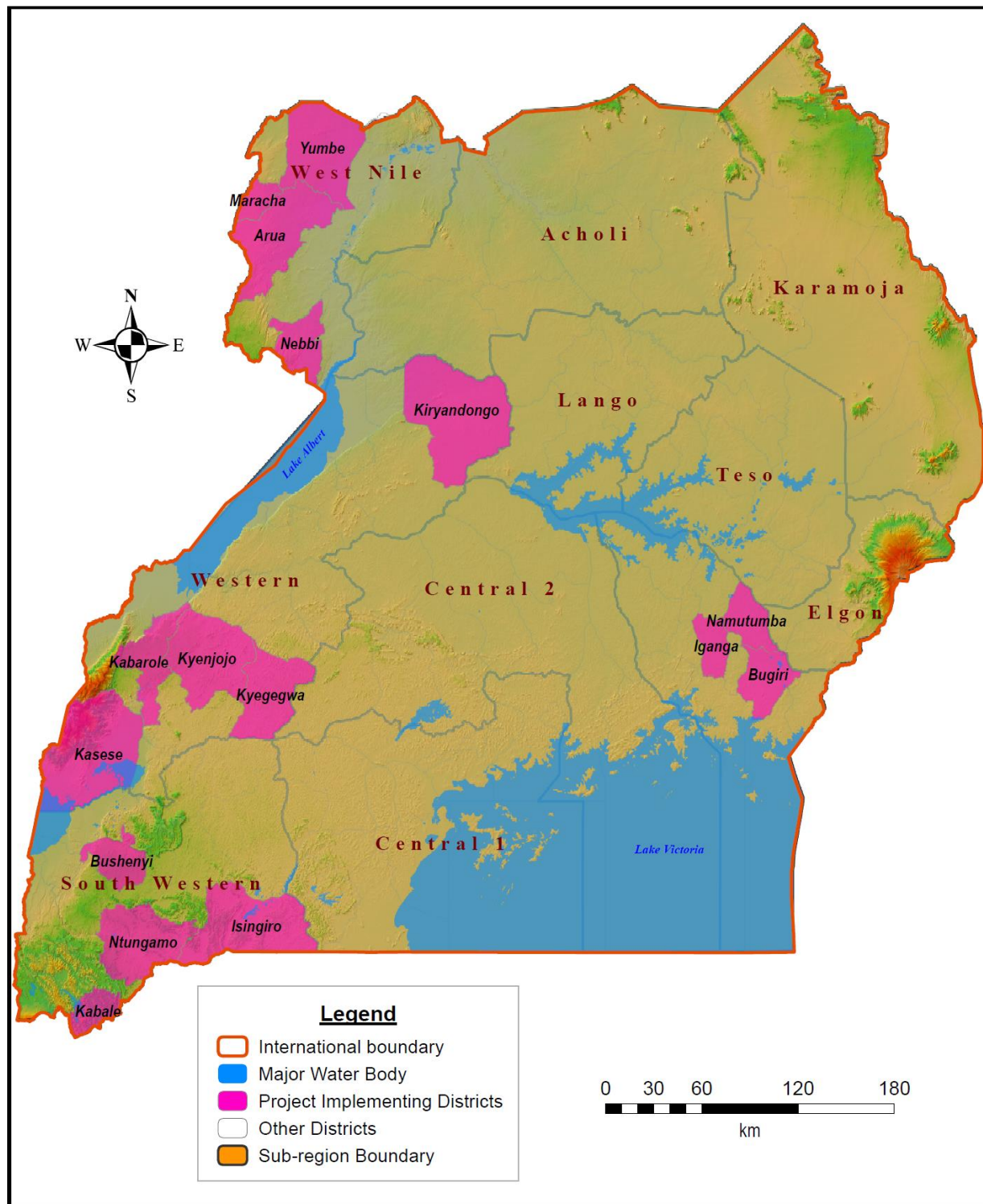


Figure 3-1: Project Beneficiary Districts (Source: JBN GIS Unit, 2021)

## 3.2 NATIONAL NUTRITION AND FOOD SECURITY PERSPECTIVE IN UGANDA

Some of the salient broader nutrition and food security aspects in Uganda can be summarized as follows:

### 3.2.1 NUTRITION AND FOOD SECURITY SITUATION IN UGANDA



Almost one-third of children under 5 years in Uganda are stunted. Stunting increases with age, peaking at 37% among children 18-35 months. Stunting is greater among children in rural areas (30%) than urban areas (24%) with some regional variations. Stunting ranges from a high of 41% in Tooro sub-region to a low of 14% in Teso sub-region. The prevalence of stunting decreases with increasing levels of the mother's education. About 4 in 10 children born to mothers with no education (37%) are stunted compared with 1 in 10 (10%) of children born to mothers with more than a secondary education. Similarly, stunting decreases with increasing wealth quintiles, from 32% among children in the lowest wealth quintile to 17% of children in the highest wealth quintile. Prevalence of wasting (low weight-for-height) nationally is 4% but in the regions of Karamoja and West Nile prevalence is 10%. Anemia, which reflects several micronutrient deficiencies, infections and, even genetic traits in malaria-endemic areas, affects more than half of children under 5 years and 1 in 3 women. Regional differences in anemia prevalence among women range from 17% in Kigezi sub-region to 47% in Acholi sub-region (UBOS 2018). Moreover, even though coverage of iron supplementation for pregnant women (for at least 90 days) increased from 4% in 2011 to 23% in 2016, anemia prevalence has increased in women from 23% in 2011 to 32% in 2016<sup>5</sup>.

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### 3.2.2 GENDER AND FOOD SECURITY

While 80% of women contribute to and provide labor for food production in Uganda, access to and ownership of land is held overwhelmingly by men (92%). The disparities identified illustrate both women's significant (but often undervalued) contribution to food security and their heavy workloads. While women's and men's roles in food production and food security differ in important ways, overall, women must balance their reproductive and productive roles with their household responsibilities. In addition, while data clearly shows that men are much less productive, they are more likely to spend their income on non-food items thereby increasing the households' food insecurity. Women predominate in subsistence farming, while men predominantly farm cash crops with women's labour<sup>6</sup>. Therefore, this project should be cognizant of this and strive to promote women's access to and control over productive resources, capital, and income generation.

Women are often allocated smaller plots of land that are of poorer quality and are farther from their homesteads, resulting in lower yields, lost time and higher opportunity costs. Women also lack the resources for farming inputs such as fertilizer, technology and extension services to improve crop yields. The heavy burden of farming and household work leaves women with little time to diversify their livelihoods, which, as noted, contributes to chronic poverty. In addition, women face labor constraints because they must work on their family's farms first and then on their own land (normally a kitchen garden near the homestead), delaying planting on their plots. They also are less able to hire labor to work on their land.

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#### 3.2.2.1 GENDER AND NUTRITION

Women in Uganda play an important role in household nutrition and food security through their responsibilities as marketers, food producers and caregivers. Studies show that in Sub-Saharan Africa, children in households where women have low decision-making power relative to men have lower nutritional status. Women's low status in Uganda is partly reflected in the high fertility rates and the relatively high percentage of poor rural women who suffer from moderate and severe malnutrition (BMI <18.5kg/m<sup>2</sup>), 23% (in the lowest wealth quintile)<sup>7</sup>. This high prevalence of women's malnutrition is related to a number of factors. Women's nutrition in general, and especially during pregnancy, is poor. Women suffer from low quantity and diversity of food in their diets, as well as certain food taboos that deprive them of nutrient-rich foods. Food allocation in the household does not favour women and cultural norms dictate

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<sup>5</sup> *Uganda Nutrition Profile April 2018, USAID*

<sup>6</sup> *The HE ANALYSIS OF THE NUTRITION SITUATION IN UGANDA May 2010*

<sup>7</sup> *Agriculture and Nutrition Fact Sheet December 2017*

that men be served first. During pregnancy, women need to reduce their workload to ensure they maintain their health and the health of the foetus. However, this is virtually impossible especially in rural settings given women's many obligations in agricultural work and household chores. As noted, women's capacity to care for themselves and their children is especially difficult given their limited decision-making power and access to resources needed to improve their health and their children's health.

### 3.2.3 KEY DRIVERS OF MALNUTRITION IN UGANDA

Other drivers of malnutrition include lack of access to clean water and sanitation, high disease burden, especially childhood diarrhea and malaria, and poor infant and young child feeding practices. While 66% of children 0–5 months are exclusively breastfed, the percentage drops to 43% among children 4–5 months. Only 15% of breastfed children 6–23 months receive a minimum acceptable diet (UBOS and ICF 2018). More than 30% of the total population faces some level of chronic food insecurity (USAID 2017). The causes of food insecurity in Uganda are multifaceted, often a result of poverty, landlessness, high fertility, natural disasters, high food prices, lack of education, and the fact that a majority of Ugandans depend on agriculture as a main source of income. Gender inequality worsens food insecurity and poverty. Producing more staple food does not guarantee less stunted children, as seen in the southwest region, considered the “food basket” of Uganda, which has one of the highest rates of stunting among children under 5 years in the country. Pastoralists have been forced to settle in concentrated areas, leading to overgrazing and ecological degradation, which is undermining their livelihoods and their ability to cope with droughts and other climate-related disasters.

**Table 3-1: Uganda Nutrition Data (DHS 2011 and 2016)**

<b>Population 2016 (UNICEF, 2017)</b>		<b>41.5 million</b>
<b>Population under 5 years (0–59 months) 2016 (UNICEF 2017)</b>		<b>7.7 million</b>
	<b>DHS 2011</b>	<b>DHS 2016</b>
❖ Prevalence of stunting among children under 5 years (0–59 months)	33%	29%
❖ Prevalence of underweight among children under 5 years (0–59 months)	14%	11%
❖ Prevalence of wasting among children under 5 years (0–59 months)	05%	04%
❖ Prevalence of low birth weight (less than 2.5 kg) (of children whose birth weights are known)	10%	10%
❖ Prevalence of anemia among children 6–59 months	43%	53%
❖ Prevalence of anemia among women of reproductive age (15–49 years)	23%	32%
❖ Prevalence of thinness among women of reproductive age (15–49 years) (BMI less than 18.5 kg/m <sup>2</sup> ).	12%	09%
❖ Prevalence of thinness among adolescent girls (15–19 years).	14%	13%
❖ Prevalence of children 0–5 months exclusively breastfed	63%	66%
❖ Prevalence of children 4–5 months exclusively breastfed	41%	43%
❖ Prevalence of early initiation of breastfeeding (i.e., put to the breast within one hour of birth)	53%	66%
❖ Prevalence of children who receive a pre-lacteal feed	41%	27%
❖ Prevalence of breastfed children 6–23 months receiving minimum acceptable diet	06%	15%
❖ Prevalence of overweight/obesity among children under 5 years (0–59 months)	03%	04%
❖ Prevalence of overweight/obesity among women of reproductive age (15–49 years).	19%	24%
❖ Coverage of iron supplementation for pregnant women (for at least 90 days).	04%	23%
❖ Coverage of vitamin A supplements for children (6–59 months, in the last 6 months) *	57%	62%
❖ Percentage of children 6–59 months living in households with iodized salt.	99%	99%

*\*In addition to the vitamin A supplementation program, Uganda has had ongoing vitamin A fortification of vegetable oil since 2005. According to a GAIN study in 2017, 85.6% of oil samples nationally, 85.1% in rural areas and 85.8% in urban areas were fortified, and the proportion of samples fortified according to current national standards was 57.9% (Uganda Nutrition Profile April 2018, USAID).*

### 3.3 SUMMARIES OF KEY ENVIRONMENTAL AND SOCIAL BASELINE CONDITIONS IN PROJECT DISTRICTS

The UMFSNP will be specifically implemented in fifteen districts selected from the following ACDP districts. These include; Bugiri, Bushenyi, Isingiro, `Kabale, Kabarole, Kasese, Kiryandongo, Kyegegwa, Kyenjojo, Maracha, Namutumba, Nebbi, Ntungamo, and Yumbe. The socio-economic profiles for the selected 15 U MSNP implementing districts are summarized below:

#### 3.3.1 EASTERN REGION

##### 3.3.1.1 BUGIRI DISTRICT

Located in the southeastern part of Uganda, Bugiri District has a total area of 5,701km<sup>2</sup> of which 1,493km<sup>2</sup> is land and the remaining 4,207km<sup>2</sup> is covered by water. The district is bordered by Tororo District to the northeast, Iganga District to the west, Mayuge District to the southwest, and Busia District to the east. Bugiri District also borders Kenya in the southeast and borders Tanzania in the waters of L. Victoria to the south.

##### 3.3.1.1.1 TOPOGRAPHY

The land is generally characterized by gentle undulating hills with few higher residual features. A somewhat higher relief across the district forms two main watersheds; a northern drainage and a southern drainage; the latter of which drains to Lake Victoria. Major swamps include Igogero, Kibimba and Dohwe and major hills are Irimbi, Bululu and Namakoko.

##### 3.3.1.1.2 CLIMATE

Bugiri district has a mean annual rainfall of 1,200mm in the wetter south and 900mm in the drier northwest. In general, there are two peak rainfall seasons: April to June and August to November. The relatively succinct dry season occurs from December to March. Annual temperatures range from a low of 16.7°C to a high of 28.1°C. The average wind speed is 4.4km/hr, mainly blowing towards the north during March.

##### 3.3.1.1.3 SAFE WATER COVERAGE IN BUGIRI DISTRICT

The access rates in Bugiri vary from 56 % in Kapyanga Sub-County to 95 % in Muterere Sub-County. Bugiri has 1,330 domestic water points which serve a total of 315,386 people– 299,366 in rural areas. About 71 water points have been non-functional for over 5 years and are considered abandoned. Bugiri has 2 piped schemes. Nandudu B.M (2018)<sup>8</sup>, established that the status of household hygiene and sanitation had improved to 81.6% compared to the 72 % during the 2002 Uganda Housing census Bugiri district Report. The common practices in the promotion of household hygiene and sanitation included construction and use of pit latrines, keeping water containers clean and washing hands before and after meals.

##### 3.3.1.2 IGANGA DISTRICT

Iganga District is bordered by Kaliro District to the north, Namutumba District to the northeast, Bugiri District to the east, Mayuge District to the South, Jinja District to the southwest, and Luuka District to the west. The district headquarters at Iganga are located approximately 44km, by road, northeast of Jinja, the largest city in the Busoga Sub-region.

<sup>8</sup> Nandudu Betty Mubiita (2018): Household Hygiene and Sanitation in Bugiri District: Practices and Challenges. MSc. Thesis Makerere University-Kampala.

### 3.3.1.2.1 POPULATION

The district has over 716,311 people, 371,891 of which are female and 344,420 are male.

### 3.3.1.2.2 ECONOMIC ACTIVITIES

Agriculture with the main emphasis on food crops; millet, maize, sorghum, rice, beans, Irish, cassava, bananas and peas. Cash crops include; coffee and cotton. Fruits and vegetables such as; oranges, tomatoes and cabbage. Fishing is carried out on the parts of Lake Victoria.

### 3.3.1.2.3 SAFE WATER COVERAGE IGANGA

The access rates in Iganga vary from 56 % in Nambale Sub-County to 95 % in Bulamogi Sub-County. Iganga has 857 domestic water points which serve a total of 283,099 people—228,374 in rural areas. 15 water points have been non-functional for over 5 years and are considered abandoned. Iganga has 1 piped scheme.

**Table 3-2: Iganga District Water Supply Summary**

Sub County	Urban/Rural Pop	Pop. Access served	Access (%)
<b>Kigulu</b>	Rural - 46,444		
1. Nalugo			
2. Namangalwe	Rural - 43,924	34,362	74
3. Nawandala	Rural - 37,024	32,674	74
4. Nakalama	Rural - 54,878	25,798	70
5. Nawanyingi	Rural - 30,232	30,715	56
6. Nambale	Rural - 55,207	18,730	62
7. Balamogi	Rural - 48,101	30,834	56
8. Nabitende	Rural - 33,400	22,274	67
<b>Iganga Municipality</b>			
1. Northern Div.	Urban - 29,356	NWSC	
2. Central Div.	Urban - 35,928	NWSC	

### 3.3.1.3 NAMUTUMBA DISTRICT

Namutumba District is bordered by Pallisa District to the north, Kibuku District to the northeast, Butaleja District to the southeast, Bugiri District to the south, Iganga District to the southwest and Kaliro District to the northwest. The district headquarters at Namutumba are located approximately 90km, by road, northeast of Jinja, the largest city in the sub-region. The coordinates of the district are: 00° 51'N, 33° 41'E. The district Headquarters are located at formerly Saza Headquarters, Busiki County, Kaiti village.

#### 3.3.1.3.1 TOPOGRAPHY

The terrain upon which Namutumba District is located is that of remnant Busoga surfaces and valleys. Physiographically, it rises from lowlands of 3,830ft (1,167m) to hilly surroundings of 91,224m above sea level. Elsewhere are valley sediments eroded from higher grounds, which form part of the District Basement Valley of varying gradients that separate the steep slopes of Namutumba District, these valleys form essential natural drains of the district downstream towards Mpologoma.

#### 3.3.1.3.2 CLIMATE

The District enjoys a tropical climate and is characterized by comparatively small seasonal variations in temperatures. The rain falls for 160–170 days each year with two peaks from March–May and October–November. The temperature ranges from 22° C to 27° C with an annual average of 25°C. The annual

temperature range is 23-27°C. The mean annual rainfall is 1000mm with a range from 900mm- 1150mm. The district is of bi-annual season with the 1st rains covering March-June and 2nd rains August–November.

#### 3.3.1.3.3 VEGETATION AND FORESTRY

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Namutumba has 3 main Central Forest Reserves namely; South Busoga, Bukaleeba and Walulumbo Central Forest Reserves. South Busoga CFR has heavily been encroached while Bukaleeba was leased to Green Resources/ South Busoga Company for commercial tree planting. Others are District Local Forest Reserves which have for so long been insignificant due to encroachment although the District has started reclaiming them back through the Lands Sector.

The current vegetation cover in the District comprises of various human manipulated or impacted types, with most of the areas under crop vegetation. There are isolated patches of natural forest left on a few hills, valleys and lakeshores. Elsewhere, grasses such as *Pennisetum purpurem* and *Hyparrhenia rufa* dominate the vegetation cover. Remnants of tropical trees are scattered on many farmlands with species like *Markhamia lutea* (Lusambya), *Ficus* spp (omutuba), *Melicia exelca* (Muvule tree), and *Albizia* spp. dominating most parts of the District. However, the modified types dominate the large extent in settlement or built-up areas such as the Namutumba Town Council and along Landing sites and Fishing Settlements.

#### 3.3.1.3.4 POPULATION SIZE AND GROWTH RATE

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During the period 2002–2020 the District population increased to 569,969, from 327,045 in 2002 this means between 2002 and 2020, the District population increased by 242,924 in a period of 18 years, at an average annual growth rate of 3.1 percent. This trend suggests that, the population could reach 700,258 by 2025. More than half of the population (51%) is female, and due to the high fertility rate, its estimated that on average there is 6.2 children per woman, half of the population is children under the age of 15 years. Owing to the high population increase against fixed land, the average population density of Namutumba has increased from 48 persons per square kilometers in 1969, 123 in 2002 to 174 in 2014.

#### 3.3.1.3.5 ECONOMIC ACTIVITY

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Agriculture is the main economic activity in Namutumba District. There are many small producers engaged in a wide range of crops like; Cotton, coffee which are grown purely for cash while maize, beans, groundnuts, cassava, . Rice, sweet potatoes, millet and bananas are both major food and cash crops. Other crops grown include simsim, yam, soya beans, sunflower, vegetables and fruits. Over 80% of the farmers practice subsistence agriculture and in most cases the production is not economically viable. Animal population is about 36,850 cattle, 28550 goats, 4250 sheep, 4900 pigs, 1220 rabbits, 1480 dogs, 257300 chickens, 4750 turkeys, 1975 ducks and 432 domestic cats (UBOS, 2009).





**Figure 3-2: Paddy rice in Magada village in Namutumba**

#### 3.3.1.3.6 SAFE WATER COVERAGE NAMUTUMBA DISTRICT

The access rates in Namutumba vary from 33 % in Ivukula Sub-County to 95 % in Nangode Sub-County. Namutumba has 665 domestic water points which serve a total of 181,949 people – 174,443 in rural areas. 81 water points have been non-functional for over 5 years and are considered abandoned. Namutumba has 1 piped scheme.

**Table 3-3: Namutumba District % water coverage**

S/No.	Busiki County	Urban/Rural	Population	Population access/served	Percentage access
1.	Mazuba	Rural	15,335	7,206	47
2.	Bulange	Rural	54,449	27,562	51
3.	Kibale	Rural	39,892	26,700	67
4.	Namutuuba	Rural	45,560	32,552	71
5.	Namutuuba T/C	Urban	22,669	7,506	33
6.	Nangode	Rural	9,112	8,656	95
7.	Magada	Rural	43,671	30,112	69
8.	Nsinze	Rural	31,114	26,812	86
9.	Ivukula	Rural	45,337	14,849	33
	<b>Total</b>		<b>307,139</b>	<b>181,949</b>	<b>59</b>

#### 3.3.1.4 SOUTH-WESTERN REGION

#### 3.3.1.4.1 KABALE DISTRICT

Kabale District between coordinates: 1° 15' 0" S and 30° 0' 0" E in Southwestern Uganda. Kabale District is bordered by Rukungiri District to the North, Ntungamo District to the Northeast, the Republic of Rwanda to the East and South, Kisoro District to the West and Kanungu District to the Northwest. The district has 19 sub-counties, 3 town councils and 1 municipality with 3 divisions. These include; Buhara, Butanda, Kaharo, Kamuganguzi, Kitumba, Kyanamira, Maziba, Rubaya, Bubaare, Bufundi, Hamurwa, Ikumba, Muko, Nyamweru, Ruhija, Bukinda, Kamwezi, Kashambya and Rwamucucu sub-counties. The town councils are Katuna, Hamurwa and Muhanga.

#### 3.3.1.4.2 DRAINAGE AND TOPOGRAPHY

Kabale district's topography is majorly hilly with steep slopes that drain in a number of streams and a few rivers that flow thriftily. All the sloping land has good drainage conditions implying that soils on these slopes have no drainage limitations especially as related to agriculture. Likewise, in terms of transport networks and other economic activities, drainage does not pose any serious limitations. Poorly drained areas such as swamps have been reclaimed mainly for cultivation and for dairy farming.

#### 3.3.1.4.3 GEOLOGY AND SOILS

More than 80% of Kabale District is underlain by the oldest rock system, the precambrian age which consists of the basement complex system as the oldest overlain in some areas by a succession of sedimentary strata which have undergone a variable degree of dynamothermal metamorphism. The absolute age of the precambrian formations has not been determined with any accuracy and their chronological relationship to one another often remains obscure. The soils of Kabale District are mainly volcanic, ferralitic and peat soils. The volcanic soils are mainly found in Muko sub-county in Kabale District. The ferralitic soils are the most widespread in the district and are in the advanced stage of weathering and have little or no mineral reserves to draw on. They largely depend on bases held in the clay and organic complexes for their fertility. Productivity of the ferralitic soils depends on favourable, adequate depth and maintenance of the humid topsoil. The peat soils in Kabale District are mainly papyrus swamps. The peat soils are formed as a result of accumulation of a thick layer of organic matter below swamp vegetation due to slow decomposition.

#### 3.3.1.4.4 CLIMATE

Total Annual Rainfall received by Kabale District ranges between 900mm-1350mm per annum. Lowest rainfall amounts are experienced in Kamwezi, Maziba, Kaharo, Rwamucucu and Bukinda sub-counties with rainfall ranging between 900mm–1100mm per annum. Highest annual rainfall between 1251mm– 1359mm are experienced in Ruhija, Ikumba and Muko sub-counties towards the border with Kisoro and Kanungu. An analysis of temperature covering the period from 1960 to 1985 shows a positive trend in both the minimum and maximum temperature covering all the months. The rate of rise of the annual temperature is found to be 0.39° per decade. This rate of warming is quite high and is very much above the global average (about 0.3° C per decade). One possible explanation for the micro-climatic warming in Kabale could be that due to massive land and swamp reclamation it is possible that the local radiative balance in this region could have been affected.

#### 3.3.1.4.5 VEGETATION AND LAND USE

Looking at the district as a whole, five categories of vegetation can be distinguished, although most of the area has been greatly modified through cultivation. The high-altitude forest comprises those, which lie at altitudes over 5,000 feet, mainly on the lower slopes of the major mountains, but also in the highlands of Kabale especially Bwindi Forest. Though not including such a large number of species as the forests at medium altitudes, these forests are quite varied in form and composition; a variation, which reflects the

wide range of sites that, they occupy. Forest/Savannah Mosaic at high altitudes. Only few remnants of forest still survive in the district and at altitudes between 2,200-3,200m there is a mosaic of patches of savannah and scrub at various stages of the succession back to forest, where the influence of fire and cultivation has been reduced. The savannahs delivered are barely distinguishable, the tree layer which is often scarce and usually 2-4m high, is characterized by *Protea gagwedi* and *Faurea saligna* and the grass layer, 0.6-15m high is dominated by *Andropogon distachyus*, *Cymbopogon validus*, *Exotheca abyssinica* of *Hyparrhenia cymbaria*. At the lower limit, this merge gradually into drier combretum savannah and above into a space stunted health. In the South Western part of the district the shallow soils support grasslands in areas which were originally forests. Small areas are covered by evergreen thicket e.g., Echuya/Orugano.

#### 3.3.1.4.6 LAND USE

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Kabale District has a total area of 1,864km<sup>2</sup>, out of which arable land area is 1,695km<sup>2</sup>, water body is 48.5km<sup>2</sup>, swamps/wetlands are 79.4km<sup>2</sup> and marginal land is 41.1km<sup>2</sup>. About 75% of arable land is largely owned according to customary laws. However, some land is held by freehold and leasehold of about 41.1 sq. km (2.4%) and 391.2km<sup>2</sup> (22.6%) respectively. The average land area for agriculture is 2.06 ha or 5.08 acres per household. The *per capita* land holding is 0.3 ha/0.8acres (1995). Land is seriously fragmented, and an average household has 6-7 plots of land on different hillsides.

#### 3.3.1.4.7 POPULATION

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According to the National Population and Housing Census (2014) results, Kabale District had a total population of 534,160 people. Results also showed that most of the people in Kabale District reside in rural areas (457,592 (85.7%) compared to (76,568 (14.3%) who reside in urban centers. The gender distribution was reported to be males: 252,164 (47.2%) and females: 281,996 (52.8%). About 98.1% (523,984) of the population form the household population and only 1.9% (10,176) is non-household. Muko sub-county had the highest population of 46,847 people while Hamurwa town council had the least population of 5,146 people.

#### 3.3.1.4.8 ECONOMIC ACTIVITIES

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The district climate favors mainly the growth of highland food crops such as maize, Irish potato, sweet potato, sorghum, bananas, beans, and finger millet. Others, which are grown on small scale by households, include; tobacco, Arabic coffee, temperate fruits (apples, grapes, pears), peas, wheat, barley and vegetables (cabbages, tomatoes, cauliflowers, carrots, onions, beet root, spinach, collards and green pepper). Livestock production is also practiced, and the animals reared include cattle, goats, sheep, pigs, rabbits and chicken.

This study also revealed that sale of these agricultural products is the main source of income however, it was also noted that, women are usually given the smallest pieces of land especially those near home for them to cultivate for home consumption while the men cultivated on the bigger pieces of land mainly for commercial purposes. This leaves women in a marginalized position since they have many needs to satisfy starting with provision of basic needs for the whole family because of their reproductive function in society. Consequently, because of the need to provide for the family, most families in this region might start to sell off most of the vegetables and food stuffs meant to improve on their nutrition, and issue that might escalate stunting in the community. Thus, there is great need for gender integration into the project for intended project results to be achieved.

#### 3.3.1.4.9 SAFE WATER COVERAGE IN KABALE

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The access rates in Kabale vary from 62 % in Ryakarimira Sub-County to 95 % in Buhara Sub-County. Kabale has 1,979 domestic water points which serve a total of 218,569 people– 167,503 in rural areas. 191 water points have been non-functional for over 5 years and are considered abandoned. Kabale has 24 piped schemes.

**Table 3-4: Kabale District Water Supply Summary**

Sub County	Urban/Rural -Pop	Pop. access served	Access (%)
<b>Kabale MC</b>			
a. Northern Div.	Urban - 13,434	NWSC	NWSC
b. Southern Div.	Urban - 22,390	NWSC	NWSC
c. Central Div.	Urban - 17,183	NWSC	NWSC
<b>Ndorwa County</b>			
a. Kitumba	Rural - 20,411	19,390	95
b. Kyanamira	Rural - 21,452	20,379	95
c. Rubaya	Rural - 21,869	20,776	95
d. Ryahamira	Rural - 7,706	4,750	62
e. Katuna TC	Urban - 10,830	10,068	93
f. Kaharo	Rural - 20, 932	9,885	95
g. Buhara	Rural - 27,388	26,019	95
h. Kamuganzi	Rural - 22,286	21,172	95
i. Butanda	Rural - 19,578	13,565	69
j. Maziba	Rural - 22,702	21,567	95
<b>Total</b>	<b>195,154</b>	<b>177,571</b>	<b>91</b>

### 3.3.1.5 NTUNGAMO DISTRICT

Ntungamo is located in southwestern Uganda; between latitudes 0° 35' and 1° 15'south and longitudes 30° 05'East. It borders with Kabale District in the south, Rukungiri District in the west, Shema and Mitooma districts in the north, Mbarara District in the northeast, Isingiro district in the east, the Republic of Tanzania and Rwanda in the south east. The district has 15 sub-counties, 3 town councils and 1 municipality with 3 divisions.

#### 3.3.1.5.1 TOPOGRAPHY

The landscape of the area belongs to the Ankole surface or wetlands pen plain classification. It lies at an altitudinal range of about 1,300 to 1,500 meters above sea level. The area is generally hilly and mountainous especially in Northern and South-western parts of the district. It is interrupted by one major swamp system of L. Nyabihoko highlands reaching heights of 1,800 meters above sea level. The district can be divided into three main topographic zones, the Northern hills, the central plains and the South-Western hills. The project area is mainly dominated by the South-Western hills that consist of isolated hills that are part of the rift valley block which is mainly rounded in shape. The proposed station site however is flat with its entire neighborhood.

#### 3.3.1.5.2 GEOLOGY AND SOILS

Ntungamo soils are varied in nature and are influenced by a number of factors such as parent rock, age of formation and climate especially the amount of moisture and its fluctuations during the process of weathering. These soils belong to Karagwe-Ankolean system. They are indeed very old and are in their last stages of development with very little mineral reserves left. Their productivity, therefore, depends on the nutrient recycling propagated by the vegetation cover and its rooting system and are generally classified as

soils of low to medium productivity; supporting few perennial crops like coffee, bananas and other annual crops where they are low in productivity. The major activity is pastoralism predominated in Ngoma Sub-county. Dominant soil types are reddish clay loams, shallow, dark-brown, sandy loams, yellowish red clay loams, podsolised black sandy loams, stoney loams and sandy to plastic clays which are hydromorphic, derived from the weathering of KA phyllites, Karagwe Ankolean schist's, sand stones and quartzite, granites and hydromorphic/alluvial soils in areas under permanent water logged or impeded drainage conditions.

#### 3.3.1.5.3 CLIMATE

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Ntungamo district lies in the Ankole-South Uganda Climatic Zone. The rainfall received is mainly convectional and averages about 900mm per annum. There are two rainfall regimes which are associated with the equatorial trough; one season begins in March to May and the other in August to November which is the largest. Two dry seasons occur, with a pronounced one in June-July and a less severe one and often interrupted by scattered showers between December and February. The district experiences a mean annual temperature of 26°C and mean annual minimum of 14.5°C. High temperatures are recorded in the months of January–February and June- August which correspond to dry spells. The relative humidity ranges from 93-85% in the morning and decreases to 60-45% in the afternoon depending on the time of the year and other weather conditions occurring at that particular time.

#### 3.3.1.5.4 VEGETATION AND LAND USE

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The vegetation in Ntungamo District can be broadly classified into five types namely grassland Savannah, Wood Savannah, Moist Acacia Savannah, Swamps and planted/cultivated vegetation. The most dominant of these is grassland savannah used for livestock grazing. Wooded savannah mainly in Rukoni, Ruhaama, Rweikiniro and Ngoma sub-counties is disappearing at a high rate due to charcoal burning, overgrazing and wetland conversion. Cultivated vegetation includes bananas, coffee, fruit trees, cassava, eucalyptus and pine.

#### 3.3.1.5.5 POPULATION

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According to the National Population and Housing Census (2014) provisional results, Ntungamo District had a total population of 489,323 people. Results also showed that most of the people in Ntungamo District reside in rural areas (431,261(88.1%) compared to (58,062 (11.9%) who reside in urban centers. The gender distribution was reported to be males: 234,244 (47.9%) and females: 255,079 (52.1%). About 98.7% (483,075) of the population form the household population and only 1.3% (6,248) is Non-household. Ruhaama sub-county had the highest population of 43,332 people while Western division in Ntungamo Municipality had the least population of 5,254 people.

#### 3.3.1.5.6 ECONOMIC ACTIVITIES

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Majority of the population in Ntungamo District engages in subsistence agriculture where cultivation of food crops such as bananas, maize, beans, finger millet, cassava, sorghum, onions and sweet potatoes are dominant. The major cash crop is Coffee. A considerable number of households practice livestock production and the animals reared are cattle, goats, sheep, pigs and chicken. Fishing is among the economic activities in the district but dominant in Nyabihoko sub-county (Lake Nyabihoko).

#### 3.3.1.5.7 SAFE WATER COVERAGE IN NTUGAMO

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The access rates in Ntungamo vary from 51 % in Kitwe TC Sub-County to 95 % in Bwongyera Sub-County. Ntungamo has 2,222 domestic water points which serve a total of 381,487 people – 342,792 in rural areas.

371 water points have been non-functional for over 5 years and are considered abandoned. Ntungamo has 4 piped schemes.

**Table 3-5: Ntungamo district % water coverage**

S/No.	Kajora County	Urban/Rural	Population	Population access/served	Percentage access
1.	Kibatsi	Rural	21,898	20,803	95
2.	Rwashamire	Urban	8,653	NWSC	NWSC
3.	Ihunga	Rural	17,189	16,338	95
4.	Nyabihoko	Rural	24,676	23,442	95
5.	Bwongyera	Rural	22,326	21,210	95
	<b>Total</b>		<b>94,751</b>	<b>90,013</b>	<b>95</b>
<b>Ruhaama County</b>					
1.	Kitwe	Urban	23,296	10,362	15
2.	Nyakyera	Rural	42,662	28,698	67
3.	Rukoni East	Rural	26,492	14,206	54
4.	Rweikiniro	Rural	41,233	28,589	69
5.	Ntungamo	Rural	35,037	33,285	95
6.	Itojo	Rural	25,103	23,285	95
7.	Rukoni West	Rural	19,014	18,063	95
8.	Ruhaama	Rural	28,735	NWSC	NWSC
	<b>Total</b>		<b>238,532</b>	<b>181,194</b>	<b>76</b>
9.	Ntungamo Municipality	Urban	494,903	381,487	77
10.	Rushenyi	Rural	140,683	94,191	67

### 3.3.1.6 ISINGIRO DISTRICT

Like most Ugandan districts, it is named after its main municipal, administrative and commercial center of Isingiro, the location of the district headquarters. Isingiro District is bordered by Kiruhura District to the north, Rakai District to the east, the Republic of Tanzania to the south, Ntungamo District to the west, and Mbarara District to the northwest. The coordinates of the district are: 00 50'S, 300 50'E. Isingiro District has 14 sub-counties and 3 Town councils, about 96 parishes each with a number of villages ranging between 5-20 villages.

#### 3.3.1.6.1 TOPOGRAPHY AND DRAINAGE

Isingiro's scenery is characterized by steep hills and deep valleys especially in the sub-counties of Nyakitunda, Kabingo, Kabuyanda, Ngarama and Kashumba mostly characterize the terrain of the District. Other areas are characterized by gentle slope hills and low land areas for the sub counties of Mbaare, Endinzi, Masha and part of Birere. The proposed site is gently sloping and drains towards the north, following the area drainage pattern.

#### 3.3.1.6.2 GEOLOGY

From the geological mapping undertaken by the Geological Surveys and mines (2012), indicate that areas west of the district (around Nyakitunda, Nyamuyanja, Kabyunda subcounties) are dominated by mudstone, shale and phyllites with oncolite and stromatolite rock patches. Lower areas occupied by Lake Nakivale catchment system are predominantly papyrus swamp with flood plain mud. Mid areas of the district especially the Ngarama hills are dominated by quartzitic sandstones and laterites. Areas farther east towards

the border with Rakai district and National border with Tanzania are occupied by mica schist with quartzitic interbeds especially in Endiizi sub-county. Some patches of Alluvium lacustrine deposits form the Masha areas especially along the Rwizi River catchment system.

#### 3.3.1.6.3 CLIMATE

Total Annual Rainfall received by Isingiro District ranges between 966-1380mm per annum. Lowest rainfall amounts are experienced near Mbarara district border in Bireere sub-county with about 966mm per annum and highest annual rainfall of 1,380mm near Rakai district border and National border with Tanzania in Endiizi sub-county. The District experiences small annual variation in air temperatures; and the climate may be described as generally hot and humid, with average monthly temperatures varying between 27°C and 31°C. The temperature maximum is consistently above 30°C and sometimes reach 38°C. Average minimum temperatures are relatively consistent and vary between 16°C and 18°C in the hilly areas of Nyakitunda, Nyamuyanja, Ngarama, Kabingo and Kabuyanda sub-counties. The lowest humidity levels occur in dry seasons with minimum levels occurring in December and January. The average monthly humidity is between 60% and 80%.

#### 3.3.1.6.4 VEGETATION AND LAND USE STRATIFICATION

The largest area of Isingiro district is covered by subsistence farmland especially in the sub-counties of Nyakitunda, Nyamuyanja, Kaberebere Town Council, Bireere, Mbaare, Endiizi and Rugaaga. Grasslands and bushlands occupy hills of Ngarama and relatively lower areas of Masha, Kabingo, Rugaaga and Rushasha especially adjacent to Lake Nakivale. Wetlands exist along Rwizi river in Rugaaga and Rushasha sub-counties and also along the prominent Oruchinga wetland system stretching from Ngarama to Isingiro Town council. Some areas are built up especially in Isingiro Town council, Kaberebere Town council and Kikagate Town Board. The district is endowed with protected areas ie. Rwoho and Kyahi central forest reserves in Kabuyanda and Masha sub-counties respectively. The district also borders with Lake Mburo National Park to the north bordering with Kiruhura district.

#### 3.3.1.6.5 POPULATION

The census data by UBOS 2014 indicate the total population of Isingiro district as 492,116 with the biggest percentage as rural residents (493985 (89%)) and the remaining percentage are urban residents (52831 (11%). Gender distribution was indicated to be Males -237549 (48%) and Females -254567 (52%). About 99% (488327) of the population form the household population and only 1% (3789) is non-household. Kashumba sub-county was indicated with the biggest population with Nakivale refugee settlement alone with 57168 and the rest of the sub-county having 21883. On the other hand, Kaberebere Town council was indicated with the least population (6,785).

#### 3.3.1.6.6 ECONOMIC ACTIVITIES

Agriculture is the mainstay of the district economy of Isingiro District. Nearly 90% of the households are engaged in Subsistence agriculture with the major crops being banana, sweet bananas, maize, sweet potatoes, Irish potatoes, beans, cassava and vegetables. A considerable number of the population is involved in livestock production especially rearing cattle and goats.

#### 3.3.1.6.7 SAFE WATER COVERAGE IN ISINGIRO DISTRICT

Isingiro District is prone to drought and there is lack of adequate water for both human consumption and production. The average safe water coverage for the entire district is recorded at 37% which is far below the national standard of 66%. According to the National Population and Housing Census 2014–Isingiro District Profile, 12.3% of the households in the district have access to piped water while 6.1% access water through

boreholes. Kabuyanda Sub County depends mainly on water from Gravity Flow Schemes (GFS) and borehole water. The sub county has two Gravity Flow Schemes which include; Rwemango GFS, Rwabymera and four boreholes scattered all over the Sub County. Other sources of water for households in the sub county include springs and swampy water although the quality of the water from these two sources is poor in terms of taste, colour, smell and hardness.

#### 3.3.1.6.8 ISINGIRO WATER SUPPLY AND SANITATION IMPROVEMENT PROJECT

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The project targets improved water supply and sanitation for both host and refugee communities in the Ugandan district of Isingiro. Isingiro is one of the 14 hosting districts which make Uganda the first asylum country in Africa, with 1.2 million refugees. More than 100 000 of the latter live in its Nakivale settlement area and are gradually turning it into a large informal urban center. Isingiro is simultaneously a water-stressed district, and is lagging behind other Ugandan rural districts in terms of access to water (37% against a national average of 70%). The district thus compounds water supply challenges with refugee hosting challenges.

The project is expected to improve health and sanitary conditions as well as living environment across Isingiro district (340 000 persons out of 550 000, including the two refugee settlement areas which host 120 000 persons). The quality of life will be enhanced by improving hygiene conditions and reducing the incidence of waterborne diseases and increasing available incomes by reducing healthcare costs and lost working days. The project will also contribute to the protection of the natural environment and biodiversity, by reducing the pollution discharged into Lake Nakivale, and reducing the volume of water abstracted from this lake.

#### 3.3.1.6.9 SANITATION AND WASTE MANAGEMENT

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According to the National Population and Housing Census 2014, Isingiro District Profile, 2.3% of the households in the district do not own a toilet facility and only 17.1% of the households dispose of their solid wastes properly. The findings from the socio-economic survey indicated that 99.1% of the households have toilet facilities for disposing human wastes while 0.9% of the households lack toilet facilities. The most common type of toilet facility owned/used is the pit latrines as reported by 96.3% of the respondents, followed by Ventilated Improved Pit latrine (VIP) 2.6%, Flush toilet 0.2% and 0.9% lack toilet facilities. The socio-economic survey revealed that the households that lack the toilet facilities utilize their neighbour's toilets to dispose their human waste and the reason advanced for lack of the toilet was lack of funds to construct a latrine. They intimated that the nature of the terrain makes construction of the toilet expensive. The most common methods of domestic garbage disposal in the project areas are the use of open dumps, burning, shallow pits and scattering in the gardens. These methods are mainly used in the villages. In the trading centre, garbage is collected by the Kabuyanda Town Council and dumped near the Town Council offices.

#### 3.3.1.6.10 HEALTH

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According to Isingiro District Health Management Information Systems (HMIS), Annual Analysis Report (July 2016 – June 2017), the District has 79 Health facilities, 4 Health Center (HC) IVs, 20 HC IIIs, and 55 HC IIs with 54 Gov't owned Health units, and 11 NGO owned Health Units Private Not for Profit Organizations (PNFPs) and 14 PFPs. The District has 32 PMTCT sites, 16 ART sites, 7 SMC sites and 30 TB sites.

The reported common diseases among the populace of Isingiro and the surrounding areas include; malaria, Respiratory Tract Infection (RTI), diarrhoea, ear infections and HIV/AIDS. He pointed out that the HIV/AIDS prevalence rate in the area is at 4.6% lower than the national HIV/AIDS prevalence rate of 7%. Findings from

the socio-economic survey indicated that the most common diseases affecting households are Malaria as reported by 93.5%, followed by cough (68.7%), water related diseases like diarrhoea (12.6%), Sexually Transmitted Diseases like HIV/AIDS, syphilis etc. (9.5%) Respiratory Infections like RTI (9.7%), ulcers (7.7%) and other diseases such as skin diseases, burns etc. Figure below shows the common diseases reported by households in the project area.

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### 3.3.1.7 BUSHENYI DISTRICT

The district has a land area of 3'949km<sup>2</sup> and lying between 910 and 2,500 meters above sea level. The main physical features include natural tropical forests of Karinzu and Imaramagambo covering an area of 784km. These serve as tourist attractions. Arable land covers 2,215km<sup>2</sup> square kms; open water bodies cover 372km<sup>2</sup> and wetlands covering 183km<sup>2</sup>.

#### 3.3.1.7.1 TOPOGRAPHY

The District is characterized by undulating hills, which are usually smooth in outline, with steep fluted slopes with hill tops continually rising to over 1846m above sea level. It has plateau areas, which are deeply incised particularly within the rightward drainage with local relief dropping to 615m above sea level. It has three distinctive topographic zones: the highland area, plateau area and rift valley area.

#### 3.3.1.7.2 GEOLOGY

The geology of Bushenyi district is characterized by two rock systems, the pleistocene rift valley sediments and the pre-cambrian rock. a) The pleistocene rift valley sediments, characterized by sediments, alluvium, black soils and moraines and are of low mineral content and fertility levels. b) The pre-cambrian underlying rock systems are in the categories of wholly granitized and metamorphosed formation which are part of the Karagwe-Ankole system. The wholly granitized formations are the major 17 undifferentiated gneiss including elements of partly metamorphosed formations and granulite facies rocks.

#### 3.3.1.7.3 SOILS

Bushenyi soils are ferrallitic representing almost the final stage of weathering and prolonged leaching which leads to a highly developed stage, and can be categorized in terms of color as:

- a. *Yellow ferrallitic soils* which are characterized by the dominant colour yellow.
- b. *Black ferallitic soils*: These are soils which have a dark colour and are characterized by their well-developed humic top soils, together with a distinctive humic horizon at source depth, which are not differentiated.
- c. *Weakly Developed Lithosols*: These are soils without genetic horizon very stony and having solid rock with 25 cm depth. Because of being young soils and products of recent weathering, they usually contain an abundance of weathering minerals.

#### 3.3.1.7.4 CLIMATE

Bushenyi district has a bimodal rainfall pattern with long rains occurring from February to May and short rains between September and November. The mean annual rainfall ranges between 700mm to 1200mm. Temperatures are warm throughout the year. The warmest month is 27<sup>0</sup> C and the coldest month 15<sup>0</sup> C. Maximum temperatures recorded is 27.5<sup>0</sup> C while minimum recorded is 15<sup>0</sup> C. Early morning mist is usually seen in the highland horizons in the district.

#### 3.3.1.7.5 POPULATION

As projected in the national statistics by 2010, Bushenyi District has a population of 117,000 males and 124,000 females respectively totaling to 241,500 people. The population distribution in rural and urban areas



is projected to stand at 89% rural and 11 per cent urban. The urban population is projected to be almost 1:1 male to female ratio. The population density stands at 282 people per square km with a household size of six.

#### 3.3.1.7.6 ECONOMIC ACTIVITIES

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The district is well known for the growing of bananas and dairy farming. Residents also grow coffee and tea. People are also involved in semi-intensive agriculture, trade and commerce, transport, stone quarrying, sand mining, mineral mining, construction, tourism, and lumbering.

#### 3.3.1.7.7 SAFE WATER COVERAGE IN BUSHENYI DISTRICT

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The access rates in Bushenyi vary from 78 % in Ruhumuro Sub-County to 95 % in Bumbaire Sub-County. Bushenyi has 1,344 domestic water points which serve a total of 211,461 people—176,774 in rural areas. 313 water points have been non-functional for over 5 years and are considered abandoned. Bushenyi has 2 piped schemes. Igara country with a population of 205,233 of which, about 191,741 representing 93% have access to safe water coverage while Bushenyi Municipal Council with a population of 248,975 of which 211,461 representing 85% have access to safe water.

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### 3.3.2 WESTERN REGION

#### 3.3.2.1 KASESE DISTRICT

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Kasese District is located in the Western region of Uganda at 00°11'N 30°05'E, and bordered by the Districts of Kabarole to the Northeast and east, Bundibugyo to the Northwest, Kamwenge to the Southeast, Bushenyi to the South and the Democratic Republic of Congo to the West. The District has an area of 3,389.6 km<sup>2</sup>, of which only 1,076.6 km<sup>2</sup> (37%) is available for habitation and cultivation, as the greater percentage is occupied by water bodies, wildlife conservation areas, nature or forest reserves

##### 3.3.2.1.1 CLIMATE

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The Rwenzori Mountains trap humid air of the Congo basin and are very wet with many rainy days. Above 2500m MSL, clouds persist for several days. Though the climatic parameters can be inferred to vary with altitude, there have been only few actual measurements of the parameters to be used in studies. Annual Potential Evapo-transpiration in the country is estimated to range from 2200 mm/annum downwards and in the mountain areas of Rwenzori, it is estimated to be less than 1400mm. However, information of its variation with altitude is not available. Limited measurements of Relative Humidity are available for Kasese indicate a range of 97% to 34% at an altitude of 960m MSL.

##### 3.3.2.1.2 SAFE WATER COVERAGE IN KASESE

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In May 2015, a cholera outbreak that lasted 3 months and infected over 100 people was reported in Kasese District, where multiple cholera outbreaks had occurred previously. This prolonged, community-wide cholera outbreak was associated with drinking water contaminated by fecal matter and cross-border trading. Since then, access to safe water in Kasese District is currently at 57.0% compared to 74% National average resulting from a range of interventions that have been put in place to stem up safe water coverage in the district by both Government and some partners. With support from UNICEF and other partners, the district has improved its systems and integrated delivery of services to curb disease outbreaks resulting from consumption of unsafe water and poor hygiene. There are currently 177 boreholes both functional and non-functional, 1932 Gravity Flow Schemes (GFS) taps and 956 protected. The access rates in Kasese vary from 20 % in Kyondo Sub-County to 95 % in Ihandiro Sub-County. Kasese has 3,317 domestic water points which serve

a total of 482,336 people– 337,908 in rural areas. 583 water points have been non-functional for over 5 years and are considered abandoned. Kasese has 1 piped scheme.

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### 3.3.2.2 KABAROLE DISTRICT

Overview of the District Kabarole District is bordered by Ntoroko District to the North, Kyenjojo District to the East, Kamwenge District to the Southeast, Kasese District to the South and Bundibugyo District, across the Rwenzori Mountains to the West. Fort Portal, the major town in the District, lies approximately 320kms (200 mi) by road West of Kampala, the capital city of Uganda. The coordinates of the District are 00° 36' N, 30° 18' E. The District has two national parks, Rwenzori National Game Park and Kibaale National Game Park, and three forest reserves, in Bukuuku, Itwara and Kibale. The Rwimi, Nsongya, Yerya, Igasa and Mpanga Rivers traverse it.

#### 3.3.2.2.1 DEMOGRAPHIC CHARACTERISTICS

According to the 2014 National Population and Housing Census Projections for 2017, Kabarole has a population of 325,261 with an average household size of 4.0 people and 77,765 households. The male and female are equally represented at 50% each of the population. Kabarole District has a relatively high population growth rate of 2.37% growth. The high growth rate is mainly due to the high fertility levels (over six children per woman) and migration from the neighboring districts like Kasese, Kyenjojo, Kamwenge and Ntoroko combined with a faster decline in mortality.

#### 3.3.2.2.2 ECONOMIC CONTEXT

Crop farming is the main source of livelihood for the people in Kabarole. The rural areas mainly depend on subsistence farming while backyard gardening is commonly practiced in urban areas to supplement on household income. The district produces 60% of Uganda's tea and has 4 companies involved in tea processing. Livestock management is wide spread; dairy farming and commercial poultry farming are big enterprises in the district.

#### 3.3.2.2.3 SAFE WATER COVERAGE IN KABAROLE DISTRICT

Kabarole District has a population of 433,200 of which 86 % has access to safe water. The majority use point water supply facilities (78%), mainly shallow wells. Seven piped systems (six Gravity Flow Schemes and one pumped ground water system) serve approximately 23 % of the population. The functionality rate in urban and rural areas is 78 % and 82 % respectively (SPR 2014). Kabarole District has 1,888 domestic water points. The average annual budget for WASH (2010-2013) was 490 million UGX (US\$163,000). According to the Ministry of Water and Environment data (2014) on performance of districts on golden indicators, the level of access to safe water in rural areas in Kabarole was 86%, and functionality of water supply facilities was 78%. Compared to the national average of 65% for access and 84% for functionality, Kabarole shows a relatively good level of performance.

#### 3.3.2.2.4 SANITATION AND HYGIENE

The main facilities used for capture and containment of fecal waste include; traditional pit latrines, VIP latrines, and WCs. Majority of the households (95.5%) have sanitation facilities. Majority of these have traditional pit latrines, followed by those with conventional latrines and VIP latrines. Analysis of the status of the sanitation infrastructure lately shows a sharp decline in proportion of households whose facilities meet the parameters for improved services; adequate superstructure, concrete slab, water and soap for handwashing. Only 1% of the households fulfilled all the 4 parameters. Further observation of the facilities showed that there was evidence of open defecation around the facilities and compound at 19% of the households.



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### 3.3.2.3 KYEGEGWA DISTRICT

Kyegegwa District is located in Western Region of Uganda and bordered by Kibaale District to the north, Mubende District to the east, Kiruhura District to the south, Kamwenge District to the southwest and Kyenjojo District to the northwest. It covers a total area of 1,747km<sup>2</sup>.

#### 3.3.2.3.1 TOPOGRAPHY

The landscape of Kyegegwa District is representative of the Waylands Peneplain II and is part of landforms that trace their origins to the end of the tertiary period. The landscape has a thick layer of laterite. There are remnants of this old laterized surfaces outcrop to the surface on hill summits in Kyegegwa and further east. Gently undulating hills are the predominant landform of crossing to areas of Rwamwanja.

#### 3.3.2.3.2 GEOLOGY AND SOILS

Kyegegwa District is underlain by Pre-cambrian rocks which can be divided into three types. There are wholly granitized or high to medium metamorphic formations which include quartzite in most of that region.

#### 3.3.2.3.3 CLIMATE AND RAINFALL

The project area experiences a double maxima rainfall regime with mean annual rainfall ranging from 800mm–1150mm. The first rains begin in late March to May and second rains begin in late August to early November sometimes stretching into the month of December during El-Nino years.

#### 3.3.2.3.4 POPULATION

Kyegegwa is one of the Ugandan districts that are hosting refugees from DRC, Rwanda and Burundi. The refugees are registered in a reception center, allocated plots of land in a refugee settlement and supported to build homes, farm and establish income generating business. This effort is in line with Uganda's transformational approach of making refugees in Uganda self-reliant and locally integrated with the host communities thus alleviating their restriction, lack and uncertainty. The 2014 Population and Housing Census results reported Kyegegwa population of 281,637. 141,043 (50.1%) people were males and 140,594 (49.9%) were females. The reported population was 92 persons per km<sup>2</sup>.

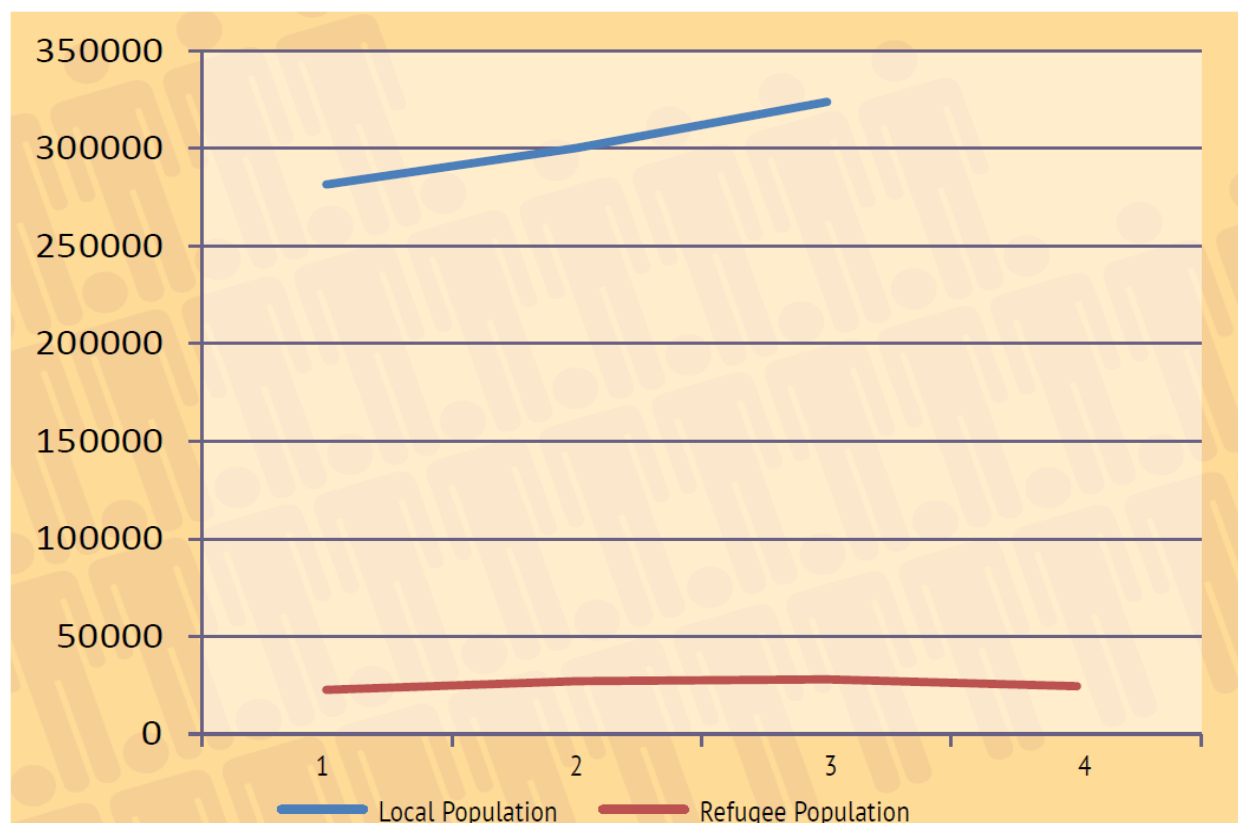


Figure 3-3: Population of Kyegegwa based on UBOS 2014 Census (Source: Kyegegwa District Investment Profile, UIA-2017)

### 3.3.2.3.5 ECONOMIC ACTIVITIES

The main occupation of the people of Kyegegwa is crop and livestock farming. Small scale farmers working on an average of two acres per household dominate the farming community. They cultivate mainly maize, bananas, beans, groundnuts, cassava, millet, potatoes, sweet potatoes citrus fruits and pineapples for food and sale. A few large-scale farmers with farms of more than 6 acres are emerging, growing pineapples, citrus fruit, and bananas for the market. Other major income generating activities are: aquaculture/fish farming; trade in agricultural produce and livestock; beekeeping and honey processing. Kyegegwa has abundant natural resources including fertile arable land. The district has fairly well distributed rainfall throughout the year with annual rainfall ranging from 1,200mm–1,500mm. The Temperatures range from 20°C-25°C in all parts of the district. Two rivers Katonga and Muzizi flow through the district. These rivers and the Ngata, Hapuyo and Kakabala wetlands are sufficient water sources which should be sustainably harnessed to enable commercial agricultural and livestock production.

### 3.3.2.3.6 WATER SANITATION AND HYGIENE

#### 3.3.2.3.6.1 SAFE WATER COVERAGE

The access rates in Kyegegwa vary from 17 % in Ruyonza Sub-County to 63 % in Hapuyo Sub-County. Kyegegwa has 559 domestic water points which serve a total of 129,793 people–116,739 in rural areas. 157 water points have been non-functional for over 5 years and are considered abandoned. Kyegegwa has 2 piped schemes.

#### 3.3.2.3.6.2 WATER SANITATION AND HYGIENE

There are 60 water sources: 31 shallow wells, 20 boreholes and 9 protected wells or springs as well as a water dam at Sweswe and a 7,500 litres mini water treatment plant. There are also 34 rainwater harvesting

structures to boost water supply in the settlement. Base camp and all institutions rely on rain water harvesting during the rainy season and water trucking during the dry season. Distance to safe water points varies from zone to zone (village to village) from 50-2000m. Latrine coverage is around 78%. The families are also encouraged to dig communal pit latrines and are provided with a latrine digging kit including plastic slabs and treated poles.

#### 3.3.2.3.7 HEALTH SERVICES DELIVERY

The most common disease in the host communities and refugees in Kyegegwa is malaria. AHA operates 2 health centers in Kyaka II: Bujubuli health center III and Mukondo health center II serving a catchment area of about 23,185 nationals (host communities) and 21,923 refugees each with around 10% of patients in Mukondo HC being Ugandan nationals and 55% at Bujubuli. AHA intervenes and supports 59 awareness messages on HIV/AIDS, other communicable diseases, health promotion campaigns, and capacity building of Community Health Workers. As a result, there has been an improvement in ANC attendance, maternal child health and family planning response. All indicators in morbidity and mortality are also within accepted standard. Cases that need further management are referred to secondary and tertiary health facilities including Kyegegwa H/C IV, Fort portal district hospital and Mulago national referral hospital.

#### 3.3.2.3.7.1 HIV/AIDS PREVALENCE IN KYEGEGWA DISTRICT

In Kyegegwa district, HIV/AIDS remains a social economic burden to the entire population, which has directly or indirectly affected them. The Young and energetic population is the most affected leading to reduction in the work force. District HIV/AIDS prevalence is 6.9% based on the District Sero Behavioral Survey report of 2018.

#### 3.3.2.4 KYENJOJO DISTRICT

Kyenjojo District was established in 2000 being carved out of Kabarole District. Administratively, the district has one county (Mwenge) and three constituencies (Mwenge North, Mwenge Central and Mwenge South), 18 sub counties, 9 Town Councils, 109 parishes, 47 wards and 853 villages. The District borders with Kibaale in the North, Kyegegwa in the East, Kamwenge in the South west, and Kabarole in the West and it is located in the mid-western at approximately 250Kms from Kampala City.

#### 3.3.2.4.1 TOPOGRAPHY

Most of the areas in Soroti district are underlain by rocks of the basement complex Precambrian age that include granites, migmatites, gneiss, schists and quartzites.

#### 3.3.2.4.2 CLIMATE

The climate of the district is modified by the large swamp area surrounding it. The rainy season is March to November, with a marked minimum in June, and marked peaks in April to May and August to October. December and January are the driest months. Of recent rainfall has been unreliable and unpredictable hence affecting the activities of people e.g., agriculture, livestock rearing etc.

#### 3.3.2.4.3 RAINFALL

Rainfall normally ranges from 1000mm to 1500mm coming in two seasons; March–July and September – November. There is normally a short dry spell between the two rain seasons during mid-June–mid July. The long dry season sets in during late November through to early March. The distribution is such that areas bordering Northeast experience earlier dry seasons. This is also a common occurrence at the lakeshore areas, which sometimes experience very sharp spells of drought.

#### 3.3.2.4.4 POPULATION

The 2014 Population and Housing Census results reported Kyegegwa population of 281,637. 141,043 (50.1%) people were males and 140,594 (49.9%) were females. The reported population was 92 persons per km<sup>2</sup>

#### 3.3.2.4.5 SAFE WATER COVERAGE IN KYENJOJO DISTRICT

The access rates in Kyenjojo vary from 24 % in Kyembogo Sub-County to 95 % in Butiiti Sub-County. Kyenjojo has 1,637 domestic water points which serve a total of 355,081 people—282,172 in rural areas. 387 water points have been non-functional for over 5 years and are considered abandoned. Kyenjojo has 3 piped schemes. With a total population of 519,165 of these, 355,081 people have access to safe water giving an overall district average coverage of 68% as of March 2021.

#### 3.3.2.5 KIRYANDONGO DISTRICT

Kiryandongo District is located in the mid-western part of Uganda, with its headquarters 218km away from Kampala. It borders Nwoya District in the North, Oyam in the North East, Apac in the East, Nakasongola in the South- East, Masindi in the South and South West, and Buliisa in the North West. The District is at an average altitude of 1295masl, situated between 10 22' and 20 20' North of the Equator, longitude 310 22' and 320 23' East of Greenwich. Kiryandongo District covers an area of 3,621km<sup>2</sup> most of which is arable land. Kiryandongo district has an area of 3,624.1km<sup>2</sup>, with a perimeter of 478km. Victoria Nile borders the district in the North, West and South East.

##### 3.3.2.5.1 GEOLOGY

The District is generally a plateau land with an altitude of 1,295m.a.s.l. Undulating hills with some pronounced high points are located in some localities in the District. One of these high points is Kaduku in Kigumba Sub County. The land in the Murchison Falls conservation area which lies in the North and North West of Kiryandongo District is flat.

##### 3.3.2.5.2 CLIMATIC CONDITIONS

In terms of climate, Kiryandongo District is endowed with favorable climate conditions and has a bimodal rainfall pattern. The District receives an annual long-term average rainfall of 1200mm. The highest rainfall is normally received in March–May and August–November. The District enjoys favorable weather conditions coupled with good soil fertility making it suitable for agricultural production. Based on the amount of rainfall received, the District can be divided into three major climatic zones. Medium rainfall zones: These are areas with total amount of rainfall ranging between 800mm–1000mm per annum. Areas which fall under this zone include Kigumba and Kiryandongo sub counties as well as part of Mutunda Sub County. Lower rainfall zones: These are areas which receive less than 800mm of rainfall per annum. Localities in Masindi Port Sub County receive this rainfall amount.

##### 3.3.2.5.3 VEGETATION AND LAND USE

Vegetation and land use stratification Kiryandongo District covers an area of 3,621km<sup>2</sup> most of which is arable land. The natural vegetation of Kiryandongo comprises of savanna woodland including dry and humid Savannah with elephant grass prolific in some areas. This type of vegetation provides a diverse habitat for a variety of birds and animals. Existing wetlands have been identified most being seasonal and they support a diversity of plant, animal and plant species. They are facing degradation especially from agriculture and settlement hence the need for restoration. The land in the North and North West of Kiryandongo District, is a protected area of Murchison Falls conservation area.

##### 3.3.2.5.4 POPULATION

The 2014 Population and Housing census estimates the population at 268,188 people of which 123,541 people are males and 134,647 people are females (UBOS, 2014). The population density stands at 74 persons/km<sup>2</sup>. Percentage of population below poverty line is at 30% compared to the national performance which is at 24% (UBOS, 2013).

#### 3.3.2.5.5 ECONOMIC ACTIVITY

Major Economic activity is agriculture. Agricultural activities carried out in medium rainfall zones include maize, cassava, sunflower, cotton and tobacco production. This has contributed to improved household incomes enabling the population to sustain their livelihoods. On the other hand, the major activities carried out in low rainfall zones include pastoralism, fishing and cotton growing.

#### 3.3.2.5.6 SAFE WATER COVERAGE IN KIRYANDONGO DISTRICT

The access rates in Kiryandongo vary from 64 % in Mutunda Sub-County to 95 % in Masindi Port Sub-County. Kiryandongo has 743 domestic water points which serve a total of 221,405 people—188,836 in rural areas. 105 water points have been non-functional for over 5 years and are considered abandoned. Kiryandongo has 2 piped schemes. Of the District population of 314,776 people, estimated 221,405 representing about 70% have access to safe water.

### 3.3.3 WEST NILE REGION

#### 3.3.3.1 ARUA DISTRICT

Arua district lies in the north-western Corner of Uganda. It is bordered by Maracha district in the north west; Yumbe in the north-east; Democratic Republic of Congo in the West; Nebbi in the south; Zombo in the south-east; and Amuru district in the east. In total the district covers an area of 4,274.13km<sup>2</sup>, of which about 87% is arable. It is located 520km from Kampala and only 80km from the South Sudan Border.

##### 3.3.3.1.1 CLIMATE

Arua district has a bi-modal rainfall pattern with light rains between April and October. The wettest months are normally August and September which receive 120mm/month. The average total rainfall is 1250mm. The mean monthly evaporation ranges from 130mm-180mm. In the dry season (December-March) temperatures remain high throughout.

##### 3.3.3.1.2 GEOLOGY AND SOILS

Arua District is underlain by early Proterozoic granitized rocks which include the Aruan and Watian Series. The main rock groups are pyroxene gneisses, charnockites and acid gneisses. Pleistocene to recent alluvium deposits and black soils occur in the rift valley trough. The weathering pattern of the rocks varies, which in turn determines the groundwater potential in the District. This has a significant bearing on the proposed groundwater development. Arua Municipal Council has mostly loamy soil, rocky in some areas with sandy soil along R. Enyau especially in Otokotoa cell and Enyau cell in Kenya Ward, R. Oli Division. These soils have fine texture with loose structures, which are easily eroded and leached. The soils are fertile and this promotes small-scale farming especially along the valleys and the slopes of the hills.

##### 3.3.3.1.3 VEGETATION

It is important to understand the vegetation of Arua as this will play an important role in revegetation of places that will be excavated/laid bare during the project activities. It will be necessary that sites are restored to as much as practically possible to conditions there were in before project activities. The natural vegetation of Arua used to be characterized by open land with equatorial type of savannah grass, with small pockets of

forest on top of the hills. The original vegetation of Arua was composed of mixed wooden savanna, which has greatly been reduced by housing settlements and subsistence farming. By far, where it exists, the savanna is the most predominant vegetation in Arua. In general, the vegetation is *Butyrospermum-hyparrhenia* savanna. It is characterized by such trees as; *Isobulinia doka*, *Danieh cliveer* and *Afseha Africana* and dry *Hyparrhenia grasssavanna*. Post cultivation communities of *Imperata-Hyparrhenia* and *Hyparrhenia-Periduim* are found on the lower grounds.

#### 3.3.3.1.4 POPULATION

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As at 2016, the district had an estimated population of 820,500, of which 36,731 9 (4.5%) were refugees. By May 2017, Arua hosted 151,039 refugees, accounting for 18% of the district population. The refugees, mainly from South Sudan are of diverse ethnic backgrounds; Dinkas, Kuku, Nuer, Kakwa, Madi, and Siluk and have close ethnicity with the locals who are Kakwa, Madi, Alur and Lugbara. This partly explains the peaceful coexistence in the community.

#### 3.3.3.1.5 ECONOMIC ACTIVITIES

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The economy of Arua depends mainly on agriculture which employs over 80% of the households. Of those employed in agriculture, 86% are engaged in the crop sector, 0.6% in animal rearing, and 0.9% in fishing. Both food and cash crops are grown. The major food crops include cassava, beans, groundnuts, simsim, millet and maize. Tobacco is the major cash crop and is the main source of livelihood for majority of the population in the district. There is renewed interest in the promotion of coffee production in many areas of the district now. Like many Ugandan districts, the economy of Arua is dependent on agriculture and employs over 80% of the total population. Fertile soils and suitable climate combine to support the cultivation of a number of crops in most parts of the district. Agriculture is mainly subsistence (80%) and takes place on smallholdings of approximately two acres using mainly simple farming tools (hoes, pangas and harrowing sticks).

#### 3.3.3.1.6 BEE NATURAL HONEY LTD

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The largest honey and apiary production company with state-of-the-art factory and a wide supply base in Arua and neighboring districts. The company started business operation in 2007. Its main apiary supply base involves 1,200 beekeepers who are clustered into 15 groups spread in the districts of Arua, Nebbi, Yumbe, Moyo, Koboko and Adjumani. The company produces honey, was bars and propolis and is engaged in queen breeding “and colony multiplication.





Figure 3-4: Packaged Arua Honey

#### 3.3.3.1.7 WATER AND SANITATION

The major source of safe water in Arua Municipal Council and its immediate environs is the tap water supplied by NWSC with coverage of over 70% during rainy season but dropping much lower during the dry season. Other water sources are seasonal rivers, protected springs (23) and the several boreholes (58) some of which are contaminated. The informal settlement pattern in R. Oli Division explains the poor sanitation problems in the division where there are less sanitation facilities, poor hygiene, poor feeding pattern and high poverty levels among the residents. Toilet coverage in 2016 was 62.4%. Least toilet coverage was registered in Gurua cell; 29%, while highest toilet coverage was in Mvara S.S. cell; 96%. Hand washing after using the toilet is very low standing at only 20% in 2016.

#### 3.3.3.2 MARACHA DISTRICT

Maracha District is found in the North Western region lying between Arua and Koboko Districts. It's district headquarters and commercial town is in Maracha Town Council 34km north of Arua town along the main road to South Sudan. Maracha District is bordered by Koboko District to the North, Yumbe District to the north-east, Democratic Republic of Congo to the West and by Arua District to the south and south-east. Maracha comprises two counties, seven rural sub counties and one town council, 42 parishes and 411 villages as per 2014 statistic. The District has an approximate total area of 445.18km<sup>2</sup> and about 2.09% (0.92km<sup>2</sup>) of the total land is occupied by forests, water bodies and hills, leaving a total of 435.87km<sup>2</sup> as the available habitable and arable land. 0.02km<sup>2</sup> of the total land is occupied by water bodies and wetlands.

##### 3.3.3.2.1 POPULATION

The district, with a total area of 441km<sup>2</sup> is home to 186,176 (2014 census) people who are spread within the one county, seven sub-counties namely Nyadri, Yivu, Tara, Oluffe, Kijomoro, Oleba, Oluvu and Maracha Town Council. The district comprises 42 parishes and 411 villages.

### 3.3.3.2.2 WATER AND SANITATION

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The access rates in Maracha vary from 66 % in Oleba Sub-County to 95 % in Kijomoro Sub-County. Maracha has 911 domestic water points which serve a total of 184,509 people—174,585 in rural areas. 309 water points have been non-functional for over 5 years and are considered abandoned. Maracha has 3 piped schemes.

### 3.3.3.2.3 ECONOMIC ACTIVITIES

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The main economic activity in the district is agriculture but this is done on a small-scale level. Other key activities are trade and commerce. The main cash crop grown for the past decades has been tobacco but in the last few years tobacco has been gradually abandoned in favor of food production. Among the main crops grown are cassava, beans, sweet potatoes and maize. Livestock farming, fishing and bee keeping are also widely practiced. Other economic activities include trading in commercial merchandise, trade in produce, fish mongering, brick laying, timber exploitation, charcoal burning and brewing of local spirits.

### 3.3.3.2.4 DIVISION OF LABOUR

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Predominantly male tasks in agriculture include the felling of trees, ploughing with oxen or tractors, digging holes, the purchase and use of chemicals, looking for markets and the sale of produce. Women usually undertake sowing, harvesting, head loading of produce, crop-drying, winnowing, seed selection, pig and poultry-rearing and bartering sunflower seeds for oil. Other tasks, such as weeding, bagging and crop storage, are almost equally undertaken by both women and men. It is estimated that women do 85% of the planting, 85% of the weeding, 55% of land preparation and 98% of all food processing.

However, decisions to market are mainly made by men (70%), or are made jointly (15%). In rural areas, it is estimated that women's workloads both in the agriculture sector and household considerably exceed those of men. Traditionally, men tend to be responsible for the cash crops, but male labor is usually withdrawn if those crops decrease in profitability. This happened with many crops in the seventies and eighties, when producer prices were unfavorable. When market conditions change, attracting male labor back to such crops may be difficult. In most districts, the MHHs act as employers within the agriculture sector while WHHS are largely employees.

The design of UMFSNP-AF 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 through increased access to agricultural inputs, extension services and promoting of labor-saving technologies as identified by the consultative process are proposed. The project will generate gender disaggregated data to the extent feasible to provide for the monitoring of the results indicators.

### 3.3.3.2.5 LAND ISSUES IN UMFSNP

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Land tenure refers to the manner in which land is owned, occupied, used and disposed of within a community. No doubt land is the most important and the only reliable physical and economic resource for everybody, especially in predominantly agricultural communities. A properly defined and managed land tenure system is essential to ensure balanced and sustainable development. Under UMFSNP-AF 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 need for land acquisition.



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### 3.3.3.3 NEBBI DISTRICT

Nebbi District is in the West Nile sub region of Uganda. It is bordered by Arua district to the north, Zombo to the northwest, DRC to the southwest and Pakwach to the south–east. Nebbi district has a total area of about 985.00km<sup>2</sup> and average population density of 296.1. Nebbi district has population of 238,757 (114,732 males, 124,025 females) people as projected from National Population and Housing Census 2014. Nebbi District is currently divided into 13 Lower Local Governments i.e. Eight (8N<sup>o</sup>.) rural Sub-Counties i.e. (Akworo, Nyaravur, Kucwiny, Ndhew, Atego, Nebbi, Erussi, Parombo), one (N<sup>o</sup>.1) Town Council i.e. (Parombo Town Council) one (1N<sup>o</sup>.) Municipal Council i.e. (Nebbi Municipal) and three (3N<sup>o</sup>.) divisions i.e (Abindu, Nebbi, Thatha).The District has 42 parishes, 429 villages. Nebbi Municipality has got three (3) Divisions, nine (9N<sup>o</sup>.) Wards, 46 cells.

#### 3.3.3.3.1 CLIMATE

The project area has a bi-modal rainfall pattern with light rains between April and October. The wettest season normally August and September receive 120mm/month. The average total rainfall is 1250 mm per year. The mean monthly evaporation ranges from 130 mm-180 mm. In the dry season (December-March) temperatures in this part of the country remain high throughout.

#### 3.3.3.3.2 DISTRICT POPULATION

According to the Population and Housing Census (2014), Nebbi District has an estimated population of 433,466 people; and of these men constitute 48% while women are 52%. With a population growth rate of 2.69%, the population is mainly rural to a tune of 90.2%. Okoro County comprises 39% of the total district population, with Padyere containing 38 per cent, and Jonam containing 23%.

#### 3.3.3.3.3 ECONOMIC ACTIVITIES

Subsistence farming is the major economic activity in the district, with less than 40% marketed. The main crops grown are cotton, coffee, simsim, sorghum, millet, sweet potatoes, beans, cassava, maize and vegetables. However, agro-processing is done on a small scale. The district is strategically positioned to access a wide market in the entire region especially from parts of South Sudan and the Democratic Republic of Congo. Proximity to Murchison Falls National Park makes Nebbi a distinctive tourist destination arising from the variety of the available game stock and the scenic beauty of the park. Equally important to note is the fact that the district is endowed with several natural resources: including L. Albert and R. Nile which contain a wide range of fish species and other aquatic resources. Rivers Namrwodho and Ora offer opportunities for hydro-electricity power generation and irrigation. In addition, there are unexploited mineral deposits which include diatomite, oil and gas, a wide range of forest resources, both natural and plantation forests, geological resources like clay, sand and rocks for construction and ceramics, fertile soils for agriculture, fresh water for humans and livestock, abundant and cheap labor and favorable climate for production and human survival, among others.

#### 3.3.3.3.4 WATER AND SANITATION

Water and sanitation improvements, in conjunction with hygiene behavior change, can have significant effects on population and health by reducing a variety of disease conditions such as diarrhea, intestinal helminths, guinea worm, and skin diseases. These improvements in health can, in turn, lead to reduced morbidity and mortality and improved nutritional status. Therefore, improvement in access, coverage of safe water supply and sanitation facilities is crucial to the people's wellbeing and their ability to participate in poverty eradication activities. Nebbi District water coverage as at 31 June 2018 was 69%, while the functionality rate was 76%. The total number of water points was at 2,485. There have been deliberate

investments by both the central and local governments towards WASH in terms of; training of water user committees (WUCs) and primary schools on operational and maintenance, gender, participatory planning and participatory monitoring, sanitation week promotion activities, radio and drama shows promoting water, sanitation and good hygiene practices, national handwashing campaign activities, small spring protection (15N°.), medium spring protection (12N°.), shallow well construction - hand dug (6N°.), shallow well construction -motorized drilled (2N°.), deep boreholes drilling (hand pump) (33N°.), and borehole rehabilitation (29N°.).

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#### 3.3.3.4 YUMBE DISTRICT

Yumbe District was created in November 2000 from Arua District. It is bordered by South Sudan to the north, Moyo District to the east, Adjumani to the southeast, Arua to the south, Maracha to the southwest and Koboko to the west. The district covers a total area of 2,411km<sup>2</sup>, 80.01% of which is arable, 17.08% forested and 9.9% covered by water bodies and wetlands.

##### 3.3.3.4.1 POPULATION

The 2014 National Population and Housing Census estimated the district population at 484,822, with 52 percent women and 48 men. In 2016, the population was estimated at 534,300. Yumbe is one of the refugee hosting districts. By May 1, 2017, the refugee population had risen to 272,707, from 144,701 registered at the end of 2016. Refugees in the district mainly come from the South Sudan. They are hosted in Bidi Bidi settlement area where they are allocated plots of land to build homes and to farm. They are also encouraged to interact freely, set up shops and other retail businesses.

##### 3.3.3.4.2 ECONOMIC ACTIVITY

The economy of Yumbe District is heavily dependent on agriculture which employs over 80% of the population. The major food crops include cassava, beans, groundnuts, Simsim, millet and maize. Tobacco is the major cash crop and main source of livelihood for most of the population in the district. It is grown mainly in the fertile highland areas and river banks/ valleys.

##### 3.3.3.4.3 WATER AND SANITATION

The access rates in Yumbe to safe water varies from 36% in Kuru Sub-county to 66% in Drajini Sub-county. Yumber has 1,083 domestic water points which serve a total of 319,343 people-292,361 in rural areas. About 38 points have been reportedly non-functional for over 5 years and are considered abandoned. Yumbe has 3 functional water schemes.

### 3.4 GENDER ASPECTS IN UMSFNP

The Uganda National Gender Policy (2007) recognizes the need to reduce gender inequalities so that all women and men, girls and boys, are able to move out of poverty and to achieve improved and sustainable livelihoods. Thus, there is need to effectively integrate gender into the UMSFNP planned phase so as to ensure its sustainability and inclusiveness during, and after its completion. Based on interviews with its key stakeholders (especially district-based coordinators), it was revealed general gender blindness<sup>9</sup>, there is limited consciousness to the different needs of women and men and taking appropriate action to remedy the existing gender issues thus, gender gaps are left un attended to<sup>10</sup>.

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<sup>9</sup> Gender blindness is not explicitly recognizing gender differences that concern both productive and reproductive roles of men and women including; researches, analysis, policies, advocacy materials, project and program design and implementation

<sup>10</sup> Gender gaps are the differences in any area between women and men in terms of their levels of; participation, Access to and control over resources, Power and influence, Remuneration and benefits

From the study, there is a feeling across sections of project staff across districts that, working with both men and women in the project constitutes and gender mainstreaming. However, when they are asked about any gender issues arising from the project, they do not easily recognize and identify them, thus, making a case for gender sensitivity in the project<sup>11</sup>. Consequently, pertinent issues of gender relations and concerns between men and women, opportunities for women and men in terms of access to and ownership of property, decision making division of roles and responsibilities a cross gender divide remain key in the project. Much as 60% of the Parent group members are women, in the subsequent phase of the project, gender needs to be well mainstreamed and that can happen through training of project staff, community sensitization and awareness creation on gender using gender sensitive language, gender sensitive and inclusive IEC material, radio talk shows and gender campaigns.

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<sup>11</sup> Gender sensitive involves consciousness of the different situations and needs of women and men and taking appropriate action. It is also the ability to recognize the differences between men and women as actors in society with different perceptions, interests, roles, aspirations, inadequacies, needs and constraints

## 4 CROP PESTS AND DISEASES PROBLEMS IN UGANDA

### 4.1 BACKGROUND

The agricultural sector, the mainstay of the economy of Uganda, provides approximately 24% of the Gross Domestic Product (GDP), generates nearly 48% of export earnings, provides direct and indirect livelihood support for over 80% of the total households, and supply the bulk of the raw materials used by the domestic industry (UBOS, 2018). The 2014 Ugandan household and population census revealed that approximately two-thirds (69%) of the working population are engaged in subsistence agriculture. The government of Uganda identifies agriculture as a vital growth sector capable of reducing poverty and stimulating economic growth. The key focus is on increasing production and productivity, improving household food security, increasing farmers' income and increasing the value of exports.

### 4.2 MAJOR RISKS TO AGRICULTURAL PRODUCTION IN UGANDA

As laid out in the recent agricultural risk assessment studies (RAS) in Uganda<sup>12</sup>, risk is defined as a probability multiplied by the consequences. The RAS concluded that crop pests and diseases have very high average severity, very high frequency, with very high losses in the worst-case scenario. Of the six named key risks that make up more than 99% of average agricultural annual losses in Uganda, 4 of these are:

- a. **Crop pests and diseases:** Average crops losses in Uganda due to pests, diseases, and weeds are estimated at 10-20% during the pre-harvest period and 20-30% during the post-harvest period. The annual losses for major crops are in the range of USD 113 million to USD 298 million (mainly banana, cassava, coffee, and cotton);
- b. **Low quality inputs:** Yields for maize, millet, rice, and sorghum are only 20% to 33% of the potential yield for rain-fed agriculture and even less for irrigated agriculture. A major factor is the lack of good-quality, higher-yielding, more vigorous, drought-resistant, and disease-free seeds and planting material. A pronounced problem is the issue of counterfeit inputs that lead to losses to farmers of USD 10.7 to 22.4 million p.a;
- c. **Post-harvest losses:** The weight loss resulting from attacks of pests and animals to major cereals (mostly for maize, but also barley, millet, rice, sorghum, and wheat) cause losses of USD 97.17million p.a. This figure does not yet include opportunity cost for farmers that were forced to sell at low market prices directly after harvest due to lack of proper storage facilities; and
- d. **Livestock pests and diseases:** The economic impact of diseases on farming households are diverse: farmers incur cost for disease control, treatment, and vaccination. Direct losses are associated with animal mortality, reduced milk production, and use of animal for traction. The total economic cost for diseases in cattle alone is estimated at USD 76.5million p.a.

Improved access to pest management services, improved pest information systems and improved capacity to monitor and combat pests and diseases are all relevant for managing all these risk scenarios, but details of the approaches may be different. These point the importance of managing the causes of loss that rotate largely around pests and diseases hence, the need for measures for pest management aspects.

### 4.3 PESTS AND DISEASES AFFECTING UMFSNP CROPS

These include:

#### 4.3.1 BEANS

Beans provide 25% of the total dietary calorie intake and 45% of the protein intake. It also provides essential micronutrients and vitamin B. It is one of the most widely grown food crops together with banana, cassava and maize. Beans are mainly produced by women for food security at household level however; it has become also a major source of income for farmers and traders. They can be intercropped with maize although farmers mainly grow them in pure stands due to higher yield potential. Diseases of beans include those caused by fungi such as: Angular Leaf Spot caused by *Phaeoisariopsis griseola*; anthracnose caused by *Colletotrichum lindemuthianum*, and bean rust caused by *Uromyces appendiculatus*. Diseases caused by bacteria include: common Bacterial Blight caused by *Xanthomonas axonopodis* pv. *phaseoli* and Halo Blight caused by *Pseudomonas syringae* pv. *phaseolicola*. Viruses, especially the bean common mosaic virus, continue to limit production levels.

#### 4.3.2 POTATO

Potato also referred to as Irish potato is a source of both income and food security in areas where it is produced. The crop is mainly produced in the highland regions at altitudes between 1,500-3,000 masl. Most of the crop is grown in south-western Uganda in the districts of Kabale and Kisoro which produce over 60% of the national crop on plots approximately one acre with Kapchorwa and Mbale in eastern districts producing the rest. Potato is affected by a number of diseases, the most important include late blight caused by *Phytophthora infestans* and bacterial wilt caused by *Ralstonia solanacearum*<sup>13</sup>.

#### 4.3.3 FRUITS AND VEGETABLES

The demand for fruits especially citrus, passion fruits and mangoes by the urban population has tremendously increased in the past decade. This is partly because of the increased awareness of the health benefits of fruits and vegetables. The horticultural industry has been ravaged by the fruit fly scourge with *Bactrocera invadens* being the most widespread although other species such as; *Ceratitis cosyra*, *Ceratitis rosa* and *Ceratitis capitata* have also been reported. *Bactrocera invadens* has been reported to reduce mango yields by 73%<sup>14</sup>. The false codling moth (*Thaumatotibia leucotreta*) is another key pest that has been reported by MAAIF mostly affecting the hot pepper value chain. The prevalence of this pest has resulted in the European Union restricting hot pepper exports destined for the European Union.

### 4.4 KEY PESTS AND PESTICIDES MANAGEMENT CHALLENGES IN UGANDA

The key bottlenecks and challenges faced by Uganda in regard to pest management and use of pesticides are as follows:

- a. The Country has very few researchers and crop pest and disease specialists especially epidemiologists, crop breeders, weed scientists critical for pest and diseases control;
- b. Limited budget for agricultural research which hinders continuity in research as well as weak collaborative linkages of NARO with tertiary universities;
- c. Proliferation of illegal imports by unscrupulous private companies and the presence of unlicensed dealers who are unlikely to have the requisite knowledge to correctly inform farmers what the appropriate pesticides to use are and how to use them safely;
- d. No food safety routine tests conducted on the food grown under pesticide use to check on contamination;

<sup>13</sup> Mulema, J.M.K., Adipala, E. and Olanya, O.M. (2005). Significance of tuber blight in late blight epidemics in Uganda. *African Crop Science Society Proceedings*, 6:329-334.

<sup>14</sup> Isabirye, B.E., Akol, A.M., Muyinza, H., Masembe, C., Rwomushana, I. and Nankinga, C.K. (2016) Fruit Fly (Diptera: Tephritidae) host status and relative infestation of selected mango cultivars in three agro ecological zones in Uganda. *International Journal of Fruit Science*, 16(1):23-41

- e. The proportion of farmers using recommended personal protective equipment while handling pesticides is very low and exposure to hazards is amplified given that some farmers allow their children to do the spraying;
- f. There is widespread re-use of pesticide containers for storing food or water for humans or livestock;
- g. There is an overlap or lack of clarity on the responsibilities of NEMA, UNBS, NDA, GAL, and MAAIF as regards pesticides monitoring and management, a cause for ineffective monitoring due to unclear responsibilities.

#### 4.4.1 PESTICIDES MANAGEMENT

The Uganda agricultural sector is working towards a healthy population by growing food and rearing animals to serve a balanced diet while feeding the increasing population. Faced with challenges of pesticides and diseases made worse by the climate change which intensifies pest resistance, use of agrochemicals for pest control, ectoparasites, bacteria and fungi remains as the best option to improve agricultural productivity as well as vector control for public health through the Indoor Residual Spraying (IRS) interventions. But as a challenge, in Uganda, lack of adequate knowledge on safe pesticide use by end user has intensified the incidence of pesticide poisoning, a study by Atuhaire<sup>15</sup> indicates that 29.2% of farmers are spraying tomatoes after harvest which can lead to food poisoning or chronic exposures. Although there is an increased import and use of pesticides, the limited user knowledge has resulted into exposure to the toxic products causing both intentional and non-intentional poisonings (Figures 4-1 and 4-2). Numbers of pesticide poisonings in Uganda are though lacking as the health centers from where treatment is obtained lack a robust data capturing mechanism for those Acute Pesticides Poisoning (APP) aggregated with general poisoning in the Health Management Information System (HMIS).

**Table 4-1: Uganda to handle the different pesticide risks**

Nature of Problem	Scale of Problem	Level of Concern	Ability to control problem
a. Public health	Local	High	Low
b. Drinking water contamination	Local and national	High	Low
c. Air Pollution	Local	Low	Low
d. Pollution of Inland Waterways	National	Medium	Low
e. Pesticide residues in food	National and Regional	Medium	Low
f. Occupational Health agricultural	Local	High	Low
g. Ground water pollution	Local	Medium	Low
h. Storage/Disposal of expired pesticides	National	High	Low
i. Soil contamination	Local	Medium	Low
k. Unknown pesticide importation	National	Medium	Medium
l. Pesticide accidents transport	Local and national	Medium	Medium

<sup>15</sup> Aggrey Atuhaire, Ocan David and Jørs Erik: Knowledge, Attitudes and Practices of Tomato Producers and Vendors in Uganda. *Elsevier*(2016): 1-7.



# Four children from same family die after taking herbicide

BY AMBROSE MUSASIZI

**RAKAI.** Four children from the same family have died after their grandmother allegedly administered on them a paraquat herbicide she mistook for *muluuza* (local herb) to cure malaria.

The children have been living with their grandmother in Kirangira Village, Kasankala Sub-county in Rakai District.

The deceased are Jovan Kivumbi, 4, Shivan Mirembe, 3, Elijah Lubyayi, 3, and Sarah Nabukenya, 2.

The only surviving one, Alfa Kamya, 6,

is currently admitted to Rubaga Hospital in Kampala.

According to Mr Fred Bongole, a relative of the deceased, the children had been unwell for some days.

"Their grandmother had become accustomed to the use of herbal medicine she says heals faster. The local herbs and the herbicide had been kept in empty bottles of mineral water and granny could not differentiate between the two," he said.

"She told us that she realised that she had made a mistake after tasting what

## WHAT POLICE SAY

"Of course there are no clues to the effect that someone intended to kill the innocent souls. We are in touch with the doctors and they have shared with us the post-mortem report as we do further investigations," **Shifa Kiribwa, Rakai DPC**

she had given to the children," Mr Bongole explained. Ms Peace Nambatya and Daniel Wasswa, are the parents of the deceased.

Mr Edward Ssemwezi, the grandfather was disconsolate. He said the children visited them for Easter holidays and have since been under their care.

"We are hopeful that the remaining one survives," he said amid sobs.

Ms Shifa Kiribwa, the Rakai District police commander, told *Daily Monitor* that they have not made any arrests related to the death of the children but

said investigations are ongoing.

"Of course there are no clues to the effect that someone intended to kill the innocent souls. We are in touch with the doctors and they have shared with us the post-mortem report as we do investigations," she said in an interview.

Three of the children were buried in Kirangira Village, Kasankala Sub-county whereas the fourth one was buried in Lwamaggwa Village, Lwamaggwa Sub-county, Rakai District.

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Mourners seated at Mr Edward Ssemwezi's home, the grandfather to the deceased children in Kirangira, Rakai District at the weekend. PHOTO/AMBROSE MUSASIZI [Daily Monitor]

Figure 4-1: Mourners during burial of children who drank a herbicide in Rakai in Uganda



# Kenyans cautioned against using chemicals on maize

## BUSIA

By Egessa Hajusu

The Kenyan maize traders in Busia have been warned against putting nova chemical in maize. Authorities said if they continue with the practice, they will be expelled from operating in the area.

The warning was made by Godfrey Wafula, the agriculture officer in Busia municipality, who, during an abrupt operation, raided a maize warehouse operated by a Kenyan maize trader in Mayombe village, Dabani sub-county, Busia and netted them red-handed using nova.

Nova is a poisonous agro-chemical made in Kakamega, Kenya and it is used to dry maize faster by reducing the moisture content.

The Kenyan traders who treasure it told *New Vision* that it dries maize faster and makes it weigh heavier, giving them more kilogrammes and more money.

According to Wafula, the Kenyan inspectors of agricultural inputs at the border have appealed to Ugandan authorities not to allow maize traders to use nova to dry maize, noting that it is poisonous.

The government of Kenya last month banned the importation of Ugandan maize, saying it is poisonous with high



Wafula showing some of the maize mixed with nova

aflatoxins content.

Much as the Kenyan government lifted the ban, the maize trade at the border has not officially resumed and some traders have resorted to smuggling maize through unprotected routes in Buteba sub-county at the

borderline of Kenya.

During the operation in which Wafula was accompanied by the Police, a maize store belonging to someone only identified as Odhiambo was stormed and maize that is said to have been mixed with nova was found being

dried.

However, his workers denied any wrongdoing, saying they had used a different chemical used for killing weevils.

### VIGILANCE

Some law abiding traders in Busia market have formed an association to fight the use of nova in drying maize.

Patrick Kenyatta, the chairperson of Busia market, said vendors and members of the cross-border trade committee are always on the look out for who is using nova.

"We recently suffered when Kenyan slapped a ban on our maize and we do not want to engage in anything that can give them any excuse to reject our produce again," Kenyatta said.

He added that the market will soon die and the traders will be the losers if they do not rise up to fight the bad practices.

Frank Kasumba, the manager of the firm contracted to run the market, said Kenyans using nova will very soon have no place in the market.

He said they should buy maize and use their nova in Kenya if they want.

Ibrahim Mulukuru, the chairperson of Namaubi 'B' village, said many residents depend on Kenyan traders for survival, but advised them to desist from using chemicals which are dangerous to human life.

## Rakai poison: Fifth minor passes on

### RAKAI

Alfa Kamoga, 6, who was the only surviving of the five children who took paraquat, a highly toxic chemical herbicide, also passed on at Rubaga Hospital on Sunday.

Kamoga was rushed to Rubaga for urgent attention after ingesting the toxin.

Other victims – Jovan Kivumbi, 4; Shivan Mirembe, 3; Elijah Lubyayi, 3 and Sarah Nabukenya, 2, succumbed to the toxin on different days last week.

It is said the children had gone to stay with their grandmother in Kirangira village, Rakai district, for Easter.

Fred Bongole, a family member, said their grandmother, whose name has been withheld to protect her, had prepared a special herbal concoction for them. She stored it in a mineral water bottle similar to the one she had kept the paraquat chemical and they accidentally drank it.

Peace Nambatya, who lost three of the children, said they are still shocked.

Masaka regional Police spokesperson Muhammad Nsubuga says they are still investigating the matter.

Figure 4-2: Additional issues on agro-pesticides



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#### 4.4.2 PEST AND PESTICIDES MANAGEMENT PLAN-PMP

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##### 4.4.2.1 NEED FOR A PMP

One of the most logical steps to increase food production is the reduction of current yield losses caused by pests, pathogens, and weeds in the field and during storage. The activities funded under the UMSFNP may lead to the increased use of agricultural pesticides, inter alia, in the agricultural sector. To ensure these issues are managed in an integrated manner and are mainstreamed nationally across the sector and also to comply with national legislation and World Bank's Safeguard Policies, it is imperative to have in place an effective and sustainable Pest Management Plan. The goal of this Pest Management Plan is to reduce the impact of pests to crops, create a list of options based on location and types of crops, and to create a plan that will provide agricultural practices which can reduce problems associated with pesticide usage.

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##### 4.4.2.2 OBJECTIVES OF THE PMP

The objective of the Pest Management Plan is to:

- a. Promote the use of environmentally friendly practices (hygienic, cultural, biological or natural control mechanisms and the judicious use of chemicals) in pest control designed to minimize potential adverse impacts on human health and the environment and to advance ecologically based Integrated Pest Management (IPM);
- b. Effectively monitor pesticide use and pest issues amongst participating farmers;
- c. Provide for implementation of an IPM action plan in the event that serious pest management issues are encountered, and/or the introduction of technologies is seen to lead to a significant decrease in the application of pesticides;
- d. Assess the capacity of the country's regulatory framework and institutions to promote and support safe, effective, socially and environmentally sound pest management and to provide for appropriate institutional capacity support recommendations;
- e. Ensure compliance with national laws, regional standards, and regulations; and
- f. Ensure compliance with World Bank safeguard policy OP 4.09.

A Pest Management Plan has therefore been prepared as part of this ESMF and is herein attached.

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#### 4.5 MAINSTREAMING COVID-19 CONTROL MEASURES

Notwithstanding the significant progress and achievements made by the project, completion of implementation of project activities has been adversely affected by COVID-19 pandemic in multiple ways making it uncertain and difficult to meet the end of project targets within the limited time and resources. The resultant impacts on the UMFSNP beneficiaries include: (i) decreased community-based nutrition services including nutrition forum organization, nutrition commodities distribution, etc.; (ii) delayed procurement of goods and services; (iii) significant scale down of capacity building; and (iv) disproportionate economic shock to smallholder farms and income reductions through failure to access produce markets due to closure of rural markets. Considering the strong results of the UMFSNP, and following a request from the Government of Uganda, a one-year no-cost extension of the project closing date to December 15, 2021 was approved in October 2020, to mitigate the adverse effects of the COVID-19 pandemic.

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##### 4.5.1 PROPOSED AF

In response to a call for expression of interest to apply for additional GAFSP funding, the GoU submitted a formal application for additional funding to fully accomplish the planned activities, deepen the project's achievements, and implement new activities designed to strengthen the short- and medium-term responses to the impacts of COVID-19, thus enhancing sustainability of the results achieved to date. A total of US\$7,000,000 million has been approved from the GAFSP's Public Sector Window: COVID-19 Additional

Financing. In addition, the GAFSP Steering Committee (SC), approved an extension of the project closing date to December 31, 2022.

The proposed AF will expand and build on the on-going UMFSNP activities to offset the above-mentioned COVID-19 impacts in the project areas, in the short to medium term. The planned activities under additional financing are fully aligned with the core project interventions, will sustain project operations with adequate support, and, will help retain and ultimately improve short-term changes in high-impact nutrition behaviors and practices known to contribute to reduction of stunting and underweight in under-2-year-old in the medium-term. Specifically, the proposed additional financing seeks to address the COVID-19 impacts including:

- a. inadequate community awareness on importance of building immunity to fight COVID-19 through sufficient Water Sanitation and Hygiene (WASH) activities, relevant training, consumption of fruits/vegetables/Micro Nutrient Rich foods;
- b. generation of income for continuation of nutrition improving activities through Nutrition Sensitive Saving schemes; and
- c. establishment of certified multiplication centers for micronutrient rich crops to ensure availability of seed/planting material production, value addition, marketing and distribution.

Therefore, project activities under the Additional Financing facility have mainstreamed COVID-19 measures, for example Component 1 entails scaling up WASH interventions at community and school levels including procurement of WASH facilities, media campaigns, printing materials for WASH aimed at improving community awareness and capacity to implement measures to curtail the spread and infection of COVID-19 and allow schools to provide WASH services and reduce the risk of infections. Above all, while undertaking capacity and extension related activities, the project will ensure implementation of COVID-19 SOPs.

This way, the project will be contributing to implementation of Uganda's COVID-19 national preparedness and response plan to enable high alertness and operational readiness. Response to COVID-19 outbreak will be multi-sectoral involving Ministries, Departments, Agencies, Development Partners, private sector entities and other stakeholders.

#### 4.5.1.1 PROJECT MANAGEMENT AND MONITORING STRUCTURES FOR AF-ACTIVITIES

Existing project management and monitoring structures will be utilized to manage the additional financing activities. All the UMFSNP implementing ministries have experience operating management frameworks for World Bank operations. For UMFSNP, the Government of Uganda has provided accurate, reliable, and timely reports and ensured that project activities are in line with safeguard policies. UMFSNP supervision reports have concluded that the UMFSNP management system provides satisfactory assurance that risks are timely monitored and mitigated appropriately. The GRM has been updated to include COVID-19 related streamlined and efficient procedures for: (a) addressing labor complaints, including terms and conditions of work and occupational health and safety; (b) resolving SEA/SH complaints, with strict application of work and confidentiality, and survivor safety; and (c) implementing COVID-19 enhanced communication and awareness/dissemination campaigns. A detailed Stakeholder Engagement Plan (SEP) to ensure continuous stakeholder engagement throughout project implementation has been recommended.

The UMFSNP-AF project team will incorporate key COVID-19 risk mitigation measures and report on these measures during weekly/monthly supervision meetings and quarterly inter-ministerial project implementation committee (IMPIC) supervision meetings. The project is committed to implementing robust occupational health and safety procedures for key actors and ensuring that all UMFSNP-AF service providers and participants are following COVID-19 social distancing and handwashing guidelines.

## 5 POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

### 5.1 POLICY FRAMEWORK

#### 5.1.1 THE NATIONAL ENVIRONMENT MANAGEMENT POLICY 1994-NEMP

The key policy objectives include the enhancement of the health and quality of life of Ugandans and promotion of long-term, sustainable socio-economic development through sound environmental and natural resource management and use; and optimizing resource use and achieving a sustainable level of resource consumption. ***With regard to UMFSNP, aspects of Environmental Assessment have been integrated into the project with the objective of ensuring sustainability in the project.***

#### 5.1.2 THE NATIONAL DEVELOPMENT PLAN III 2019/2020-2023/24

The National Development Plan (NDP) covers the fiscal period 2019/20 to 2023/24. It stipulates the Country's medium-term strategic direction, development priorities and implementation strategies. According to the NDP, the share of agriculture in GDP was 51.1% in 1988 and 33.1% in 1997, declining further to 15.4% in 2008. The sharp decline in the share of agriculture in GDP represents significant structural transformation in the economy. ***It is therefore recognized that, there is a compelling need to ensure that productivity growth in agriculture supports the high population growth.***

#### 5.1.3 THE UGANDA VISION 2040

Uganda Vision 2040 provides development paths and strategies to operationalize Uganda's Vision statement which is "A Transformed Ugandan Society from a Peasant to a Modern and Prosperous Country within 30 years" as approved by Cabinet in 2007. Agriculture is the main stay of the Ugandan economy employing 65.6% (UBOS, 2010) of the labor force and contributing 21% to the GDP. Despite these, agricultural contribution to the GDP has been declining but remains very important to provide a basis for growth in other sectors. However, agriculture productivity of most crops has been reducing over the last decade mainly due to a number of factors including: high costs of inputs, poor production techniques, limited extension services, over dependency on rain fed agriculture, limited markets, land tenure challenges and limited application of technology and innovation. ***UMFSNP addresses issues of nutritional uptake through selection and promotion of cultivation of nutritious food crops using appropriate technology and innovative approaches.***

#### 5.1.4 NATIONAL GUIDELINES FOR MANAGEMENT OF COVID-19

To ensure that the country responds adequately and mitigates the impact of the COVID-19 pandemic, the Ministry of Health (MoH) embarked on the development of these guidelines to provide guidance on clinical management of the COVID-19 cases in context of existing infectious diseases including Nutritional and Psycho-social Support. They also serve to provide a standardized package and pathway that will support timely decision making for management of COVID-19 cases in context of existing Infectious diseases. The Guidelines are to be used in response to the COVID-19 and is the first pragmatic step by the MoH in providing technical leadership in aligning and standardizing national and district management of COVID-19 suspected, probable and confirmed cases. They for now, serve as hands on tools by all health care providers in Uganda, including those working in the public and private sector.

#### 5.1.5 NATIONAL AGRICULTURAL POLICY (NAP) 2013

The vision of the NAP is "A Competitive, Profitable and Sustainable Agricultural Sector", and the mission is "To transform subsistence farming to sustainable commercial agriculture and the 5 objectives being:

- a. Ensure household and national food and nutrition security for all Ugandans;
- b. Increase incomes of farming households from crops, livestock, fisheries and all other agriculture related activities;
- c. Promote specialization in strategic, profitable and viable enterprises and value addition through agro-zoning;
- d. Promote domestic, regional and international trade in agricultural products; and
- e. Ensure sustainable use and management of agricultural resources.

These have much in common with the agriculture component of NDPII, which built on the NAP. As in the NDPIII, pests are mentioned as a cause of limited production, and something that will be addressed. The policy also describes the roles of key stakeholders, and notes that as a result of the creation of a number of agencies, several divisions and departments have been re-organized, including those with responsibility for disease and pest control.

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#### 5.1.6 UGANDA FOOD AND NUTRITION POLICY, 2003

The Uganda Food and Nutrition Policy has been formulated within the context of the overall national development policy objective of eradicating poverty. The overall objective of the policy is to promote the nutritional status of all the people of Uganda through multi-sectoral and co-coordinated interventions that focus on food security, improved nutrition and increased incomes. The goal of Government in the area of food supply and availability is to ensure an adequate supply of, and access to, good quality food at all times for human consumption, income generation, agro-based industries, and local, regional and international markets.

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#### 5.1.7 NATIONAL STRATEGY FOR YOUTH EMPLOYMENT IN AGRICULTURE 2014

About seventy eight percent (78%) of Ugandans are below 30 years of age. Despite being the majority, they still face varying problems including inability to own or access land, lack of affordable financing for agribusiness start-ups as well as the technical know-how to be effectively employed in the sector. The gender differences among the youth have had a negative impact especially on the young women. The strategy therefore, has been designed to enable the youth to join the agriculture sector and in so doing enable them to find decent employment which will in the long run contribute in solving the major challenges facing agriculture in Uganda, such as low production and productivity, high post-harvest losses and low value addition.

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#### 5.1.8 GENDER ANALYSIS REPORT FOR PROJECT COMPONENTS AND COMMODITY VALUE-CHAINS 2014

The study concludes that women are bearing most of the burden in smallholder farming production, as seen through the increased involvement of women in labor-intensive activities such as weeding and drying. The gender differences were observed in the gendered extent of involvement in the different tasks. The findings show that the involvement of men increases from production to marketing while the participation of women decreases from production to marketing. Across the five agricultural commodities, men were observed to be more involved at the end of the value chains, namely off-taking, transporting, processing and wholesaling, among others. These are the nodes that involve high returns for every kilogram of agricultural commodity traded in the market compared to production.

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#### 5.1.9 NATIONAL FERTILISER POLICY 2016

The National Fertilizer Policy (NFP) brings together all the related fragmented regulations into a single and comprehensive policy framework on fertilizer. The overall objective is to reduce nutrient loss through soil

erosion by 30kg/ha. per year and raise the use and application levels of fertilizer to at least 50kg of nutrients per hectare per year by 2020. The fertilizer policy shall operate under the mandate of MAAIF within the broader objective of the agricultural development agenda. This policy advocates for a partnership between Government and the private sector.

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#### 5.1.10 NATIONAL AGRI-FOOD SYSTEMS AND COVID-19 IN UGANDA: EFFECTS, POLICY RESPONSES, AND LONG-TERM IMPLICATIONS 2020<sup>16</sup>

Is part of a series of country profiles that describe policy measures; enacted by governments to contain the spread of the virus; to stabilize the functioning of agri-food systems and potential effects of policies on agri-food systems and vulnerable groups. ***Specific to UMSFNP, the profile looks at measures to boosting immunity to fight COVID-19 which involves encouraging Ugandans to grow and eat biofortified nutrient-dense crops (vitamin A-rich crops, orange fleshed sweet potato; iron/zinc-rich beans, etc.).***

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#### 5.1.11 THE NATIONAL GENDER POLICY, 1997

The government adopted a National Gender Policy of 1997, a tool to guide and direct the planning, resource allocation and implementation of development programs with a gender perspective. The adoption of the gender policy has facilitated Uganda's gender mainstreaming programs in all sectors of the economy (implying, the planned works project should equally integrate gender into the implementation of works. ***UMFSNP has mainstreamed gender dimensions into its formulation, planning and implementation framework hence, its compliance with the National Gender Policy for Uganda.***

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#### 5.1.12 THE NATIONAL HIV/AIDS POLICY, 2004

The policy provides the principles and a framework for a multi-sectoral response to HIV/AIDS in Ugandan's world of work. The policy applies to all current and prospective employers and workers, including applicants for work, within the public and private sectors. It also applies to all aspects of work, both formal and informal. ***UMFSNP will mainstream HIV/AIDS interventions into its plan, programmes and activities more so in its Project Implementation Manual (PIM).***

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### 5.2 LEGAL FRAMEWORK

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#### 5.2.1 CONSTITUTION OF THE REPUBLIC OF UGANDA, 1995

The right to a clean and healthy environment is enshrined in Article 39 of the Constitution of Uganda, 1995. ***To ensure UMFSNP compliance with the Constitutional obligations on sustainability, an ESMF has been prepared which outlines mechanisms for environment assessment and mitigation measures included therein.***

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#### 5.2.2 THE NATIONAL ENVIRONMENT ACT, N<sup>o</sup>.5 OF 2019

Section 70(3) stipulates that, a person shall not import, export, manufacture, formulate, distribute or use hazardous chemicals or products containing hazardous chemicals prohibited under its subsections (1) and (2). Part X of the Act in its Section 110 provides for preparation of environmental and social assessments whose purpose is to evaluate environmental and social impacts, risks or other concerns of a given project or activity, taking into account the environmental principles set out in its Section 5(2). ***ESMF outlines some of the salient impacts in UMFSNP as well as mechanisms for conducting further assessments on the project sub-components.***

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<sup>16</sup> FAO March, 2020

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#### 5.2.3 THE PUBLIC HEALTH (CONTROL OF COVID-19) RULES, 2020 ARRANGEMENT OF RULES

These Rules were formulated for purposes of controlling activities aimed at curbing the spread of COVID-19. They served to impose curfew hours, operations hours business and travel restrictions amongst others.

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#### 5.2.4 THE OCCUPATIONAL SAFETY AND HEALTH ACT, 2006

The Act provides for the prevention and protection of persons at all workplaces from injuries, diseases, death and damage to property. ***The ESMF provides for provision of safety gear for workers during implementation of UMFSNP school and selected Farmer Groups activities.***

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#### 5.2.5 BIOSAFETY AND BIOTECHNOLOGY BILL 2012

There has been much debate about the pros and cons of biotechnology, especially genetic modification. This is relevant to crop protection because some of the most widely used modifications confer pest resistance, and in Uganda a number of such traits have been engineered and tested. Enactment of the Bill would provide the necessary regulatory framework for the commercialization and release of these materials, which would have substantial implication for the way in which pest problems are managed.

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#### 5.2.6 CONTROL OF MANUFACTURE OF AGRICULTURAL CHEMICALS ACT CAP 29

The Act provides for safe manufacture, packaging, store, display, distribution agricultural chemicals. It also has provisions governing the importation and exportation of agricultural chemicals. The Act provides for the establishment, constitution and operation of Agricultural Chemicals Board which has the responsibility to advise government on matters pertaining to agricultural chemicals. ***The ESMF provides guidance on the use and management of pesticides in UMFSNP.***

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#### 5.2.7 ENVIRONMENTAL IMPACTS ASSESSMENT REGULATIONS, 2020

The EIA Regulations gives a systematic EIA procedure in Uganda. It gives EIA a legal mandate, thus paving the way for an enabling environment for it to use as a tool for environmental protection. The regulation also has punitive measures for offenders. It recognizes three levels of EIA:

- a. An environment impact review shall be required for small scale activities that may have significant impact; and
- b. Environmental impact evaluation for activities that are likely to have significant impacts; and
- c. Environmental impact study for activities that will have significant impacts.

***In all, issues of EIA are being addressed in the project in line with these Regulations.***

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#### 5.2.8 THE LOCAL GOVERNMENTS ACT (CAP 243)

The Act creates a decentralized system of government based on the district as the main unit of administration. Administrative powers and functions are devolved from the central government to the local governments. The Act allocates responsibility for service delivery of a number of functions to local government councils (districts, cities, municipalities or town councils) and to lower local government councils (sub-counties / divisions). ***In conformity with this Act, the respective District Local Governments shall be involved in the implementation of UMFSNP.***

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#### 5.2.9 LAND ACT, CAP 227

The Land Act vests land ownership in Uganda in the hands of Ugandans and that, whoever owns or occupies land shall manage and utilize the land in accordance with the Forest Act, Mining Act, National Environment Act, the Water Act, the Uganda Wildlife Act and any other law [section 43, Land Act]. ***The***



***planned UMFSNP has integrated Environmental Assessments in its ESMF in compliance with the Act provisions.***

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#### 5.2.10 THE PUBLIC HEALTH ACT, 1964

Section 7 of the Act provides local authorities with administrative powers to take all lawful, necessary and reasonable practical measures for preventing the occurrence of, or for dealing with any outbreak or prevalence of any infectious, communicable or preventable disease to safeguard and promote public health; and to exercise the powers and perform the duties in respect of public health conferred or imposed by this Act or other relevant laws. ***Public health and hygiene are key in UMFSNP with regard to waste management arising from agro-chemicals use, including use of pesticides.***

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### 5.3 RELATED INTERNATIONAL CONVENTIONS AND AGREEMENTS

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#### 5.3.1 INTERNATIONAL PLANT PROTECTION CONVENTION-IPPC

The IPPC is an international plant health agreement, established as such in 1952, that aims to protect cultivated and wild plants by preventing the introduction and spread of pests into endangered areas and cooperating to control pests of plants and plant products. The IPPC was modified in 1997 to be compatible with the WTO-SPS Agreement.

To protect plant resources from the risks associated with pests to take care of:

- ❖ ***food security:*** protect crops to ensure an abundant, high-quality, and varied food supply;
- ❖ ***international trade:*** strengthen the marketability of agriculture in international commerce by meeting phytosanitary import requirements, compatible with pest risk analysis; and
- ❖ ***environmental protection:*** preserve natural ecosystems and horticultural plant resources.

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#### 5.3.2 ACF-NUTRITION SECURITY POLICY

Beyond the conceptual framework of undernutrition, used as a reference for many years in ACF policy and strategy documents, this policy is developed to provide a comprehensive framework for mobilization and action of ACF and its partners in our fight against undernutrition. Its aims are:

- a. To highlight the issues and challenges, and define concepts around nutrition security;
- b. To define the organization's vision and positioning for a systematic nutrition security approach; and
- c. To provide overall principles, ambitions and commitments at institutional, strategic and programmatic levels to apply this vision.

It forms the basis for a common multisectoral understanding of the global issue of undernutrition and how ACF commits to respond to it in a coherent, evidence based and holistic way. Nutrition security recognizes that nutritional status is dependent on a wide array of factors. As such, it constitutes a conceptual way for dealing with undernutrition problematic in a comprehensive way while exploring and using all possible avenues to prevent undernutrition and mitigate its consequences.

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#### 5.3.3 THE INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG) CODE

The International Maritime Dangerous Goods (IMDG) Code was developed as a uniform international code for the transport of dangerous goods by sea. It covers such matters as packing, container traffic and stowage, with particular reference to the segregation of incompatible substances. The Code lays down basic principles; detailed recommendations for individual substances, materials and articles; and a number of recommendations for good operational practice, including advice on terminology, packing, labeling, storage, segregation and handling, and emergency response action. The Code has become the standard guide to all aspects of handling dangerous goods and marine pollutants

in sea transport. ***The Code will ensure compliance to international law in the event that Uganda decides on sea transport for its pesticides destined for disposal.***

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#### 5.3.4 THE FAO INTERNATIONAL CODE OF CONDUCT ON THE DISTRIBUTION AND USE OF PESTICIDES

It establishes voluntary standards for public and private institutions involved in the distribution and use of pesticides. The revised version of the Code, adopted in 2002, has become the globally accepted benchmark for pesticide management and has enabled many countries to establish and strengthen their pesticide management systems. The Code sets out a vision of shared responsibility between the public and private sectors, especially the pesticide industry and government, to ensure that pesticides are used responsibly, delivering benefits through adequate pest management without significant adverse effects on human health or the environment. ***The ESMF of UMFSNP takes into considerations these provisions to ensure safety in the project.***

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#### 5.3.5 UN DECLARATION ON THE ELIMINATION OF VIOLENCE AGAINST WOMEN 1993

The Declaration on the Elimination of Violence Against Women (abbreviated as DEVAW) was adopted without a vote by the United Nations General Assembly in the 48/104 resolution of 20 December 1993. Contained within it is the recognition of "the urgent need for the universal application to women of the rights and principles with regard to equality, security, liberty, integrity and dignity of all human beings". It recalls and embodies the same rights and principles as those enshrined in such instruments as the Universal Declaration of Human Rights, and Articles 1 and 2 provide the most widely used definition of violence against women.

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#### 5.3.6 WORLD BANK GROUP EHS GUIDELINES FOR PESTICIDE MANUFACTURING, FORMULATION, AND PACKAGING

The World Bank Group General Environmental, Health and Safety (EHS) guidelines and specifically the Industry Sector Guidelines for pesticides manufacturing and formulation address the synthesis, optimization of the active ingredients, process development (manufacturing), the formulation and packaging of pesticides from these active ingredients. ***In UMFSNP, aspects of pesticides and related considerations are addressed by having in place, a Pest Management Plan as part and parcel of the project ESMF, including guiding instructions that will be incorporated in the Project Operational/Implementation Manual.***

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#### 5.3.7 WORLD BANK GROUP ENVIRONMENT, HEALTH AND SAFETY GUIDELINES

The Environmental, Health, and Safety (EHS) Guidelines are technical reference documents with general and industry specific examples of Good International Industry Practice (GIIP). When one or more members of the World Bank Group are involved in a project, these EHS Guidelines are applied as required by their respective policies and standards. The General EHS Guidelines contain information on cross-cutting environmental, health, and safety issues potentially applicable to all industry sectors. It should be used together with the relevant industry sector guideline(s).

The relevant General EHS Guidelines for the project are:

##### 1. Environmental

- a. Air Emissions and Ambient Air Quality
- b. Energy Conservation
- c. Wastewater and Ambient Water Quality
- d. Water Conservation
- e. Hazardous Materials Management
- f. Waste Management



- g. Noise
- h. Contaminated land

## **2. Occupational Health and Safety**

- a. General Facility Design and Operation
- b. Communication and Training
- c. Physical Hazards
- d. Chemical Hazards
- e. Biological Hazards
- f. Radiological Hazards
- g. Personal Protective Equipment (PPE)
- h. Special Hazard Environments
- i. Monitoring

## **3. Community Health and Safety**

- a. Water Quality and Availability
- b. Structural Safety of Project Infrastructure
- c. Life and Fire Safety (L&FS)
- d. Traffic Safety
- e. Transport of Hazardous Materials
- f. Disease Prevention
- g. Emergency Preparedness and Response.

## **4. Construction and Decommissioning**

- a. Environment
- b. Occupational Health and Safety
- c. Community Health and Safety

Detailed General EHS Guidelines and Industry specific EHS Guidelines can be accessed at [http://www.ifc.org/wps/wcm/connect/topics\\_ext\\_content/ifc\\_external\\_corporate\\_site/ifc+sustainability/our+approach/risk+management/ehsguidelines](http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/our+approach/risk+management/ehsguidelines)

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### **5.3.8 FAO GUIDELINES ON GOOD PRACTICE FOR GROUND APPLICATION OF PESTICIDES, 2001**

In 2001, FAO produced a new, revised and expanded series of pesticide application equipment-related guidelines to cover the application of pesticides using any ground-based field crop sprayers, including operator carried and tree and bush crop sprayers. Other related guidelines by FAO include:

- a. Guidelines on good practice for aerial application of pesticides;
- b. Guidelines on minimum requirements for agricultural pesticide application equipment;
- c. Guidelines on standards for agricultural pesticide sprayers and related test procedures;
- d. Guidelines on procedures for the registration, certification and testing of new pesticide application equipment;
- e. Guidelines on the organization of schemes for testing and certification of agricultural pesticide sprayers in use; and
- f. Guidelines on the organization and operation of training schemes and certification procedures for operators of pesticide application equipment.

***These have been domesticated in Uganda through the Control of Agricultural Chemicals Act Cap 29 whose provisions have guided the pesticides aspects covered in this ESMF.***

#### 5.4 WORLD BANK ENVIRONMENTAL AND SOCIAL SAFEGUARDS POLICIES

The World Bank's Environmental and Social Safeguards Policies are an elaborate systematic approach to guaranteeing sustainable development. The Environmental and Social Safeguards Policies set out the Bank's vision for sustainable development, the Environment and Social policy for investment project financing and triggered Operational Policies that guide borrowers in the course of project implementation. The Safeguards Policies have been applied to:

- a. support Government of Uganda in achieving good international practice relating to environmental and social sustainability;
- b. assist GoU in fulfilling their national and international environmental and social obligations;
- c. enhance non-discrimination and inclusion, transparency, participation, accountability and governance; and
- d. enhance the sustainable development outcomes of projects through ongoing stakeholder engagement and feedback. The Bank's Access to Information Policy applies to the UMFSNP-AF project and requires disclosure of the information.
- e. Preparation of UMFSNP Additional Finance Facility required update of the ESMF among others to incorporate measures that ensure sound implementation of project activities under the current COVID-19 pandemic environment.

The proposed AF will expand and build on the on-going UMFSNP activities to offset the above-mentioned COVID-19 impacts in the project areas, in the short to medium term. Specifically, the proposed additional financing seeks to address the COVID-19 impacts including: inadequate community awareness on importance of building immunity to fight COVID-19 through sufficient Water Sanitation and Hygiene (WASH) activities, relevant training, consumption of fruits/vegetables/Micro Nutrient Rich foods; generation of income for continuation of nutrition improving activities through Nutrition Sensitive Saving schemes; and, establishment of certified multiplication centers for micronutrient rich crops to ensure availability of seed/planting material production, value addition, marketing and distribution. The planned activities under additional financing are fully aligned with the core project interventions, will sustain project operations with adequate support, and, will help retain and ultimately improve short-term changes in high-impact nutrition behaviors and practices known to contribute to reduction of stunting and underweight in under-2-year-olds in the medium-term.

The AF will result in (3) major changes:

- a. an extension of the project closing date from *December 15, 2021 to December 31, 2022* to provide adequate time to implement the proposed activities;
- b. a change in component costs to reflect the expenditures for the additional activities; and
- c. a revision in the results framework (RF) that includes upward revision in the intermediate results (IR) targets and addition of new IR indicators to reflect the additional project activities

The following key project elements remain unchanged: The PDO; project components and sub-components; implementation arrangements, fiduciary, and environmental and social safeguards arrangements; and environmental and social safeguards category. The major safeguards focus in UMFSNP will be on the minimal use and management of pesticides and agricultural chemicals at the selected farmers and schools' gardens, which are small in size (half-acre per selected school or homestead. While implementing these activities, COVID-19 risks associated with community gatherings, the project shall follow set operational guidance by the Ministry of Health, and in general by the Government of Uganda, while cognizant of WHO overall guidelines on management of COVID-19 pandemic. Overall, the environmental and social impacts are expected to be minimal and not adverse, site specific and readily manageable. Given this explanation, the project is considered to pose Moderate E&S risks and impacts. The parent project has been under

implementation for over five years using the previous safeguards policy framework. Therefore, the proposed AF activities will build on and strengthen on-going activities which will not raise the environmental and social safeguards category of the Project above the current Category B as defined under OP/BP 4.01. The remedial environment and social risks and impact of the AF activities would not be significant as described under OP/BP 4.01. They will continue to be site-specific, predictable, short-lived and can be managed through the existing Environment and Social Management Framework and Pest Management Plan, and other instruments as needed, and therefore remain “Moderate”. No other environmental risks are expected. The UMFSNP-AF is substantially in compliance with all the environmental and social safeguards policy requirements.

Therefore, Environmental and Social Assessment (EA) Category for the UMFSNP-AF is “B”. The World Bank safeguards policies triggered at project preparation remain relevant and will be applicable to the proposed AF. They are: Environmental Assessment (OP/BP 4.01) and Pest Management (OP 4.09). Additional policies will not be triggered because of the proposed AF. An environmental and social screening tool in use will be reviewed for appropriateness as part of the update of the ESMF.

#### 5.5 WORLD BANK OPERATIONAL POLICIES-OPS TRIGGERED BY THE PROJECT

Details of the description of the applicable OPs and how they are triggered by the project is summarized below:

**Table 5-1: Table: World Bank Safeguard policies triggered by UMFSP-AF**

OP No.	Summary of Safeguard Policy	Triggered?	Component Implications on the Safeguards	Its implications on the ACDP Project
<b>OP 4.01</b>	<b>Environmental Assessment:</b> The objective of OP 4.01 is to ensure that projects financed by the Bank are environmentally and socially sustainable, and that, the decision-making process is improved through an appropriate analysis of the actions including their potential environmental impacts.	√	<p>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. However, the use of pesticides will be very limited because not all schools shall establish demos, and those that may, will have only 0.5-acre demo garden. Therefore, the environmental impact will be of very low-intensity, minor, site specific at primary school vegetable gardens and as inputs for the use of smallholder Lead Farmers. The pesticides should be readily managed by farmers, with guidance from the respective Local Government agricultural extension specialists and Environment Officers.</p> <p>UMSFNP-AF project activities shall be implemented under COVID-19 pandemic and this requires development and implementation of Standard Operating Procedures, owing to COVID-19 risks associated with community gatherings. Ministry of Health COVID-19 SOPs including general guidance from WHO will be followed by the project. Overall, the environmental and social impacts are expected to be minimal and not adverse, site specific and readily manageable. Given this explanation, the project is considered to pose Moderate E&amp;S risks and impacts, and thus maintained at EA Category B.</p> <p>The World Bank's Environmental Assessment Policy OP 4.01 provides that project-affected groups and stakeholders should be consulted about the project's potential environmental and social impacts during the ESIA process. The consultation process gives stakeholders and Project Affected Persons (PAPs) an opportunity to learn about the project, raise concerns, understand the potential</p>	<p>Since the AF activities entail upscaling of ongoing Multi-sectoral Food Security and Nutrition Project and will be implemented in the same current Districts, Environmental and Social Management Framework (ESMF) of the ongoing operation has been adapted and updated to cater for the impacts of COVID-19 related activities. The ESMF shall be disclosed before appraisal, both at <i>World Bank website</i> and in-country by MAAIF at their website and print media. Once specific information for individual sub-projects is available, site/project specific ESMPs will be prepared during implementation. Specific guidance on the handling, use of pesticides and disposal of empty pesticide containers contained in current ESMF &amp; Project Operational Manual PIM shall continue to be used.</p> <p>Ministry of Health developed COVID-19 SOPs shall be followed by the project and these include: observing Social-Distance of at least 2 meters between persons, use of nose masks, regular sanitization of hands (using hand-wash facilities and soap, or alcohol-based sanitizer), understanding general signs and symptoms of COVID-19 for prompt reporting and medical attention. The PIM shall be updated to incorporate COVID-19 SOPs.</p>

OP No.	Summary of Safeguard Policy	Triggered?	Component Implications on the Safeguards	Its implications on the ACDP Project
			effects, and comment on the project design as well as on the reports that are produced during each phase.	
OP 4.04	<b>Natural Habitat:</b> The Bank supports the protection, maintenance, and rehabilitation of natural habitats and their functions. The conservation of natural habitats is essential for long term sustainable development.	X	The project will be implemented in established farmlands and primary schools and will not in any way impact on any natural habitat.	This policy is not triggered.
OP 4.09	<b>Pest Management:</b> In Bank-financed agriculture operations, pest populations are normally controlled through IPM approaches, such as biological control, cultural practices, and the development and use of crop varieties that are resistant or tolerant to the pest. The Bank may finance the purchase of pesticides when their use is justified under an IPM approach.	X	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. The use of pesticides poses some health and safety risks. These have a potential of causing environmental impacts that require assessment and mitigation recommendations. However, the use of pesticides is expected to be very limited both in scope and quantities.	A Pest Management Plan has been prepared as part of the ESMF. In addition, specific guidance on the handling, use of pesticides and disposal of empty pesticide containers is included in the Project Operational/Implementation Manual.
OP 4.10	<b>Indigenous peoples:</b> This policy calls for free, prior and informed consultation that should result in broad community support to the project by the affected indigenous peoples. This policy also emphasizes that World Bank financed projects be designed in such a way as to ensure that the Indigenous Peoples receive social and economic	X	Project implementation will specifically cover the Districts of Iganga, Bugiri, Bushenyi, Isingiro, Kabale, Kabarole, Kasese, Kiryandongo, Kyegegwa, Kyenjojo, Maracha, Namutumba, Nebbi, Ntungamo, and Yumbe. There are no indigenous peoples in the selected sites/participating communities at the above listed districts.	This policy is not triggered because there are no indigenous peoples in the selected project areas.

OP No.	Summary of Safeguard Policy	Triggered?	Component Implications on the Safeguards	Its implications on the ACDP Project
	benefits that are culturally appropriate and gender and inter-generationally inclusive.			
OP 4.11	<b>OP 4.11 Physical Cultural Properties:</b> This policy addresses physical cultural resources, which are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance.	X	The project does not involve any civil or earthworks.	This policy is not triggered.
OP 4.12	<b>Involuntary Resettlement:</b> This policy observes that involuntary resettlement may cause severe long-term hardship, impoverishment, and environmental damage unless appropriate measures are carefully planned and carried out.	X	Schools selected to host the demonstration gardens are chosen after confirming availability of at least one-half acre of available arable land within the school boundaries and therefore there will be no need for land acquisition.	This policy is not triggered.
OP 4.36	<b>Forests:</b> The objective of this policy is to assist borrowers to harness the potential of forests to reduce poverty in a sustainable manner, integrate forests effectively into sustainable economic development, and protect the vital local and environmental services and values of forests.	X	By design, the project will not support and/or involve any significant forestry conversion/degradation activities.	This Policy is not triggered.
OP 4.37	<b>Safety of Dams:</b> The Bank distinguishes between small and large dams where large dams are 15 m or more in height. Dams that are between 10 and 15 m in height are treated as large dams if they present special design complexities. Dams more than 10 m in height are treated as large dams if they are expected to become large dams during the operation of the facility.	X	MNP does not entail development of dam structures.	N/A
OP 7.50	<b>Projects on International Waterways:</b> This policy applies to the following types of international waterways: (a) any river, canal, lake, or similar body of water that forms a boundary between, or any river or body of surface water that flows through, two or more states, whether Bank members or not; and (b) Any tributary or other body of surface water that is a component of any waterway described in (a) above.	X	N/A	N/A

OP No.	Summary of Safeguard Policy	Triggered?	Component Implications on the Safeguards	Its implications on the ACDP Project
OP 7.60	<b>Projects in Disputed Areas:</b> Projects in disputed areas may raise a number of delicate problems affecting relations not only between the Bank and its member countries.	X	The project will not be implemented in disputed areas.	N/A



## 6 PROJECT ACTIVITIES, IMPACTS AND MITIGATIONS MEASURES

### 6.1 UMFSNP-AF PROJECT ACTIVITIES

The project approach is not only to plan and coordinate nutrition actions across multiple sectors (agriculture, health, and education) but also to implement interventions within each sector, following *existing systems, budgets, and accountability structures*. Interventions will be primarily delivered at primary school and community-level to improve coverage of nutrition services in agriculture, health, and education; and increase access and availability of nutrition information, inputs, and commodities. To generate demand, the project will support community mobilization and improved understanding of the importance of nutrition and key actions for nutrition. 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 dissemination, and policy advocacy. These activities will be structured under three components and implemented over two years. However, under the Additional Financing facility, COVID-19 control measures have been mainstreamed into the project and these have a bearing on the Health and Safety management of project activities during implementation. This implies that all the three Components will have to be cognizant of eminent COVID-19 risks and impacts.

### 6.2 COMPONENT 1: DELIVERY OF MULTI-SECTORAL NUTRITION SERVICES AT PRIMARY SCHOOL AND COMMUNITY LEVELS

This component will improve service delivery of nutrition interventions through agriculture, health, and education platforms at primary school- and community-levels. The overall approach will be to promote year-round consumption of micronutrient-rich foods by increasing community knowledge about how to produce nutrient-rich foods, awareness about nutrition, and how to prepare and why to consume these foods. 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; most 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.

Primary schools are mandated to establish school gardens 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 the community and line ministries (MoES-primary school teachers), MAAIF (agricultural extension services), and MoH (HC II 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:

- a. 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 Village Health Teams (VHTs), as well as teachers. This will include agreed and defined protocols and guidelines, to be outlined in the Project Implementation Manual (PIM);
- b. Technology and innovation transfers to promote year-round production of micronutrient- rich (including bio-fortified) crops;
- c. Transfer of practical nutrition, health, and hygiene knowledge to students and communities;
- d. Improved access of school children to health promoting services including deworming and age-appropriate IFA; and

- e. 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.

### 6.3 POSITIVE IMPACTS

The project will have a number of positive social impacts for people such as: creation of employment opportunities for the local workers to be recruited on the project especially amongst neighboring communities; there will be improved accessibility to farm inputs such as fertilizers, pesticides, improved seeds, improved water and soil management, and this is expected to translate into improved production and consumption of nutrient rich foods, and thus reducing stunted growth in children and improving the general health and wellbeing of the target districts/communities. Additional positive project impacts of the project include: seed selection leading to 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. The project will also lead to better appreciation of the gender element, especially the role played by women, towards sustaining proper nutrition in schools and communities.

It is envisaged that, together with ACDP, there will be support to the registration of pesticides, dealers and premises that are handling pesticides which will go a long way to control marketing of adulterated inputs. The project will create awareness on pesticide aspects such as safe usage, handling and disposal of pesticides, including support to a pesticide poison information facility. The development of seed demand information system will serve to inform stakeholders about availability, quality and quantities of seed materials.

UMFSNP-AF is expected to have significant positive impact on social and poverty conditions by increasing productivity and production of nutrient rich foods including promoting their consumption. The process has been designed to ensure the inclusion of women and youth in the management of farms (and/or agribusiness) enterprises. The project is also expected to increase community and schools' level of awareness on infection prevention and control measures against COVID-19, including implementation of Standard Operating Procedures.

Overall, the UMFSNP-AF is expected to have the following positive impacts:

- a. ***Delivery of multi-sectoral health, agricultural and education interventions:*** Overall, the PDO seeks mitigate the COVID impacts through integration and diligent delivery of health, agriculture and education sector interventions to promote and ensure short-term changes in high-impact nutrition behaviors and practices known to contribute to addressing problems of stunting in both the medium and long-term basis. In particular, the proposed measures under UMFSNP will have longer term impacts in the community by increasing the adoption rates of project interventions; consumption of MNR foods to strengthen immunity; upholding new-normal behavior e.g., sanitation practices, social distancing, etc.; changing superstitious mindset; and therefore, reducing malnutrition among the target groups.
- b. ***Reducing risks of COVID-19 and diarrheal diseases:*** Scaling up WASH interventions at community and school levels including procurement of WASH facilities, media campaigns, printing materials for WASH will go a long-way to reducing risks of COVID-19 and associated oral diseases. This will improve the awareness and capacity of the communities on COVID-19 situation and reduce the risk of infection in group meetings and schools.
- c. ***Improvement in Micro-Nutrient Rich Crops in the communities:*** This will be facilitated through improved multiplication and adoption rates of the MNR crops among participating community members. Increasing coverage of community level production interventions of Orange Fleshed Sweet

Potatoes (OFSP), Iron Rich Beans (IRB), fruits and vegetables and intensifying ‘nutrition campaigns’ about their consumption will likely have strong linkages to immune system development among project beneficiaries.

- d. **Potential increased productivity at household levels:** Providing Support to the project’s organized community groups (e.g., lead farmers, parents group, etc.) with interventions such as planting materials (for MNR crop production) and savings schemes is aimed at boosting livelihoods at households their livelihoods through income generating activities. This will improve the capacity of farmers to afford inputs and therefore increased productivity, production and consumption.
- e. **Improvement in the quality of the food, improve farmers’ incomes and promote product diversification:** The planned project interventions targeting strengthening seed systems for multiplication of MNR crops and developing value-chains including strengthening market linkages as well as a focus on capacity building support to organized community groups (including women and youths) to intensify value addition for bio-fortified crop varieties in order to boost incomes and improve the quality of the food products to ensure ‘food security and nutrition’ These will all lead to improved nutrition and product diversification which other achievement is better post-harvest handling and food preservation.
- f. **Empowerment of beneficiary groups:** Developing advocacy and behavioral change communication (BCC) strategy towards increased uptake and adoption of project technologies at national and community levels. In addition, the project targets strengthening and sensitization of nutrition related school clubs, organizing nationwide ‘Nutrition Olympiad’ involving school children, and music dance and drama (MDD) as a channel to disseminate recommended nutrition messages all these will build capacity of beneficiaries and uptake of appropriate innovations and technologies in the communities.
- g. **Enhanced community adoption of nutrition interventions:** This is envisaged to be achieved through the planned strengthening and intensifying community demonstration activities including community mobilization, nutrition forum, cookery demonstrations, growth monitoring and promotion (GMP) and WASH interventions. These are aimed at increasing the participation of community people in project activities, which will finally lead to increased adoption of nutrition interventions.
- h. **Potential increase production, multiplication and consumption of MNR crops at school and communities:** Supporting schools to replicate production of MNR crops beyond the demonstration gardens using a subsidy-based approach will likely increase production, multiplication and consumption of MNR crops at school and communities. However, for effective integration of these into the school schedule, there will be need for matched supportive supervision and capacity building activities needed so that, the academic activities are not compromised.
- i. **Expanding nutrition commodity-specific interventions:** Expanding nutrition commodity-specific interventions, especially IFA supplementation to adolescent girls in schools is new and a much needed, and highly appreciated intervention in Uganda, which has been badly affected by the COVID-19 lockdown. This will involve the procurement of more IFA tablets to meet the huge demand of micronutrient deficiencies in the project areas. In addition, implementing annual nutrition assessments of school going children (HB levels for the menstruating girls and anthropometric assessments for all). This will inform the stakeholders about the impact of IFA on the recipients and therefore inform future interventions.
- j. **Optimal use of existing administration structure in delivery of services:** The existing project will sustain and deepen project outcomes through strategies of using existing Government structures such as districts, sub-counties, schools and health facilities. In addition, the project will strengthen its synergies with other projects including the on-going Agriculture Cluster Development Project (ACDP), which provide agricultural inputs to farmers, and the planned climate smart agriculture (CSA) project. Furthermore, the project also seeks to engage CSOs e.g., SNV Netherlands Development Organization

in some districts for community mobilization and effective operationalization of Districts Nutrition Coordination Committees (DNCC) to strengthen monitoring and expedite the implementation.

#### 6.4 POTENTIAL NEGATIVE IMPACTS AND MITIGATION

Some of the associated negative environmental and social impacts include possible point and non-point pollution of water sources from the use of pesticides and fertilizers, health and safety impacts arising from poor handling and application of pesticides at farmer and school demonstration gardens. Most of these impacts are minor or of low-intensity, site-specific and thus relatively straight forward to manage, with participation of the Local Governments and respective line Ministries.

Sensitization and awareness of all the schools and farmers involved in the project is key and shall be undertaken before start of the project. In particular, the project beneficiaries shall be mandated to go thru Pesticides Use Training before using them. They will be trained in IPM practices, post-harvest handling of crops, storage, disposal as well as safe use and handling of pesticides. Training for “safer pesticide use” is a common approach to mitigate the potential negative health and environmental impacts of pesticides. This conventional approach will promote reducing health risks of pesticides by safer use of the products through training, use of protective equipment and technology improvements, as well seeking to reduce pesticide hazards via regulations and enforcement in addition to the training. Under the project, a well-illustrated booklet on safe pesticide use designed for self-learning will be developed and distributed to farmers, extension staff, agro-pesticides stockists and their staff. This booklet shall be applied and used in UMFSNP-AF.

In order to advance project implementation amidst COVID-19 environment while following and implementing Standard Operating Procedures developed by Ministry of Health, the risk of COVID-19 infections and spread remains real. Possible infection routes include: weak compliance with the precaution measures for infection prevention and control on COVID-19 including hand washing hygiene, respiratory / cough etiquettes, contact with infected mask; among others for both community members and project workers. The project will undertake extensive community outreach program on COVID-19 SOPs using IEC materials and VHTs, working closely under the supervision of the respective District COVID-19 Task Teams. For project activities that involve physical meetings, the project will ensure provision and use of appropriate protective wear such as face masks, hand-sanitization/washing facilities through WASH interventions being upscaled under Component 1, observance of Social Distance of 2 meters.

##### **COVID-19 Mitigation Measures**

- Awareness creation for both school children (pupilteachers and community members (especially beneficiaries due to the potential to interact with the project workers) on the signs and symptoms of COVID-19, how it spreads, how to protect themselves and the need to be tested if they have symptoms;
- Use existing grievance procedures to encourage reporting of cases/persons who show outward symptoms, such as ongoing and severe coughing with fever, and do not voluntarily isolate or submit to testing;
- All workers and project participants at any given event shall be subjected to rapid COVID-19 screening which may include temperature check especially during meetings;
- Mandatory provision and use of appropriate Personal Protective Equipment (PPE) shall be required for all project personnel including workers and visitors, and at the bear minimum requiring use of face masks;
- Keep records of all persons (including phone contacts) involved in project implementation;

- Workers are to limit face to face contacts especially during their work on demonstrations gardens or sensitization sessions;
- Consider introducing an enhanced monitoring process for activities where less than 2 m distance may be required;
- All equipment should be thoroughly cleaned/ disinfected before and after using it;
- Provide additional supervision to monitor social distancing;
- Whenever possible, undertake project activities under proper ventilation conditions/environment;
- Reusable PPE should be thoroughly cleaned after use and not shared between pupils/ farmers/workers. These should be stored in suitable places;
- Single-use PPEs (such as disposable face masks) should be disposed of into waste bins with lids so that, such cannot be reused and to control potential contamination;
- Workers deemed clinically vulnerable should never work within 2 m of persons;
- Break times should be staggered to reduce congestion and contact at all times;
- Additional sanitary measures are implemented on-site: hand washing stations with a posted hand washing protocol, hand sanitizer stations, provision of disinfectant wiping products;
- Avoid concentration of persons at one location, where more than one person are gathered, maintain social distancing of at least 2 meters; and
- Train community member (beneficiaries) and project workers in respiratory hygiene, cough etiquette and hand hygiene.

## 7 PROCEDURES FOR UMFSNP-AF SUBPROJECT PREPARATION AND ASSESSMENT

This section defines steps, actions and responsibilities screening potential environmental and social (E&S) issues and classifying risk levels. The classification of each subproject under the appropriate environmental risk category will be based on the provisions of the World Bank Operational Policy OP4.01 Environmental Assessment. The screening will also be cognizant of Uganda's National Environment Act No.5 of 2019, especially Section 113 which provides for Projects Categorization.

**Environmental Assessment Category A (WB) requiring Mandatory ESIA (Uganda's NEA 2019):** A detailed ESIA study is always required for projects that are in this category. Impacts are expected to be 'adverse, sensitive, irreversible and diverse with attributes such as pollutant discharges large enough to cause degradation of air, water, or soil; large-scale physical disturbance of the site or surroundings; extraction, consumption or conversion of substantial amounts of forests and other natural resources; measurable modification of hydrological cycles; use of hazardous materials in more than incidental quantities; and involuntary displacement of people and other significant social disturbances. The impacts under this category affect broader area than the sites or facilities subject to physical works. **Such subprojects would require a full ESIA. UMFSNP-AF project activities are not expected to fall under this risk category since the nature, scope and scale of activities is limited and largely localized.**

**Environmental Assessment Category B (WB) requiring ESMP/Project Brief (Uganda's NEA 2019):** Any project which is likely to have potential environmental and social impacts, which are less adverse than those of Category A projects, on human populations or environmentally important areas including wetlands, forests, grasslands and any other natural habitat. The impacts are usually site specific, few or none of them are irreversible, and most of them are mitigated more readily than impacts from category-A sub projects. **Although an ESIA is not always required, some environmental analysis is necessary. Such subprojects would require an ESMP. Most of the proposed project activities of UMFSNP-AF fall under this Classification/ Category.**

**Environmental Assessment Category C (WB) which are exempted from Environmental Assessment (Uganda NEA 2019):** Any project which is likely to have minimal or no adverse environmental and social impacts. Beyond screening no further ESA action is required. **No assessment would be required under World Bank requirements and Uganda's NEA 2019 Schedule 11. It should be noted that screening will always be undertaken to qualify the placement of project activities under this classification/ category. The UMFSNP-AF Project has been assigned Environmental Category B requiring ESMP/Project Brief.** Therefore, no sub-project is expected to fall under EA Category A.

### 7.1 ENVIRONMENTAL AND SOCIAL ASSESSMENT IN UGANDA

The key regulations for environmental and social assessment in Uganda include the National Environment Act, the EIA Regulations, 1998, the EIA Guidelines of 1997 and the National Environment (Audit) regulations, 2006. The National Environment (Environmental Impact Assessment) Regulations, 1998 define the role of ESIA as a key tool in environmental management, especially in addressing potential environmental impacts at the pre-project stage. The regulations define the ESIA preparation process, required contents of an ESIA, and the review and approval process including provisions for public review and comment. The regulations are interpreted for developers and practitioners through the Guidelines for Environmental Impact Assessment in Uganda (1997). Although assessments nowadays conducted and submitted to NEMA are now termed "Environmental and Social Impact Assessment", in common with best international practice, this term is not used in the environmental Regulations or Guidelines. The acronyms EIS and EIA are used in reference to environmental impact statement and environmental impact assessment respectively. However, the acronyms ESIS and ESIA are used herein to refer to environmental

and social impact statement and environmental impact and social assessment respectively to include the social component in line with best international practice. The section below illustrates the steps involved during environmental and social assessment and management process as per Ugandan regulations that will lead to the review and approval of subprojects under the UMFSNP-AF.

## 7.2 KEY STEPS

The section below illustrates the steps involved during environmental and social assessment and management process as per Ugandan regulations and World Bank Environmental and Social Safeguards Policies that will lead to the review and approval of subprojects under the UMFSNP-AF.

### 7.2.1 STEP 1: SCREENING OF ACTIVITIES AND SITES

MAAIF will carry out scoping and screening of the sub-projects using the Environmental and Social Screening Form (ESSF) in Annex 1. The ESSF requires information that determines the characteristics of the prevailing local bio-physical and social environment with the aim of assessing the potential project impacts on it. The ESSF should also identify the potential socio-economic impacts that will require mitigation measures and or resettlement and compensation.

### 7.2.2 STEP 2: ASSIGNING THE APPROPRIATE ENVIRONMENTAL CATEGORIES

MAAIF will then assign the appropriate risk classification/environmental category to the subproject based on the information contained in the ESSF and the national criteria for categorization. The potential categories, in line with the National Environment Act and EIA Guidelines are:

- a. Activities that require a full Environmental and Social Impact Study (ESIS), either because (i) they meet the general criteria in the Fifth Schedule of the National Environment Act, NEA No.5 of 2019 (see Annex 3 an extract of the NEA), i.e. are out of character with their surroundings, are of a scale not in keeping with surroundings, or involve major changes in land use; (ii) are types of projects listed in the Fifth Schedule; (iii) are located in a nature conservation area; or (iv) are identified in other laws or regulations as requiring EIA because of their location. Under the World Bank Safeguards Categorization, projects that require full ESIA study are likely to fall under EA Category A. Therefore, based on the activities of UMFSNP-AF the sub-projects will either require a Project Brief or ESMP, or may be exempt, and not a full ESIA.
- b. Activities for which additional information is needed to determine what level of environmental analysis and/or management is appropriate and for which mitigation is easily identifiable. These will likely be EA Category B under the World Bank safeguards categorization. Under GoU requirements, a Project Brief suffices and under the World Bank requirements, an ESMP suffices (NEA No.5 of 2019 Schedule 4). Most of the UMFSNP-AF sub-projects will either require a Project Brief or ESMP, or may be exempt, and therefore fall under this classification/ categorization.
- c. Activities that are determined to have no significant or adverse potential impact on the environment (List A, annex 2 of the 1998 EIA Guidelines, see Annex 4 herein). Projects defined as List A will not need any further work as they are predicted to have little or no impact (Schedule 11 of NEA). But a Project Brief may be required to be submitted to NEMA. These will likely be EA Category C projects under World Bank categorization.

### 7.2.3 STEP 3: CARRYING OUT ENVIRONMENTAL ASSESSMENT

The ESIA will be conducted by the consultancy firms registered by NEMA. However, Project Briefs may be prepared by non-NEMA registered persons. A Project Brief doesn't require preparation of ToRs but their approval is done by NEMA. However, in case an ESIA needs to be undertaken, the ToRs for the study will



be prepared by implementing agency and reviewed and approved by NEMA and the World Bank. The ESIA report will identify and assess the potential environmental and social impacts for the planned activities, assess the alternative solutions, and will design the mitigation, management and monitoring measures to be implemented.

According to the National Environment Act, "project brief" means a summary statement of the likely environmental effects of a proposed development referred to in section 112. Unlike the ESIA, a project brief does not require a scoping report and neither submission of terms of reference for approval by NEMA. The ESMP or Project Brief will for each potential impact include: mitigation measures, monitoring indicators, implementing and monitoring agencies, frequency of monitoring, cost of implementation, and necessary capacity-building. It is possible that after completing the Environmental and Social Screening Form (ESSF) Checklist, the Environmental Specialist may recommend that the subproject concerned should be subjected to a full ESIA, and submitted to NEMA for review and decision making.

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#### 7.2.4 STEP 4: PUBLIC CONSULTATIONS AND DISCLOSURE

Public consultation will be initiated during the scoping and ESIA preparation stages and views of stakeholders (general public and lead agencies) have to be included in a Project Brief as well. Public consultation will also be an integral part of the process throughout the planning and execution of the project. MAAIF will interact closely with PAPs/communities, project personnel, government departments, NGOs right from the early stages of the project preparation on a regular basis for developing and implementing the respective project ESIA and RAP where applicable. For this purpose, public contact drives shall be organized by MAAIF and public awareness shall also be created with NGO's and other social organizations active in the affected areas. During the public awareness drives, it will be ensured that only accurate information is given about the project and its possible environmental and social impacts. The opinion/suggestions made by the community/affected groups shall be incorporated in the respective ESIA and Resettlement Action Plans. After clearance, the assessment reports (ESIS, RAPs, and PBs etc.) shall be disclosed both in Uganda through the daily print media by Implementing Agency, on their Website, NEMA's Website and at WB's Website by IDA.

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#### 7.2.5 FORMAT OF THE PROJECT BRIEFS

The National Environment (Environmental and Social Assessment) Regulations 2020 in Regulations, 2020 and Sub-section 5 provides that, the project brief shall contain the following information, in a concise manner:

- a. a description of the proposed project, including the name, purpose and nature of the project in accordance with the categories in Schedule 4 of the Act;
- b. the proposed location and physical boundaries, including a map and coordinates of the project clearly showing the projected area of land or air that may be affected by the project activities, or, if it is:
  - i. a linear activity, a description of the route of the activity and an alternative route, if any; or
  - ii. an activity on a water body, the coordinates within which the activity is to be undertaken;
- c. an evaluation of project alternatives, including a zero or no-project alternative in terms of project location, project design or technologies to be used, and a justification for selecting the chosen option;
- d. the design of the project and any other project related components and associated facilities, including the activities that shall be undertaken and a description of the major material inputs to be used during construction or development and operation of the project;
- e. the estimated cost of the project evidenced by a certificate of valuation of the capital investment of the project, issued by a qualified and registered valuer;
- f. the size of the workforce;

- g. a description of the manner in which the proposed project and its location conform to existing laws, standards and international agreements governing the projects, including reference to relevant plans required under the Physical Planning Act, 2010 and Building Control Act, 2013;
- h. an indication of permits, licenses or other approvals that may be required for the project;
- i. baseline conditions of the physical, biological and socio- economic environment of the project area, including results of relevant studies and other geophysical and geotechnical studies;
- j. a description of potential direct, indirect, induced, cumulative, transboundary, temporary and permanent environmental, health, social, economic and cultural impacts of the project and their severity, and the proposed mitigation measures to be taken during the planning, design, pre-construction, construction, operational and decommissioning phases of the project;
- k. proposed mitigation and preparedness measures for potential undesirable impacts that may arise at project implementation, but were not contemplated at the time of undertaking the project brief;
- l. a description of climate-related impacts associated with the project, including potential climate benefits and carbon footprints of the proposed project, as well as the potential vulnerability of the proposed project or activity to climate change, and the proposed adaptation and mitigation measures;
- m. a description of alternative resettlement areas for project affected persons, if any, their associated environmental and social impacts, and or any plans for compensation to project affected persons;
- n. an environmental management and monitoring plan developed in accordance with regulation 46, incorporating climate adaptation and mitigation plan;
- o. plan for stakeholder engagement throughout the proposed project or activity development, including details on how to address potential related grievances or requests for information, and evidence of stakeholder consultation; and
- p. any other information required by the Authority or lead agency.

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#### 7.2.6 STEP 6: REVIEW AND APPROVAL

Following internal review of the ESIS or PB, by the respective implementing agency and the Bank the ESIS or PB will be forwarded to NEMA for final review and decision (approval or disapproval). If the Executive Director is satisfied that the subproject will have no significant impact on the environment, or that the assessment (Project Brief or ESIS) discloses sufficient mitigation measures to cope with the anticipated impacts, he may approve the project. The Executive Director of NEMA or his delegated official shall then issue an EIA Certificate of Approval for the project.

It is important to note that this review and approval process is to be carried out in parallel with the review and approval of the technical, economic, financial and other aspects of the subprojects. Implementation of subprojects cannot commence until the environmental and social aspects have been reviewed and appropriate mitigation measures have been adopted. As possibilities of social impacts regarding land acquisition, the implementation of subprojects cannot proceed until the resettlement and/or compensation plans have been prepared and implemented after clearance by the Chief Government Valuer (CGV) in the Ministry of Lands, Housing and Urban Development (MoLHUD). However, this will not apply to UMFSNP-AF because the Schools that are selected to host the demonstration gardens are 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.

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#### 7.2.7 STEP 7: ENVIRONMENTAL MONITORING

Environmental and social monitoring aims at checking the effectiveness and relevance of the implementation of the proposed mitigation measures. Monitoring exercises should be undertaken in sequences and frequencies stipulated in the ESIS, PBs, RAPs, or ESMPs. Local Government leaders, District Environment Officers, Community Development Officers as well as NGOs and CBOs will undertake

monitoring exercises as required by the National Environmental Act. The District Environment Officer in conjunction with the District Community Development Officer will monitor the implementation of environmental and social mitigation measures.

The monitoring indicators will be developed by implementing agencies' Environmental Specialists based on the mitigation measures and the ESMP as summarized herein below. MAAIF will have the lead role in monitoring to ensure that various project environmental and social obligations are met, and will ensure that the requirement for an environmental and social audit is fulfilled not less than 12 nor more than 36 months after project completion or commencement of operations respectively in line with the National Environment Act and the Audit Regulations of 2006. It is critical to note that NEMA has a regulatory coordinating role in monitoring of compliance with permits, standards, regulations and all approval conditions. However, given the scale of the school and farmer demonstration gardens to be established, the respective District Environment Officers shall bear the main responsibility of follow up and provision of required guidance from time to time.

N°.	Project Component	Activities	Impacts	Mitigation Measures	Results Indicators/Reference Situation/baseline	Period	Surveillance		Cost (Ugx)
							Responsible Entity	Frequency	

### 7.3 OTHER SAFEGUARDS GUIDING DOCUMENTS

#### 7.3.1 MANAGING RISKS AND IMPACTS OF CORONA VIRUS DISEASE (COVID-19)

During implementation of the project, there is need to be cognizant of COVID-19 pandemic and its associated risks of infection, if the required measures are not followed. The World Health Organization declared COVID-19 a global pandemic after assessing both its alarming levels of spread and severity, and the alarming levels of inaction. Consequentially, WHO issued various measures to prevent the spread of the virus, and these measures have been adopted worldwide. In Uganda, Ministry of Health has adopted most of the WHO measures and as a result the government has enforced lockdown measures, restricted movements and introduced social distancing guidelines among other Standard Operating Procedures (SOPs). While a number of countries in Asia and Europe have started to ease the conditions and allowed restricted human interaction, WHO has warned the virus might persist and become a way of life, thus requiring Standard Operating Procedure (SOPs) throughout. Therefore, nearly all aspects of the project implementation and completion are affected. More so, project stakeholder and public consultations, including mobilization and execution of activities will have to be undertaken at a slower and cautious pace, than usual, taking into consideration COVID-19 SOPs and guidelines from the Ministry of Health guidelines, including the Presidential directives issued on the same.

The UMFSNP-AF has mainstreamed COVID-19 measures and overall project implementation shall follow the stipulated SOPs. Therefore, in order to ensure project implementation is not greatly affected the following measures shall be followed by the project implementers;

- MAAIF shall develop as part of Project Implementation Manual, the COVID-19 Standard Operating Procedures (SOPs) for managing the spread of COVID-19. The SOPs shall be prepared jointly in consultation with the Ministry of Health and the District COVID-19 Task Forces;
- At the bare minimum, the following measures shall be ensured: observance of social distance of at least 2 meters or as guided by MoH, non-shaking of hands, regular use of hand-sanitizers and washing hands with soap, wearing of face masks while in public, use of temperature guns to screen

project participants during project events that bring participants together, reporting protocol of any likely infection of persons, regular training and sensitization of communities and leaders on COVID-19 control measures, display of COVID-19 IEC materials at active project sites; etc.

- c. Provision of appropriate Personal Protective Equipment (PPE) and mainly face masks to all project workers and visitors;
- d. Adopting electronic means of consulting stakeholders, whenever possible. At community Level stakeholders, telephone communication is encouraged.
- e. Upon guidance by MoH, the project shall adopt rapid testing of workers and participating communities for covid-19 on a regular basis;
- f. The project will liaise with MoH and District COVID-19 Task Forces to make special effort to ensure that healthcare providers effectively include vulnerable groups such as those with underlying conditions, the elderly, disabled, etc. For example, in case of COVID-19 outbreak, health personnel with specific knowledge of their social customs and culture should be included in teams providing emergency services to vulnerable groups; and
- g. Corroboration with the Ministry of Health and COVID-19 District Task Forces will be key in ensuring that the potential impact of COVID-19 on the project is minimized as much as possible.

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### 7.3.2 GRIEVANCE REDRESS MECHANISM

Grievance redress mechanisms provide a way to provide an effective avenue for expressing concerns and achieving remedies for communities, promote a mutually constructive relationship and enhance the achievement of project development objectives. Gender sensitive grievance redress mechanisms are increasingly important for development projects where ongoing risks or adverse impacts are anticipated. They serve as a way to prevent and address community concerns, reduce risk, and assist larger processes that create positive social change, taking into account critical gender and vulnerability concerns. It has been learned from many years of experience that open dialogue and collaborative grievance resolution simply represent good business practice both in managing for social and environmental risk and in furthering project and community development objectives. The GRM will be popularized under the SEP

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#### 7.3.2.1 COMMUNITY EXPECTATIONS WHEN GRIEVANCES ARISE

When local people present a grievance, they generally expect to receive one or more of the following:

- a. Acknowledgment of their problem
- b. An honest response to questions about project activities
- c. An apology
- d. Compensation
- e. Modification of the conduct that caused the grievance
- f. Some other fair remedy.

In voicing their concerns, the local people also expect to be heard and taken seriously. Therefore, the project's PCUs must convince them that they can voice grievances and the project will work to resolve them without retaliation. Grievance resolution mechanisms should take special care to provide a platform for and take special measures to protect women, children, the poor and other vulnerable groups and be sensitive to their concerns.

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#### 7.3.2.2 PROCEDURES AND TIME FRAMES

There is no ideal model or one-size-fits-all approach to grievance resolution. The best solutions to conflicts are generally achieved through localized mechanisms that take account of the specific

issues, cultural context, local customs, sensitivity to women and other vulnerable groups, and project conditions and scale. In its simplest form, a grievance mechanism can be broken down into the following primary components:

- a. Receiving and registering a complaint.
- b. Screening and validating the complaint.
- c. Formulating a response.
- d. Selecting a resolution approach, based on consultation with affected person/group.
- e. Implementing the approach.
- f. Settling the issues.
- g. Tracking and evaluating results.
- h. Learning from the experience and communicate back to all parties involved.

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#### 7.3.2.3 GRIEVANCE PREVENTION

There are ways to proactively solve issues before they even become grievances. Implementers should be aware and accept that grievances do occur, that dealing with them is part of the work, and that they should be considered in a work plan. Implementers should do the following:

- a. **Provide sufficient and timely information to communities.** Many grievances arise because of misunderstandings; lack of information; or delayed, inconsistent, or insufficient information. Accurate and adequate information about a project and its activities, plus an approximate implementation schedule, should be documented in the SEP and communicated to the communities, especially PAPs, regularly. Appropriate communication channels and means of communication should be used;
- b. **Conduct meaningful community consultations.** MAAIF should formalize the process of consultation and dialogue throughout the implementation of the project. Sharing information, reporting on project progress, providing community members with an opportunity to express their concerns, clarifying and responding to their issues, eliciting communities' views, and receiving feedback on interventions will benefit the communities and the project management; and
- c. **Build capacity for project staff, particularly community facilitators and other field-level staff.** The community-level facilitators and field-level staff of MAAIF and the participating Districts should be provided with adequate information on the project such as project design, activities, implementing schedules, and institutional arrangements as well as enhanced skills in effective communication, understanding community dynamics and processes, negotiation and conflict resolution, and empathizing with communities and their needs. Building trust and maintaining good rapport with the communities by providing relevant information on the project and responding effectively to the needs and concerns of the community members will help solve issues before they even become grievances. It is also important that community facilitators and field-level staff provide regular feedback on their interactions with the communities to the higher levels of the implementing agencies as will be in both the Project Implementation Manual and, the SEP to be prepared later.

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#### 7.3.2.4 MECHANISM UNDER UMFSNP-AF

Local grievance redress committees (LGRC) will be initiated at the school/village level to record grievances and also help in mediation. This committee will comprise the LC I Chairperson, the School Head Teacher, a trusted village elder, a religious representative, and specific vulnerable group representatives of relevance to the village i.e., women and the disabled. Disputes will be resolved at the village level as far as possible. The GRC at the Sub County level will comprise the LC III Chairperson, Sub County Chief, a representative of vulnerable groups (women etc.) and the Councilor of the Parish. At the District Level,

the Grievance Redress Committee will be established to deal with any grievances unsettled at the village level. The Grievance Redress Committee at the district will at a minimum comprise the LC 3 representative, representatives of vulnerable groups, District Land Officer/Surveyor, District Community Development Officer and a Grievance Officer from the implementing agency who will oversee and coordinate grievance issues at the village level including setting up of LGRCs, provision of Grievance Logbooks and related logistics, training and orientation of LGRCs, and providing advice on grievance resolution as well as compiling records of all grievances raised and their mediation for the whole district. Following the update of the ESMF, GRCs are required to capture and handle the following grievances: labor complaints (especially those who will be involved in expansion for commodity specific interventions as well as activities involving strengthening and intensification of community demonstration activities), including terms and conditions of work and occupational health and safety issues; SEA/SH complaints, with strict application of work and confidentiality, and survivor safety; and implementing COVID-19 enhanced communication and awareness/dissemination campaigns. These complaints will be handled through existing LCs system and can be escalated to higher levels depending on levels of the grievance and that can involve police and prosecution in the courts of laws. The PCU and District Extension staff shall offer the necessary training to all participating schools and communities about the introduction of these new areas to be handled by the GRCs. The GRCs shall also be trained on how to handle these new/additional aspects of grievances.

The grievance mechanism for the implementation process is as follows:

- a. The LGRC will interrogate the PAP in the local language and complete a Grievance Form which will be signed by the leader of the LGRC and the PAP/complainant. This will then be lodged in the Grievance Log/Register provided by the Grievance Officer;
- b. The PAP should expect a response from the LGRC within seven days of filing the complaint. If the issue is not resolved, the LGRC will forward the complaint to the GRC at the Sub-County;
- c. The GRC at the Sub County will be given a fourteen-day notice to hold a meeting. Two days after the meeting, the Sub County GRC will call the PAP and LGRC for discussions and resolution. The resolution will be presented to the PAP in written form within the same day of the meeting. If there is no resolution to the grievance, the GRC at the Sub County and the PAP shall then refer the matter to the GRC at the District;
- d. The GRC at the District will be given a fourteen-day notice to hold a meeting. Two days after the meeting, the GRC will call the PAP and LGRC for discussions and resolution. The resolution will be presented to the PAP in written form within the same day of the meeting;
- e. If there is no resolution to the grievance, the GRC at the district and the PAP shall then refer the matter to the District Land Tribunal for land-related issues and to MAAIF head office for all other grievances; and
- f. Appeal to Court - The Ugandan laws allow any aggrieved person the right to access to Court of law. If the complainant still remains dissatisfied with the District Land Tribunal or MAAIF top management in Kampala, the complainant has the option to pursue appropriate recourse via judicial process in Uganda. Courts of law will be a “last resort” option, in view of the above mechanism.

#### 7.3.2.5 COVID-19 SPECIFIC RISK CONSIDERATIONS

Based on the task team and PCU’s assessment to date, the additional environmental risk posed by COVID-19 to the additional financing activities is very limited. **As mandated by the GoU, the UMFSNP is adhering to the national COVID-19 containment protocols.** Project monitoring has shown that UMFSNP districts, schools and other project sites are complying with the Government of Uganda’s hand washing (with soap or sanitizers) and social distancing policies by reducing the number of people gathered in the project activities at any given time where applicable, and temporarily halting operations where health risks are posed. All the



participating 1,500 primary schools of the 15 project districts remained closed from mid-March to December 2020. These schools are re-opening sequentially, following the protective health measures guided by the Ministry of Health (MoH). Given that UMFSNP interventions are largely school centered and community focused they need to abide by the hand washing, social distancing and other health requirements during interactions at different nutrition forum/meetings.

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#### 7.3.2.6 OCCUPATIONAL HEALTH AND SAFETY

Standard labor related risks are covered by the Occupational Health Safety (OHS) provisions in the existing ESMF instrument. The Occupational Health Safety Act, 2006 provides for the prevention and protection of persons at all workplaces from injuries, diseases, death, and damage to property. The existing ESMF provides for provision of safety gear for workers during implementation at UMFSNP schools and selected Farmer Groups activities. In addition to supporting clients' access to finances during the COVID-19 crisis, the project also supports UMFSNP-AF activities in building resilience and compliance with social distancing practices. This includes a transition from in-person to remote project meeting and training; reduced number of participants in community nutrition forum; using Personal Protective Equipment (PPE) and WASH facilities when/if needed (e.g., handling agro-chemical waste, cooking demonstrations, etc.); increasing remote monitoring & supervision for data collection using geo-enabled smart phone apps; and intensifying community sensitization through radio & other media messages. The PCU and UMFSNP district project assistants (DPAs) shall also maintain contact with the community facilitators (CFs) via zoom meeting, phone calls, and messaging. This assistance is aiding districts and communities to continue operations while complying with health and safety directives by the government of Uganda. Further actions will be taken as the situation evolves to encourage and support safe approaches to operating under COVID-19 conditions.

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#### 7.3.2.7 THE COMMUNITY HEALTH AND SAFETY

The Community Health and Safety Standard recognizes that project activities, equipment, and infrastructure can increase community exposure to risks and impacts. Potential negative impacts affecting health and safety may arise from project supported activities which in this case may include management impacts from rehabilitation of demonstration gardens, safe disposal of obsolete pesticides and associated packaging amongst others. It is therefore important that, the project strictly observes the need to avoid or minimize the risks and impacts to community health, safety and security that may arise from its with particular attention given to the health of the pupils and women. Therefore, it is important to ensure that, the project avoid or minimize the potential for community exposure to health risks (e.g., pollution, contaminated areas/resources) and diseases that could result from or be exacerbated by vector-borne diseases, and communicable diseases, injuries, nutritional disorders, mental health, and well-being. Where project is to provide nutritional supplements, measures be undertaken to ensure their safe storage, transportation, prescription and usage.

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#### 7.3.2.8 DISADVANTAGED / VULNERABLE GROUPS AND GBV ASPECTS

By design disadvantaged or vulnerable groups were identified i.e., pregnant and lactating women and under-2 children and are key targets under the parent Project. Project information collected to date suggests that women (60% of project beneficiaries) are key actors in this multisectoral food security and nutrition project network. They are extensively involved in making important decisions (e.g., financial/crop production/food consumption) in their households. However, data from around the world suggests increased risk of gender-based domestic violence during the COVID-19 pandemic. The task team will make use of key service providers (NGOs) offering support, and use DPAs, CFs, and other nutrition training forum/meetings to sensitize and inform clients and communities, and sensitively and appropriately expand the use of the grievance redress mechanism for addressing the same. Additional information is provided in Chapter 6 and



Annex on specific mitigation measures in place to respond to COVID-19 risk considerations related to UMFSNP project activities.

Gender based violence (GBV)/ Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH) assessment would not be necessary as GBV/SEA/SH have been criminalized in Uganda through the National Gender Policy of 1997 and law enforcement mechanisms are in place and operational, up to the lowest administration level. It is a tool to guide and direct the planning, resource allocation and implementation of development programs with a gender perspective. The adoption of the gender policy has facilitated Uganda's gender mainstreaming programs in all sectors of the economy. UMFSNP has already mainstreamed gender dimensions into its formulation, planning and implementation framework, hence, its compliance with the National Gender Policy for Uganda.

### 8.1 MINISTRY OF AGRICULTURE, ANIMAL INDUSTRY AND FISHERIES

**Mandate and Responsibility**—MAAIF is responsible for policy formulation, planning, setting standards on irrigation, aquaculture and water for livestock. The Crop Protection Directorate of MAAIF is in charge of all matters related to plant health, including issuance of import and export phytosanitary certificates for live plant material and horticultural crops, as well as for plant pest prevention or eradication programmes. The department is also responsible for enforcing regulations on registration and the use of pesticides and other agrochemicals. The Ministry of Agriculture, Animal Industry and Fisheries - MAAIF will be the main implementing unit of this project at national level, working in liaison with local governments in the respective districts. Specifically, for UMFSNP-AF, 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 comprised of a Project Coordinator, administrator, procurement specialist, accountant, M&E specialist and support staff. (Technical support will be provided particularly for financial and procurement management, and monitoring and evaluation).

**Safeguards Capacity**—During preparation of UMFSNP project, MAAIF in consultation with the World Bank agreed the ACDP (Bank funded project) Safeguards Staff to support the project, since the scope of UMFSNP project activities do not warrant hiring of separate Safeguards Staff. During the preparation of this ESMF, it is established that, UMFSNP very much needs its own in-house environmental and social safeguards team of at least 2Nº. persons i.e., an Environmental Safeguards Specialist and Social Safeguards Specialist to oversee safeguards implementation, supervision and reporting. The earlier proposal of shared staff is not feasible because ACDP has a lot of compliance requirements since it large infrastructure projects involving irrigation amongst others.

### 8.2 AGRICULTURAL CHEMICALS CONTROL BOARD-ACB

This is a government agency responsible for controlling the use of agricultural chemicals in Uganda mainly for phyto-sanitary plant/crop protection purposes. This body regulates: (i) herbicides; (ii) pesticides; (iii) fungicides; (iv) fertilizers; (v) insecticides; (vi) plant growth regulators; (vii) seed treatment chemicals; (viii) bio pesticides; (ix) chemicals for wood industry (petroleum and wood treatment); and (x) vector control-the Board also handles chemicals for the control of epidemic pests and diseases. The Agricultural Chemicals Board also gives permits to suitable and approved importers of agrochemicals. The Board also maintains a statistical database of these chemicals.

The responsibilities of the Agricultural Chemicals Board under the UMFSNP-AF will include:

- a. Registration of new pesticides required under the project.
- b. Licensing on new pesticides suppliers
- c. Development of the project specific IPM Pesticides List
- d. Work with MAAIF inspectors to enforce the pertinent laws

**Capacity**—ACB has a low laboratory staff capacity with only two fully qualified staff and no laboratory equipment for assessing pesticides chemicals. In addition, the ACB is unable to regularly sit to assess the chemicals imported in the country and make decisions; and there are no regular field inspections and surveillance due to a limited budget. ***The ACDP will set aside resources for laboratory and technical capacity enhancement for the key stakeholders and a plan to harmonize activities and share resources where capacity is higher.***

### 8.3 MINISTRY OF HEALTH

Community Health (CH) Department of the Ministry of Health in Uganda comprises of the cross-cutting areas of health promotion, disease prevention, and community health initiatives, environmental health, school health, as well as gender and health. The Department's major objective is to increase community awareness and health literacy on disease prevention and promotion of healthy lifestyles in order to have a healthy and productive population in Uganda. To achieve this objective research is critical for evidence-based policy and decision making. Environmental health programme is one of the main components of the current National Health Policy of Uganda as it is evident that environmental factors are major determinants of public health outcomes. The main objective of the programme is to contribute to the attainment of a significant reduction in morbidity and mortality due to environmental health related conditions.

In the absence of systematic data collection related to pesticide poisoning (accidental or intentional), it is difficult to understand and tackle the problem. The Ministry of Health is expected to keep records on pesticide poisoning and accidents. The Ministry needs to be supported for the collection and keeping of accurate statistics on these events. The district hospitals and Health Centers in the cluster districts will set up databases on incidence of pesticide poisoning, effect of pesticides on human health and environmental contamination. Currently, the data on pesticide poisoning and accidents resulting from pesticides use or disposal must be fragmented and still remains in the various newspapers that have reported such cases, and various hospital cases. There is the need to create awareness raising actions that will target the different pesticide users in order to avoid accidents and incidents.

Under the UNFSNP-AF, the Department of Environmental Health in the Ministry of Health will be supported to collect and keep accurate statistics on pesticide poisonings events and also spearhead implementation of COVID-19 SOPs during implementation of various project activities. In addition, it will create awareness raising actions that will target the different pesticide users in order to avoid such accidents and incidents, including undertaking awareness campaigns on COVID-19 SOPs. The department has experts to address pesticides issues but need support to gather information as well as to create awareness on safe pesticides use and observance of COVID-19 SOPs.

Specifically, for UMFSNP-AF, at the national level, the MOH nutrition unit will be responsible for: (i) review and revision of existing VHT nutrition training modules as needed and distribution of training materials; (ii) training of district trainers (Master Trainers) and quality assurance of the cascade training; (iii) collecting and consolidating the key performance indicators for the project; and (iv) management of proposed related operational research. Relevant departments will be involved as needed to ensure that activities follow the existing structures in MOH, including those related to management of COVID-19 pandemic risks and impacts.

### 8.4 NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY-NEMA

NEMA is specifically mandated by the National Environment Act (NEA) N°.05 of 2019 as the principal agency in Uganda charged with the responsibility of coordinating, monitoring, supervising, and regulating all environmental management matters in the country. One of the key institutional mandates of NEMA include among others ensuring the observance of proper safeguards in the planning and execution of all development projects including those already in existence that have or are likely to have significant impact on the environment. The role of NEMA will be to review and approve environmental impact assessments and Project Briefs as well as monitoring records submitted in accordance with the National Environment Act and the respective regulations. In addition, NEMA's role in the project will include monitoring and supervision during implementation, review of audit reports, issuance of permits etc.

**Safeguards Capacity**—In general, NEMA has a fully-fledged Environmental Compliance and Monitoring Directorate with staff to undertake the mandate of compliance monitoring. In addition, the Authority has established working mechanisms with the local governments in areas of environmental and monitoring and such, this function on matters of this project will be implemented under its existing and functional framework without requiring additional staffing.

## 8.5 UGANDA NATIONAL BUREAU OF STANDARDS

The UNBS is mandated to develop and promote standardization; quality assurance; laboratory testing; and metrology to enhance the competitiveness of local industry and to strengthen Uganda's economy and promote quality, safety and fair trade. UNBS also ensures quality imports through implementation of the Import Inspection and Clearance Regulations 2002 by carrying out inspection of imports to:

- a. Safeguard the health and safety of the consumers and the environment against imported substandard, shoddy and hazardous products;
- b. Safeguard our industries from cheap counterfeit imports that can be a threat to our infant industries; and
- c. Ensure that Uganda's hard-earned foreign exchange is not wasted on shoddy, substandard and sometimes dangerous products, which may not only further impoverish the people but also cause ill health sometimes resulting in death.

***UNBS will work hand in hand with ACB, NDA, URA and MAAIF to address issues of pesticides quality.***

## 8.6 GOVERNMENT ANALYTICAL LABORATORY

The Government Analytical Laboratory (GAL) is a Department under the Ministry of Internal Affairs and has been in existence since 1930's. It is mandated to safeguard lives of people and environment as well as enhancing market competitiveness of products through provisions of forensic and general scientific services. Currently, the main functions of GAL can be broadly categorized as follows:

- a. Provision of Forensic science services as back up in assuring national internal security, trans- boundary activities, law and order to all interested parties;
- b. Statutory testing for enforcement of public health, environmental standards and regulations; and
- c. Advisory and investigative services, important in assuring national internal security, trans- border activities, business competitiveness, health and environmental protection.

This Pesticides Residue Laboratory (PRL) was set up under the GAL department by the Government of Uganda as a result of fish poisoning saga in 1997. It was a requirement by the European Union for any fish exporting country to establish and build capacity for a pesticide residue laboratory. PRL is mandated to analyze pesticide residues in water, food and environmental samples for both local consumption and export. It further undertakes the examination of residues of agricultural and veterinary drugs in food and food animals that are of health and public concern. For instance, during fish poisoning as indicated above, the laboratory carried out analysis on the fish samples from the market and identified the poison as endosulfan.

***GAL and other laboratories will be useful in testing of samples to monitor pesticide contamination and food safety issues.***

## 8.7 MINISTRY OF EDUCATION AND SPORTS

Specifically for UMFSNP-AF, at the Primary School level, existing Government systems 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 work plan 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.

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 work plans, 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.

At the national level, the MoES nutrition focal team (reporting to the Director, Basic and Secondary Education) will be responsible for the review, revision 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 deliver the training of district Master Trainers; ensure quality assurance of the cascade training; supportive supervision; the collection and consolidation of the key performance indicators of the project; and management of proposed related operational research.

## 8.8 LOCAL GOVERNMENT ADMINISTRATION STRUCTURES

The CAO is responsible for all activities and fund management undertaken in the district. Local governments will coordinate and monitor the implementation of the project in their respective areas of jurisdiction. District and Local Council Administration will be vital in implementation of the project by mobilizing political goodwill and sensitizing communities on the project as well as their District Environment Officers taking care of environmental aspects of the project at their levels. 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 and safeguards staff, a District Nutrition Coordinator. The DNCC will meet regularly to review implementation progress, identify problems, and coordinate efforts.

**Safeguards Capacity** – The Local Governments have District Environment Officers, District Agricultural Officers, District Community Development Officers and District Gender Officers, some of whom are involved in the current Bank Financed ACDP and NUSAF-3 Projects. Sub-county extension staff shall also be involved in the implementation of safeguard policies. The DEOs in the respective areas of project implementation will have to monitor the projects to ensure that mitigation measures are adequate and are well integrated in the subproject proposals. The Role of the DEOs will also be to ensure that UMFSNP-AF subproject is implemented in accordance with NEMA conditions of approval. The capacity development of the respective District and Sub County staff needs to be strengthened through a hands-on training on safeguard requirements.

***NGOs working with farmers can undertake the following key roles:***

- a. Raise awareness among the smallholder farmers about the dangers of pesticide use;

- b. Work with extension staff to teach farmers about safe pesticide use and storage;
- c. Work with farmers to develop community monitoring of the use and impacts of pesticides in order to alert the authorities as to the health and environmental impacts of pesticide use;
- d. Empower the smallholders through training and other support to engage with the local government to address their concerns on pesticides use; and
- e. Do more to publicize to the public the environmental and health impacts of pesticide use

## 8.9 THE WORLD BANK GROUP

The World Bank will independently review and comment on the safeguards documents on UMFSNP-AF as well as independently monitor the project's environmental and social performance and compliance in relation to the respective safeguards during implementation process. Once the World Bank clears the ESMF, it will then be officially disclosed on its website. Technical guidance may also be provided by World Bank to MAAIF as needed.

## 8.10 ESMF MONITORING AND EVALUATION

Implementation of the ESMF includes monitoring, reporting and evaluation. At local level, the respective project management teams in the different agencies, local government and local communities will be responsible for monitoring to ensure that all required environmental and social mitigation measures for each project component are being implemented satisfactorily. Information collected from various stakeholders together with observations of project activities will be reported quarterly to MAAIF. Monthly monitoring reports will include:

- a. List of consultations held, including locations and dates, name of participants and occupations.
- b. Main points arising from consultations including any agreements reached.
- c. A record of grievance applications and/or grievances redress dealt with
- d. Monitoring data on environmental and safety parameters
- e. Trainings conducted.

At national level, MAAIF will take overall responsibility for overseeing progress in implementing the ESMF and assessing the effectiveness of mitigation measures against agreed indicators and parameters. MAAIF will consolidate and review monthly reports submitted by the different agencies. The monitoring results shall be communicated to the World Bank.

## 8.11 CAPACITY BUILDING

### 8.11.1 CAPACITY ASSESSMENT NEEDS UMFSNP

The project established a set of minimum standards of staffing and capacity which participating districts should have in order to be considered a full partner in the program. These standards will be revised in the light of the new design; and minimum standards established for sub-counties. Therefore, the districts will be expected to meet those minimum standards of staffing and capacity for them to be considered fully in the project. This implies that in order to effectively operationalize the ESMF, the line agencies need to have basic skills and understanding of general environmental and social safeguards dimensions and with specific reference to the UMFSNP aspects.

The overall objective will be to build and strengthen the institutional capacity of the implementing agencies to better support the development and integration of social and environmental measures into the project. The institutional capacity building strategy will seek to:

- a. Develop organizational mechanisms to ensure that environmental and social requirements of the World Bank and Uganda are followed throughout the project;

- b. Assist MAAIF and its project implementing agencies in strengthening their capacity to deal with environmental and social issues and to ensure generally, project operations are environmentally and socially sound and acceptable;
- c. Ensure effective coordination between the respective implementing agencies on matters of environmental and social safeguards compliance; and
- d. Identify and assess overall needs for environmental education, information, awareness building and training in the project.

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#### 8.11.2 STRATEGY

Prior to the subproject cycle, mobilization and sensitization of relevant technical teams and communities is important. The District project staff will put together a team of experts/consultants/persons that will orient the members of District environment and technical committees on the ESMF and equip them with skills to be able to identify and analyze potentially adverse environmental and social impacts, prescribe mitigation approaches, integrate environmental standards for planning and implementation into project activities as well as be able to prepare and supervise the implementation of the projects. This training will address such matters as community participatory methods; environmental analysis; social analysis, using the ESSF checklists, reporting; and subproject supervision and monitoring. The UMFNSP Environmental and Social Specialist will work through the CDOs and DEOs and other relevant fora to organize practical training to build the knowledge and awareness of local government officials and local communities, on social and environmental issues related to proposed activities. Training will also seek to build the skills of local communities and schools to participate actively in identifying appropriate mitigation measures to avoid or reduce potential negative impacts of project activities. The Capacity building will be required to implement the recommendations outlined in the ESMF.

The key areas of capacity building in the Project to include:

- a. World Bank Safeguards policies and requirements;
- b. Understanding of the Environmental and Social Management Process in Uganda;
- c. How to monitor mitigation measures and reporting; and
- d. Waste management and disposal.

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#### 8.11.3 TRAINING IN SAFEGUARDS IMPLEMENTATION

The training modules below are proposed to form part of the training program to ensure awareness of how to effectively implement the ESMF:

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##### 8.11.3.1 TRAINING MODULE 1

- a. Introduction to Basic concepts on environment and social issues
- b. Their relevance and significance in project implementation
- c. Overview of environment and social regulations
- d. World Bank policies and safeguards.

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##### 8.11.3.2 TRAINING MODULE 2

- a. Environmental and social considerations in project implementation
- b. Environmental and social safeguards lessons from on-going UMFSNP
- c. Environmental and social concerns in typical UMFSNP project
- d. Good environmental and social practices in project implementation

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##### 8.11.3.3 TRAINING MODULE 3



- a. Environmental and social assessment processes
- b. Screening using the ESSF
- c. Writing a project brief
- d. EIA process
- e. Identification and costing of mitigations
- f. Subproject monitoring and reporting
- g. Pests and pesticides management
- h. Mobilization and consultation of communities
- i. Vulnerability issues
- j. Operation and functionality of GRM and GRS

## 8.12 ESMF BUDGET AND DISCLOSURE

Financial resources are required to support implementation of the ESMF. Below are estimates to successfully implement the ESMF for UMFSNP-AF.

**Table 8-1: Budget estimate for implementing the ESMF**

Item	Cost in USD		Remarks
	Year 1	Year 2	
❖ Mobilization and training in ESMF E&S requirements, use of pesticides and general project management including GRM issues coordination (targeted include implementing agencies and LGs)	50,000	40,000	This will be undertaken during the launch of the project and continuous on a quarterly basis in order to ensure the E&S requirements are adhered to during project implementation.
❖ Supervision and monitoring by district officers (responsible for social and environment affairs: the DAO, DEO) and coordination by MAAIF & OPM.	40,000	40,000	Close monitoring shall be undertaken by the PIU, MDAs and participating Districts, on monthly and quarterly basis.
❖ Social and environmental sensitization and training for communities and participating farmers and schools, about application of and safety measures when using of pesticides, COVID-19 prevention measures and implementation of Standard Operating Procedures (SOPs).	50,000	40,000	Sensitization shall be carried out by the Extension staff, and Health workers from project host districts, backstopped by national level task forces.
❖ Lumpsum support for collection and disposal of used pesticide containers, by licensed hazardous waste handling companies, coordinated by MAAIF and Local Governments.	40,000	40,000	This will cover all participating districts and regional collection centers shall be established in collaboration with NEMA.
❖ Project Closure Environmental and Social Audit		75,000	To ensure systematic documentation of implementation and management of EHS aspects at the end of the project implementation, feeding into the Project Completion Report.
<b>Annual Total</b>	<b>180,000</b>	<b>235,000</b>	
<b>Total Budget Estimate for ESMF</b>			<b>415,000</b>

### 8.13 ESMF DISCLOSURE

This ESMF will be disclosed in compliance with relevant Ugandan regulations and the World Bank Environmental and Social Safeguards Policies and Information Disclosure. It will be disclosed at the World Bank's Website and will also be available to any interested persons through MAAIF's Website. MAAIF will also provide copies of the ESMF and respective ESIAs if / when prepared for disclosure at the World Bank's Website and similarly disclosed at MAAIF's website.

## 9 CONCLUSIONS AND RECOMMENDATIONS

### 9.1 CONCLUSION

The UMFSNP will have several positive social impacts for people. UMFSNP is expected to have significant positive impact on social and poverty conditions by increasing productivity and production of the selected commodities as well as focusing to reach and promote smallholding farmers. UMFSNP will promote better nutritional practices among the communities and greatly improve the general health status and wellbeing of the local populace, in the long run. The process has been designed to ensure the inclusion of women and youth in the management of farms (and/or agribusiness) enterprises.

The Project has been maintained at the original project's assigned Environmental Assessment Category B, given the fact that project activities do not pose high or substantial risks and impacts. The major safeguards focus in UMFSNP will be on the minimal use and management of pesticides and agricultural chemicals at the selected farmers and schools' gardens, which are small in size (half-acre per selected school or homestead. While implementing these activities (COVID-19 risks associated with community gatherings), the project shall follow set operational guidance by the Ministry of Health, and in general by the Government of Uganda, while cognizant of WHO overall guidelines on management of COVID-19 pandemic. Overall, the environmental and social impacts are expected to be minimal and not adverse, site specific and readily manageable.

### 9.2 RECOMMENDATIONS

- a. ***Use of developed guidelines for pesticides for safe use and management:*** Need to continue using guidelines developed as part of the Projects Operational Manuals for use and disposal of pesticides is recommended. This will provide quick reference and guidance to the project implementers and beneficiaries on how to purchase/procure, transport, store, use, apply and safely dispose of pesticides related/resultant wastes;
- b. ***Continued training and sensitization on the use of Pesticides:*** Continuation of training activities on the use of pesticides and sensitization of all project participants and/or beneficiaries is strongly recommended in order to avert any negative impacts that may be associated with the use of pesticides.
- c. ***Training and Sensitization on COVID-19 SOPs:*** Develop as part of the Projects Operational Manual guidelines Project specific COVID-19 Standard Operating Procedures (SOPs) as provided in the ESMF and in line with Uganda's Ministry of Health, WHO and WB guidance on COVID-19 measures. The Project will undertake extensive sensitization and training of project stakeholders on COVID-19 risks and impacts, including the application of Standard Operating Procedures.

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## 11 ANNEXES

### 11.1 ANNEX 1: ENVIRONMENTAL AND SOCIAL SCREENING FORM

Please type or print clearly, completing this form in its entirety. You may provide additional information on a separate sheet of paper if necessary. Kindly note that the information you are to provide is required by Section of the National Environment.

a. Component under UMFSNP-AF	
b. Name of Subproject	
c. Project Objective	
d. Expected Commencement Date	
e. Proposed Main Project Activities	
f. Location (District, Parish, Village)	
g. Name of Evaluator	

#### BRIEF DESCRIPTION OF THE PROPOSED PROJECT

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-----

#### EMPLOYEES AND LABOURERS

Number of people to be employed: Employees and Laborer	During Construction	During Routine Operation
Full-time		
Part-time		

#### DESCRIPTION OF PROCESS THAT COULD BE IMPLEMENTED

Briefly describe the type and nature or type of the project at the site.

-----

----- List the type and quantity of raw materials to be used in the project and highlight their sources

Material	Quantity	Source

#### POTENTIAL ENVIRONMENTAL IMPACTS

Please indicate environmental impacts that may occur as a result of the proposed project.

##### A. The Biological Environment

##### The Natural Environment

Describe the habitats and flora and fauna in the project area and in the entire area expected to be affected by the sub-project (e.g., downstream areas, access roads):

Will the project directly or indirectly affect: Natural forest types?

swamps? Wetlands (i.e., lakes, rivers, swamps, seasonally inundated areas)? Natural critical habitats (parks, protected areas)?

Other habitats of threatened species that require protection under Ugandan laws and/or international agreements?

YES \_\_\_\_\_ NO \_\_\_\_\_

Are there according to background research/observations any threatened/ endemic species in the project area that could be affected by the project?

YES \_\_\_\_\_ NO \_\_\_\_\_

Will vegetation be cleared? If yes, please state the distance/length of affected area

YES \_\_\_\_\_ NO \_\_\_\_\_

Will there be any potential risk of habitat fragmentation due to the clearing activities? YES \_\_\_\_\_ NO \_

Will the project lead to a change in access, leading to an increase in the risk of depleting biodiversity resources?

YES \_\_\_\_\_ NO \_\_\_\_\_

Provide an additional description for “yes” answers:

---

#### **Protected Areas**

Does the subproject area or do subproject activities:

Occur within or adjacent to any designated protected areas? YES \_\_\_\_\_ NO \_\_\_\_

Affect any protected area downstream of the project? YES \_\_\_\_\_ NO \_\_\_\_

Affect any ecological corridors used by migratory or nomadic species located between any protected areas or between important natural habitats (protected or not) (e.g., mammals or birds)?

YES \_\_\_\_\_ NO \_\_\_\_\_

Provide an additional description for “yes” answers:

---

#### **Invasive Species**

Is the sub-project likely to result in the dispersion of or increase in the population of invasive? plants or animals (e.g., along distribution lines)? YES \_\_\_\_\_ NO \_

Provide an additional description for a “yes” answer:

---

### **B. The Physical Environment**

#### **Geology/Soils**

Will slope or soil stability be affected by the project? YES \_\_\_\_\_ NO \_\_\_\_\_

Will the subproject cause physical changes in the project area (e.g., changes to the topography)? YES \_\_\_\_\_ NO

\_\_\_\_\_

Will local resources, such as rocks, wood, sand, gravel be used? YES \_\_\_\_ NO \_\_\_\_



Could the subproject potentially cause an increase in soil salinity in or downstream the project area? YES  
NO \_\_\_\_\_

Could the soil exposed due to the project potentially lead to an increase in lixiviation of metals, clay  
sediments, or organic materials? YES \_\_\_\_\_ NO \_\_\_\_\_

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### **Landscape / Aesthetics**

Is there a possibility that the sub-project will adversely affect the aesthetics of the landscape? YES \_\_\_\_\_ NO  
\_\_\_\_\_

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### **Pollution**

Will the sub-project use or store dangerous substances (e.g., large quantities of hydrocarbons)?  
YES \_\_\_\_\_ NO \_\_\_\_\_

Will the subproject produce harmful substances? YES \_\_\_\_\_ NO \_\_\_\_\_ Will the subproject produce solid or  
liquid wastes? YES \_\_\_\_\_ NO \_\_\_\_\_ Will the subproject cause air  
pollution? YES \_\_\_\_\_ NO \_\_\_\_\_

Will the subproject generate noise? YES \_\_\_\_\_ NO \_\_\_\_\_

Will the subproject generate electromagnetic emissions? YES \_\_\_\_\_ NO \_\_\_\_\_ Will the subproject  
release pollutants into the environment? YES \_\_\_\_\_ NO \_\_\_\_\_

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### **C. The Social Environment**

#### **Land Use, Resettlement, and/or Land Acquisition**

Describe existing land uses on and around the sub-project area (e.g., community facilities, agriculture,  
tourism, private property, or hunting areas):

Are there any land use plans on or near the sub-project location, which will be negatively affected by  
subproject implementation? YES \_\_\_\_\_ NO \_\_\_\_\_

Are there any areas on or near the subproject location, which are densely populated which could be affected  
by the sub-project? YES \_\_\_\_\_ NO \_\_\_\_\_

Are there sensitive land uses near the project area (e.g., hospitals, schools)? YES \_\_\_\_\_ NO \_\_\_\_\_

Will there be a loss of livelihoods among the population? YES \_\_\_\_\_ NO \_\_\_\_\_

Will the sub-project affect any resources that local people take from the natural environment? YES  
\_\_\_\_\_ NO \_\_\_\_\_

Will there be additional demands on local water supplies or other local resources? YES \_\_\_\_\_ NO \_\_\_\_\_

Will the sub-project restrict people's access to land or natural resources? YES \_\_\_\_\_ NO \_\_\_\_\_

Will the project require resettlement and/or compensation of any residents, including squatters? YES  
NO \_\_\_\_\_

Will the subproject result in construction workers or other people moving into or having access to the area  
(for a long time period and in large numbers compared to permanent residents)?  
YES \_\_\_\_\_ NO \_\_\_\_\_

Who is/are the present owner(s)/users of resources/infrastructures the subproject area?

**Loss of Crops, Fruit Trees, and Household Infrastructure** Will the subproject result in the permanent or temporary loss of: Crops?

Fruit trees / coconut palms? Household infrastructure? Any other assets/resources?

**Occupational Health and Safety, Health, Welfare, Employment, and Gender**

Is the sub-project likely to safeguard worker's health and safety and public safety (e.g., occupational health and safety issues, COVID-19 risks)? YES \_\_\_\_\_ NO \_\_\_\_

How will the project minimize risk of HIV/Aids?

How will the project minimize risks of COVID-19 infection and spread?

How will the sub-project minimize the risk of accidents? How will accidents be managed, when they do occur?

Is the project likely to provide local employment opportunities, including employment opportunities for women? YES \_\_\_\_\_ NO \_\_\_\_\_

Provide an additional description for "yes" answers:

**Historical, Archaeological, or Cultural Heritage Sites**

Based on available sources, consultation with local authorities, local knowledge and/or observations, could the sub-project alter:

Historical heritage site(s) or require excavation near the same? YES \_\_\_\_ NO \_\_\_\_\_

Archaeological heritage site(s) or require excavation near the same? YES \_\_\_\_ NO \_\_\_\_\_ Cultural heritage site(s) or require excavation near the same? YES \_\_\_\_ NO \_\_\_\_\_

Graves, or sacred locations (e.g., fetish trees or stones) or require excavations near the same? YES \_\_\_\_\_ NO \_\_\_\_\_

N.B For all affirmative answers (YES) Provide description, possible alternatives reviewed and/or appropriate mitigating measures.

**RECOMMENDATIONS**

**Environmental category: (tick where applicable)**

Category	Justification
Does not require further environmental or social studies	
Requires submission of only a Project Brief	
Requires a full ESIA to be submitted on date	
Requires an ESMP to be submitted on date	
Requires a RAP to be submitted on date	
Requires an Indigenous Peoples Plan (IPP)	
Requires a Physical Cultural Resources Plan	

**CERTIFICATION**

We certify that we have thoroughly examined all the potential adverse effects of this subproject.

Reviewer: .....  
Name: .....  
Signature: .....  
Date: .....

## 11.2 ANNEX 2: ESIA PROCESS IN UGANDA

### Overview

The ESIA Guidelines (NEMA 1997) and the ESIA Regulations 2020 recognize the following stages in an ESIA process: Project Brief formulation; Screening; Environmental impacts study; and Decision making. In addition, public consultation is required throughout the ESIA process.

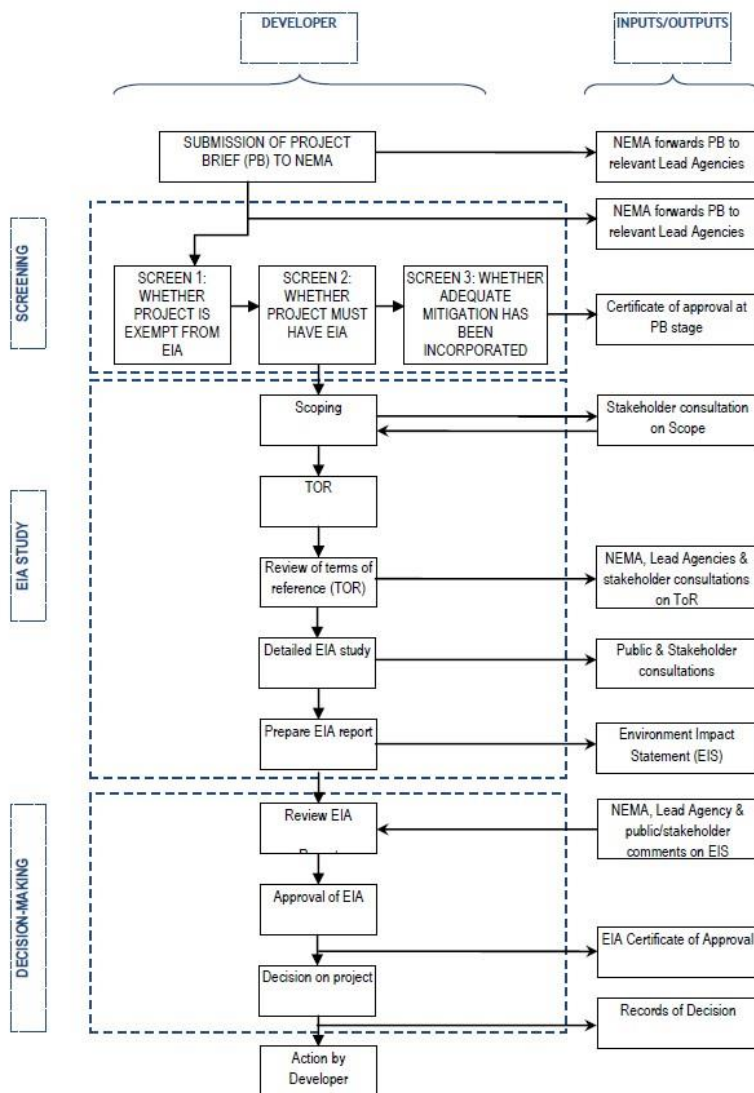


Figure 11-1: EIA Process in Uganda: (Source: EIA Guidelines for Uganda 1997)

The EIA process in Uganda is described as initiated by the submission of a project brief—a document that contains the same sorts of information that are in the ESSF and a format for which is contained in the EIA guidelines. Once the information is judged to be complete, NEMA requests comments from the lead agency and then screens the project.

The Executive Director has three options: (a) approve the proposed project, if the EIA is not mandatory and the project brief includes adequate mitigation measures, or (b) request the developer to prepare an Environmental and Social Impact Study (ESIS) if a decision cannot be made on the basis of the project brief. If MAAIF has ascertained that the project is on the mandatory ESIA list, NEMA states that the project brief stage is normally omitted, moving straight into the ESIA process. If the decision is for an ESIS, the proponent obtains NEMA approval of the proposed ESIA consultant, conducts a scoping exercise, and agrees with NEMA on the study terms of reference. The study is conducted, and culminates in submission of an Environmental Impact Statement (ESIS) to NEMA for review and decision. Stakeholder consultation is mandatory at scoping, Terms of Reference preparation, during the environmental study, and preparation of the draft Environmental and Social Impact Statement (ESIS). The content of an ESIS, as specified in the EIA regulations, covers the recognized elements of environmental and social assessment good practice, including consideration of technical and site alternatives and induced and cumulative impacts.

The EIA Regulations (First Schedule) list the issues to be considered in an EIA, including:

- a. Biodiversity
- b. Ecosystem maintenance
- c. Fragile ecosystems
- d. Social considerations including employment generation, social cohesion or disruption, immigration or emigration, local economy
- e. Effects on culture and objects of cultural value
- f. Visual impacts

## **Preparation of Project Brief**

### **Format of the Project Briefs**

The National Environment (Environmental and Social Assessment) Regulations 2020 in Regulations, 2020 and Sub-section 5 provides that, the project brief shall contain the following information, in a concise manner:

- q. a description of the proposed project, including the name, purpose and nature of the project in accordance with the categories in Schedule 4 of the Act;
- r. the proposed location and physical boundaries, including a map and coordinates of the project clearly showing the projected area of land or air that may be affected by the project activities, or, if it is:
  - iii. a linear activity, a description of the route of the activity and an alternative route, if any; or
  - iv. an activity on a water body, the coordinates within which the activity is to be undertaken;
- s. an evaluation of project alternatives, including a zero or no-project alternative in terms of project location, project design or technologies to be used, and a justification for selecting the chosen option;
- t. the design of the project and any other project related components and associated facilities, including the activities that shall be undertaken and a description of the major material inputs to be used during construction or development and operation of the project;
- u. the estimated cost of the project evidenced by a certificate of valuation of the capital investment of the project, issued by a qualified and registered valuer;
- v. the size of the workforce;
- w. a description of the manner in which the proposed project and its location conform to existing laws, standards and international agreements governing the projects, including reference to relevant plans required under the Physical Planning Act, 2010 and Building Control Act, 2013;
- x. an indication of permits, licenses or other approvals that may be required for the project;
- y. baseline conditions of the physical, biological and socio-economic environment of the project area, including results of relevant studies and other geophysical and geotechnical studies;
- z. a description of potential direct, indirect, induced, cumulative, transboundary, temporary and permanent environmental, health, social, economic and cultural impacts of the project and their severity, and the proposed

mitigation measures to be taken during the planning, design, pre-construction, construction, operational and decommissioning phases of the project;

- aa. proposed mitigation and preparedness measures for potential undesirable impacts that may arise at project implementation, but were not contemplated at the time of undertaking the project brief;
- bb. a description of climate-related impacts associated with the project, including potential climate benefits and carbon footprints of the proposed project, as well as the potential vulnerability of the proposed project or activity to climate change, and the proposed adaptation and mitigation measures;
- cc. a description of alternative resettlement areas for project affected persons, if any, their associated environmental and social impacts, and or any plans for compensation to project affected persons;
- dd. an environmental management and monitoring plan developed in accordance with regulation 46, incorporating climate adaptation and mitigation plan;
- ee. plan for stakeholder engagement throughout the proposed project or activity development, including details on how to address potential related grievances or requests for information, and evidence of stakeholder consultation; and
- ff. any other information required by the Authority or lead agency.

If the Executive Director is satisfied that the project will have no significant impact on the environment, or that the Project Brief discloses sufficient mitigation measures to cope with the anticipated impacts he may approve project. The Executive Director of NEMA or his delegated official shall then issue a Certificate of Approval for the project. However, if the Executive Director finds that the project will have significant impacts of the environment and that, the Project Brief does not disclose sufficient mitigation measures to cope with the anticipated negative impacts, he shall require that, the developer undertakes an ESIA for the planned project.

### **Environmental Screening**

The purpose of screening is to assist categorize the type of ESIA required for the project i.e. does it require a full ESIA, a Project Brief or no ESIA at all is required. This is important to enable the application of the appropriate ESIA level based on the project's anticipated levels of significant impacts as elaborated in the National Environment (EIA) Guidelines 1997.

### **Scoping and Preparation of ToRs**

Scoping is the initial step in the ESIA process. Its purpose is to determine the scope of work to be undertaken in assessing the environmental impacts of the proposed project. It identifies the critical environmental impacts of the project for which in-depth studies are required, and elimination of the insignificant ones. The scoping exercise should involve all the project stakeholders so that consensus is reached on what to include or exclude from the scope of work. It is also at this stage that project alternatives are identified and taken into consideration. The contents of the scoping report are the same as the project brief; however, more detail is likely to be needed. This may involve some preliminary data collection and fieldwork. The Developer takes the responsibility for scoping and prepares the scoping report after consultation with NEMA, Lead Agencies and other stakeholders. The developer with assistance from technical consultants will draw up the ToRs for the ESIS and submit a copy to NEMA that shall in turn be forwarded to Lead Agencies for comments, in this case including the District Environment Officer.

### **Preparation of the ESIS**

In preparing an ESIS, relevant information is collected on issues of real significance and sensitivity. These are then analyzed, mitigation measures developed for the adverse impacts and compensatory measures recommended for unmitigated environmental impacts. Measures aimed at enhancing beneficial or positive impacts are also given. An ESIS documents the findings and is submitted to NEMA by the developer.

### **Review of ESIS and Decision on Project**

The Developer is required to submit ten (10) copies of the ESIS to NEMA for review and approval. NEMA then forwards a copy to the Lead Agencies for comments. NEMA in consultation with the Lead Agencies shall review the contents of the ESIS, paying particular attention to the identified environmental impacts and their mitigation measures, as well as the level of consultation and involvement of the affected stakeholders in the ESIS process. In this review, the level to which the ToRs set out for the study is addressed shall be considered. In making a decision about the adequacy of the ESIS, NEMA shall take into account the comments and observations made by the Lead Agencies, other stakeholders

and the general public. NEMA may grant permission for the project with or without conditions, or refuse permission. If the project is approved, the Developer will be issued a Certificate of Approval.

### **Environmental and Social Management Plan**

The Environmental and Social Management Plan (ESMP) is intended to ensure efficient management of environmental and social issues in subprojects. The ESMP consists of:

- a. The relevant project activities,
- b. The potential negative environmental and social impacts,
- c. The proposed mitigating measures,
- d. The institutions responsible for implementing the mitigation measures,
- e. The institutions responsible for monitoring the implementation of the mitigation measures and the frequency of the afore-mentioned measures;
- f. Capacity building needs and
- g. The cost estimates for these activities.

In cases where the UMFSNP-AF is likely to have sub-projects which are small in nature without significant environmental impacts, an ESMP will be prepared and will outline specific actions to mitigate these impacts and conforming to the obligations stipulated in the screening exercises, and all legal instruments in force. At the time of the implementation of the sub-projects, the potential environmental and social impacts must be clearly identified and a management plan formulated, implemented and the plan's performance monitored during and after execution of sub-project activities. The impacts must be avoided or neutralized where possible or mitigated in conformity with Uganda's and the World Bank's prescriptions for sound environmental management.

### **Environmental Management and Monitoring Plan**

Monitoring is the continuous and systematic collection of data in order to assess whether the environmental objectives of the project have been achieved. Good practice demands that procedures for monitoring the environmental performance of proposed projects are incorporated in the ESIS. Monitoring provides information on the occurrence of impacts. It helps identify how well mitigation measures are working, and where better mitigation may be needed. The monitoring program should identify what information will be collected, how, where and how often. It should also indicate at what level of effect there will be a need for further mitigation.

How environmental impacts are monitored is discussed below.

- a. Responsibilities in terms of the people, groups, or organizations that will carry out the monitoring activities be defined, as well as to whom they report amongst others. In some instances, there may be a need to train people to carry out these responsibilities, and to provide them with equipment and supplies;
- b. Implementation schedule, covers the timing, frequency and duration of monitoring are specified in an implementation schedule, and linked to the overall sub project schedule;
- c. Cost Estimates and source of resources for monitoring need to be specified in the monitoring plan;
- d. Monitoring methods need to be as simple as possible, consistent with collecting useful information, so that the sub project implementer can apply them.
- e. The data collected during monitoring is analysed with the aim of:
  - f. Assessing any changes in baseline conditions;
  - b. Assessing whether recommended mitigation measures have been successfully implemented;
    - a. Determining reasons for unsuccessful mitigation;
    - b. Developing and recommending alternative mitigation measures or plans to replace unsatisfactory ones; and
    - c. Identifying and explaining trends in environment improvement or degradation.

### **Public Consultation**

The environmental impacts or effects of a project will often differ depending on the area in which it is located. Such impacts may directly or indirectly affect different categories of social groups, agencies, communities and individuals. These are collectively referred to as project stakeholders or the public. It is crucial that during the ESIA process,



appropriate mechanisms for ensuring the fullest participation and involvement of the public are taken by the developer in order to minimize social and environmental impacts and enhance stakeholder acceptance. An effective consultation process should generally ensure that:

- a. The public has a clear understanding of the proposed project; and
- b. Feedback mechanisms are clearly laid out and known by parties involved.

Different stages of the ESIA process require different levels of public consultation and involvement. The key stages are:

- a. Public consultation before the commissioning of the ESIS;
- b. Public consultation during the ESIS; and
- c. Public consultation during ESIS review.

Consultation can be before, during the ESIA study or during its review as outlined below:

#### **Consultation before the ESIA**

On submission of the project brief to NEMA, it might be decided that views of the public on the project is sought. NEMA is obliged to publish the developer's notification and other relevant documents in a public notice within 4 weeks from the date of submission of the project brief and/or notice of intent to develop. It is important therefore, that a plan for stakeholder involvement is prepared before the ESIS begins. Such a plan should consider:

- a. The stakeholders to be involved;
- b. Matching of stakeholders with approaches and techniques of involvement;
- c. Traditional authority structures and political decision-making processes;
- d. approaches and techniques for stakeholder involvement;
- e. Mechanisms to collect, synthesize, analyse and, most importantly, present the results;
- f. To the ESIS team and key decision-makers;
- g. Measures to ensure timely and adequate feedback to the stakeholders; and
- h. Budgetary/time opportunities and constraints.

#### **Public consultation during the ESIS**

During the ESIS, the study team should endeavor to consult the public on environmental concerns and any other issues pertaining to the project. Though consultations are very critical at the scoping stage, ideally, it should be an on-going activity throughout the study. During the ESIS review, the public is given additional opportunity for ensuring that their views and concerns have been adequately addressed in the ESIS. Any earlier omissions or oversight about the project effects can be raised at this stage. To achieve this objective, the ESIS and related documents become public after submission to NEMA. An official review appointment will be announced, where the reviewing authority has to answer questions and remarks from the public. These questions have to be handed in writing prior to the meeting.

### 11.3 ANNEX 3: PROJECTS WHICH ARE LIKELY TO BE EXEMPTED FROM EIA PROCESS (SCHEDULE 11 OF NATIONAL ENVIRONMENT ACT N<sup>o</sup>.5 2019)

The following list identifies those projects which are normally exempt from the EIA process. The characteristics and anticipated physical effects of each project should be carefully considered when or if they are exempted from further steps of the EIA Process, to ensure development and implementation of an acceptable ESMP where necessary, and which is most likely for UMFSNP-AF:

1. Emergency situations reported to the appropriate authority within 24 hours of occurrence, including disasters.
2. Clearing of land for subsistence farming, unless cumulative impacts are adverse.
3. Construction or repair of individual houses.
4. Minor land use changes in areas with slopes of less than 20% including housing construction.
5. Environmental enforcement actions.
6. Emergency repairs to facilities within character of the facility's surroundings.
7. Health programmes, including nutrition and family planning.
8. Electricity distribution lines of voltage of 415V and below.
9. Construction of tourism trails in protected areas.
10. Change of forest reserve to wildlife protected area and vice versa, or any other protected area system.
11. Construction of fish ponds of size 10m by 20m.
12. Establishment of no fishing zones, such as fish breeding or nursery areas.

#### 11.4 ANNEX 04: PEST MANAGEMENT PLAN

Since the UMFSNP-AF triggers OP 4.09 Pest Management, a Pest Management Plan (PMP) has been prepared as part of this ESMF. However, the use of pesticides will be very limited because not all schools shall establish demos, and those that may, will have only 0.5-acre demo garden. Therefore, the environmental impact will be of very low magnitude and intensity, minor, site specific at primary school vegetable gardens and as inputs for the use of smallholder Lead Farmers. A stand-alone PMP was therefore deemed not necessary. The PMP prepared as part of this ESMF is meant to enhance IPM within Uganda to ensure a guided acquisition, storage, handling and application of pesticides. The plan includes development of comprehensive strategies for handling, transportation, application and disposal of pesticides in compliance with national and international requirements relating to different agrochemicals. The PMP addresses relevant stakeholder concerns about pests and pesticides. It stresses the need to monitor and mitigate negative environmental and social impacts of the UMFSNP-AF (which includes the use of pesticides) and emphasizes the need for an integrated approach to the management of pests in line with Uganda's strategies on IPM adoption as well as World Bank requirements on pest management and makes provision for adequate measures to enable the Project sustain the adoption of IPM techniques.

In terms of guiding implementation of UMFSNP-AF, the Project Operational/Implementation Manual is recommended to incorporate guidelines that clearly stipulate procedures for acquisition, storage, handling, application and disposal of pesticides. For purposes of this ESMF, the following basic guidance and information is provided as PMP:

##### **Pesticide management training of pesticide dealers**

###### **Recommended Course Content**

The target group is mainly business persons, whose main interest is making money. Consequently, this group has minimal interest in theoretical background and needs to be introduced to the practical aspects of pesticide management. Therefore, the course recommended here include types of pesticides, pesticide formulations, toxicity classification, types of pesticide labels, concentration mixing, fate of pesticides in the environment, safer use of pesticides (including selection, handling, application, storage, and protective clothing), and combining pesticides with non-pesticide methods.

###### **Booklet/Manual on Safe Pesticide Use**

In addition to the above training, a well-illustrated booklet designed for self-learning will be developed and distributed to stockists and their staff. The booklet will contain information on how to read pesticide labels as well as general information about safe pesticide use and first aid practices. In addition, MAAIF will assemble the recommended pest control practices in summary form for major crops that will also be very useful to stockists when advising farmers. This same booklet will also be used by extension workers.

###### **Training Responsibilities**

The PIU at MAAIF with input from National Agricultural Advisory Services (NAADS), Uganda Cooperative Alliance (UCA) and National Agricultural Research Organization (NARO) and other interested stakeholders will standardize training needs assessment across the clusters and organize appropriate workshops to develop more detailed learning modules. The Crop Protection Department with input from the NAADS, will liaise with appropriate farmers' associations to:

- a. plan training implementation
- b. provide technical support such as in preparing and delivering specific training materials and evaluating resource materials,

- c. identify and select suitable local training resource persons and materials, and
- d. Prepare training progress reports.

The respective District Agricultural Officers will collaborate with farmers' associations to:

- a. identify and organize farmers groups for training (i.e., use of farmer field school to teach farmers on the efficient and responsible use of pesticides),
- b. prepare, organize and supervise training implementation plan,
- c. verify reports of persisting pest problems and farmers training needs,
- d. monitor performance of farmer trainers and post-training assignments, and
- e. Prepare training progress reports.

Farmers/local communities as the principal beneficiaries will be organized into farmer groups for training and adoption of IPM practices. The farmers will be facilitated to set up Community IPM Action Committees to coordinate IPM activities in their areas.

### **Key Elements of UMFSNP-AF IPM Plan**

The key elements of the UMFSNP-AF IPM include the following:

- a. Preventing pest problems;
- b. Monitoring for the presence of pests and pest damage;
- c. Establishing the density of pest population, which may be set at zero, that can be tolerated or corrected with a damage level sufficient to warrant treatment of the problem based on health, public safety, economic or aesthetic threshold;
- d. Treating pest problems to reduce population below those levels established by damage thresholds using strategies that may include biological, cultural, mechanical and pesticidal control methods and that shall consider human health, ecological impact, feasibility and cost effectiveness; and
- e. Evaluating the effects and efficacy of pest treatments.

**Decision Making** - Detecting a single pest under the Project will not always mean control is needed. A decision to use pesticides will be taken only as the very last resort and will also be based on conclusions reached from an agro-ecosystem analysis and trials. The decision under UMFSNP-AF will also depend on the number of pest and diseases found in the respective crop and the level of damage they are doing. If it is absolutely necessary to spray crops with pesticides, use of selective rather than broad-spectrum pesticides shall be strictly observed.

### **Procurement of Pesticides**

The following criteria will apply to the selection and use of pesticides in activities under UMFSNP-AF:

- a. Pesticide financed under UMFSNP-AF must be manufactured, packaged, labeled, handled, stored, disposed of, and applied according to standards that, at a minimum, comply with the FAO's guidelines on pesticides.
- b. Consistent with World Bank OP 4.09, UMFSNP-AF financing will not be used for formulated products that fall in WHO classes IA and IB, or formulations of products in Class II, if (a) the country lacks restrictions on their distribution and use; or (b) they are likely to be used by, or be accessible to, lay personnel, farmers, or others without training, equipment, and facilities to handle, store, and apply these products properly.
- c. UMFSNP-AF financing will not be used for any pesticide products which contain active ingredients that are listed on Annex III of the Rotterdam Convention (on Prior Informed Consent Procedure for

Certain Hazardous Chemicals and Pesticides in International Trade), unless the Country has taken explicit legal or administrative measures to consent to import and use of that active ingredient.

- d. UMFSNP-AF financing will not be used on any pesticide products which contain active ingredients that are listed on Annex A & B of the Stockholm Convention on Persistent Organic Pollutants, unless for an acceptable purpose as defined by the Convention, or if an exemption has been obtained by the Country under this Convention.
- e. UMFSNP-AF financing will not be used for any pesticide products which contain active ingredients that are listed on Annex III of the Rotterdam Convention (on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade), unless the Country has taken explicit legal or administrative measures to consent to import and use of that active ingredient.

### **Procurement Challenges by Farmers**

Challenges associated with direct procurement of pesticides by smallholder farmers in Uganda include the proliferation of illegal imports by unscrupulous private companies and the presence of unlicensed dealers. There are many fake or adulterated pesticides on the market. However, purchase of pesticides through ACEs presents a solution to this problem.

### **DISTRIBUTION OF PESTICIDES**

**Cluster Stores** -Pesticides will be stored at one Cluster Store under the project and will then be dispersed to each District Store when need arises. The stores will have to be maintained in good condition with all the required facilities for proper storage as detailed in the next Chapter. Storage facilities in each District will help alleviate the crowding at the Cluster Store and to reduce the travel distances to the Parish facilities. UMFSNP-AF will use the same cluster stores to acquire pesticides.

**Distribution downstream** - To help facilitate the accounting of specific stock of pesticides and other logistics, record for each type of stock (i.e., pesticides, gloves – number and date bought, number and date dispersed to each Parish, number and date returned at end of spray cycle, etc.). This will ensure good accountability and record keeping of pesticide at the Parish level, from dispersal to collection of empty containers at the end of the day. Each Parish store manager or Distributor will have to count out and document the required number of sachets or bottles to be distributed to the Spray Leaders, who in turn will count out and document the sachets and bottles allocated to each spray operator. At the end of the day, the process will be repeated and the used and unused sachets or bottles will be collected and recorded.

**Pesticides Usage Records** -Under circumstances where MAAIF will directly procure pesticides for distribution to the farmers, it will be required to maintain records of all pesticides annually applied under the project.

**Pesticide Use Issues** – School and Farmers are likely to misuse pesticides in at least six different ways:

- a. Spraying too close to harvest, thus contaminating the crop after harvest;
- b. Applying the wrong dosage, often over-applying. Farmers often spray hazardous insecticides like organochlorines over five times in a season when two or three times can be sufficient;
- c. Applying pesticides intended for cash crops to growing food crops;
- d. Spraying pesticides intended for growing crops on stored crops;
- e. Using obsolete or expired pesticides;
- f. Improper disposal of empty pesticides containers and packaging;
- g. Mixing different chemical pesticides together.
- h. Inadequate or non-use of required PPE in handling and applying pesticides.
- i. Insufficient or lack of knowledge on pesticides use and management by most farmers.
- j. No use of PPE

## **RULES AND PROCEDURES FOR SAFE APPLICATION OF PESTICIDES**

It is virtually impossible to train all small-scale farmers in Uganda in the safe and responsible use of pesticides. The solution, therefore, is the concept of Spray Service Providers (SSPs) as part of an initiative to promote the safe and responsible use of pesticides and timely control of outbreaks and occurrence of new pests, or to manage regular pests, to benefit small-scale farmers. This approach will recruit trained and certified lead farmers in the application of pesticides and they will hire out their services to fellow farmers to spray their lands/crop. This implies that untrained farmers will no longer handle pesticides and that this application will only be undertaken by those who are properly trained and certified.

**Safety and Protection:** There are certain measures which should always be undertaken by pesticide operators to help protect against contamination during the handling and application of pesticides. These measures should always be followed.

**Reading and understanding labels-** The first principle is to always read and follow the label recommendations on the pesticide container. If the label information cannot be read or understood for any reason, then the operator should find someone who can explain the instructions to him. Apart from the written instructions, the operator should also look for pictorial information on the label which will indicate the degree of hazard presented by the pesticide formulation. Similarly warning symbols, such as skull and crossbones, give information on the type of chemical hazard.

**Avoiding contamination** - Direct exposure of the skin, nose, mouth or eyes should be avoided or minimized when working with pesticide products to reduce the chances of personal contamination. When pouring and mixing the concentrated product, every effort should be made to avoid splashing or spilling onto skin or clothing. If any product falls on the skin, or into the eyes, then this should be washed off as soon as possible. Heavily contaminated clothing must be removed and washed with detergent and water. The likelihood of contamination can be greatly reduced by using suitable equipment for measuring out and transferring the product. In particular the hands must never be used as scoops nor should the hands or arms be used to stir liquids.

**Personal hygiene** -Another basic principle of personal protection is good hygiene when working with pesticides. This is to ensure that if any contamination occurs then it is removed in good time. In addition, personal habits will help avoid direct contamination in itself.

**Safety gear-**For the effective safety and protection of the workers handling agro-chemicals, the provision of the following is deemed necessary.

- Helmet or cloth cap
- Safety spectacles, goggles or face shield (attached to helmet)
- Dust or light fume masks
- Emergency vapor masks or half-face respirators with organic vapor cartridges
- Nitrile rubber or neoprene gloves or gauntlets
- Overalls
- Nitrile rubber or neoprene aprons
- Strong rubber or neoprene boots

### **Instructions on use of PPEs**

Wear protective equipment as described in Table 11-1 below:

**Table 11-1: Summary on how to use PPEs**

<b>Equipment</b>	<b>Protection</b>	<b>How to wear it</b>
Coveralls	<p>There are two types of coveralls: disposable and reusable.</p> <p>Disposable coveralls are lightweight and comfortable on warm days. They can be worn for mixing and applying pesticides, and then discarded at the day's end. If they become contaminated, they should be discarded at once.</p> <p>The second type of coverall is made of washable fabric and may be reused many times. These fabric coveralls are adequate for use with all but the most highly toxic and concentrated pesticides.</p>	<p>Button (or zip) right up to the neck. Loose coveralls around the neck will suck and blow pesticide in and out of the interior of the coveralls as you bend and move. Wear coveralls over a long-sleeved shirt and pants.</p>
Aprons	<p>When pouring or otherwise handling concentrated pesticides, it makes good sense to wear protection in the form of an apron. The apron protects the front of your body from spills or splashes of the concentrate. The apron should be made of rubber or synthetic liquid-proof material that will resist the solvents used in formulating the pesticide.</p>	<p>Make sure the apron covers your body from your chest to your boots.</p>
Gloves	<p>Protect your hands by wearing chemical-resistant gloves. Neoprene gloves provide the best protection. Natural rubber gloves may be used when handling organo-phosphorus or carbamate pesticides. Be sure that they are designed for use with solvents and pesticides. Never use lined gloves, gloves with wristbands or leather gloves.</p>	<p>Put gloves on and roll up the first inch or two of the cuff. That way when you lift your hands, any liquid on the gloves won't drip down your arms.</p>
Hats	<p>Use a chemical-resistant hat, preferably made of washable plastic. The hat may be a hard hat or made of flexible plastic.</p> <p>In either case, it should have a plastic sweatband. Wash and dry entire hat after each use and before storing. Ordinary baseball caps with cloth sweatbands are dangerous as they absorb the pesticide and recontaminate the forehead each time you wear them. Even small amounts of moderately or slightly toxic pesticides may cause severe skin irritation or other illness if exposure continues for several days.</p>	
Boots	<p>Wear chemical-resistant, unlined boots. These boots are available in a variety of styles and materials. Neoprene boots are the best. Knee-length boots offer greater protection because they extend above the lower end of the apron. Avoid leather or fabric boots and shoes because these will absorb pesticides and cannot be cleaned effectively.</p>	<p>Wear your trouser legs outside the top of your boots. This will prevent spills and splashes from running into the boot and onto your leg.</p>
Goggles	<p>Chemical-resistant goggles keep your eyes safe from both splashing and, if using dry formulations, dusts or granules.</p> <p>Don't use goggles with cloth or elastic headbands as these will absorb pesticides.</p>	<p>Wear goggles snugly on your face so that the sides of your head are protected from splashes. If you wear glasses, make sure you purchase goggles that fit snugly over them. Never wear contact lenses when working around pesticides.</p>



Respirators	<p>Only approved respirators should be used. Do not exchange parts of different respirators. (For example, do not use a cartridge produced by Company “A” with a respirator produced by Company “B” as the combination may not provide adequate protection to the user). Dust masks are ineffective in protecting against herbicide vapors.</p> <p>Similarly, the filters on tractor cabs are intended to remove dust and are not designed to protect against herbicide vapors or mists. Chemical cartridge respirators are recommended for outdoor use when mixing and applying herbicides.</p>	<p>When carrying out operations, change filters each day. The cartridge should be replaced when chemical odor becomes apparent or when breathing becomes difficult. New cartridges should always be installed at the beginning of the spray season.</p> <p>Prior to commencing work, check the face seal while the respirator is on the wearer’s face. Regardless of design, respirators cannot be worn securely by people wearing beards, moustaches or sideburns.</p>
Face Shields	<p>Goggles offer some protection, but frequently full-face protection is advised or required according to the pesticide label.</p> <p>It is especially important to protect your eyes and face when pouring or mixing liquid concentrates.</p> <p>Effective face shields are made of clear plastic.</p>	<p>Since the shield attaches to the hard hat, you can raise or lower it as needed.</p>

Note: The key danger times are during mixing and when walking through the spray path. Eye and feet protection are the greatest priority. Goggles, long pants, and rubber boots are most needed. Due to the use of knapsack sprayers by small-scale farmers and being unaccustomed to wearing protective equipment, only pesticides which meet World Bank standards of minimum mammalian toxicity (“least toxic”), yet still effective, will be recommended for use under the project.

### Records Keeping

All records will have to be documented as soon as possible but no later than 14 days following completion of each pesticide application in a treatment area. On or before the 14th day after any pesticide application, a copy of the below information will need to be on file with the Extension Workers. Information for each treatment area to which pesticides are discharged as follows:

- Surveillance methods used, dates of surveillance, and findings of surveillance
- Target pest(s) and explanation of the need for pest control
- Pest or site-specific action thresholds prior to pesticide application
- Description of pest management measures implemented prior to the first application
- Company name and contact information for pesticide applicator
- Pesticide application dates and time of day of application
- Description of treatment area, including location and size of treatment area and identification of any waters
- Name of each pesticide product used to include ACB registration number
- Quantity of pesticide applied
- Concentration (%) of active ingredient
- Effective concentration of active ingredient
- Any unusual or unexpected effects identified to non-target organisms
- Was a visual assessment conducted? Was it done during or post pesticide application, if not explanation why not?
- Assessment of environmental conditions relating to proper pesticide use

## PEST MANAGEMENT PLAN IMPLEMENTATION

### Key Strategies

The project will adopt the following programmes and strategies to achieve an effective pest and pesticide management process:

- a. Formation of a Safeguard Team
- b. Registration and training of all interested pesticide distributors/resellers under the Project
- c. Education and awareness creation on safe pesticides use
- d. Pests Monitoring and Surveillance Measures
- e. IPM Capacity Building
- f. Institutional Capacity Building and Training
- g. Training of farmers in IPM and safe pesticide use
- h. Participatory Monitoring and Evaluation

### Key Recommended Interventions

- a. Pest surveillance systems need to be urgently established or bolstered in Uganda to avert the socio-economic disasters that can be caused by plant pests and diseases;
- b. Smallholder farmers need to have more reliable and timely access to agricultural advisory and extension services to provide them with the knowledge on how to identify and deal with pests and diseases;
- c. Registration of pesticide distributors and resellers and to train them in safe pesticides management;
- d. Setup Collection Centres where farmers across the Districts can return empty pesticides container for onward transmission for safe handling and disposal. The collections of empty containers will be a direct responsibility of the Local Government Authority;
- e. Need for MAAIF to consider construction of a pesticide disposal facility in Uganda.

**Safeguards Team** -The Project Coordinators/PIU will form a Safeguard Team to oversee the monitoring of pests and pesticide use under the project to ensure that the project complies with national laws, relevant safeguard policies as well as meeting of the country's international obligations.

### Implementing Agencies

**Table 11-2: PMP Implementing Agencies and their roles and responsibilities**

Institution	Role/Responsibility
MAAIF Crop Protection Department	<p>MAAIF will be the focal point for implementation of the PMP and shall coordinate its implementation through a harmonized information management system, financial mechanism and a monitoring and evaluation framework. The PIU will communicate the content of the Pest Management Plan to all project actors or stakeholders including ACB, NAADS, NARO, DAOs, UNBS, NDA, GAL, NEMA etc. at the national and relevant regional levels (i.e. within project clusters). MAAIF will</p> <ul style="list-style-type: none"><li>• create awareness among downstream project actors or participants (pesticide distributors/resellers, farmers, farm assistants) of the importance of pest and pesticide management in the framework of this PMP;</li><li>• Ensure that all downstream actors or participants have access to information on relevant crop pests/diseases, Project IPM strategies regarding pest control, declared pest plants, current ACB list of registered pesticides etc.</li></ul> <p>MAAIF will also:</p>

	<ul style="list-style-type: none"> <li>• Liaise with statutory bodies including URA, NDA and UNBS to ensure the importation of quality pesticides; (Already contacted UNBS for PVOC which starts May 31 2014). MAAIF has constructed a laboratory to test the pesticide ingredients if in harmony with the label at Namarele.</li> <li>• Liaise with NEMA and GAL to monitor pesticide contamination;</li> <li>• inspect the conditions of pesticide storage and transport;</li> <li>• Together with LGs collect empty pesticide containers;</li> <li>• Inspect pesticide shops to ensure that they are registered or licensed by ACB and trained by the College of Agricultural and Environmental Sciences at Makerere University together with UNADA, on safe use of pesticides. Inspectors will also be required to take samples of pesticides that are expired or suspected of being adulterated for laboratory testing.</li> <li>• Collect agricultural statistics through its Agricultural Statistics Division</li> </ul>
NARO	NARO will coordinate all integrated agricultural research activities initiated under the project. The institutions will include National Agricultural Research Laboratory at Kawanda, Coffee Research Center at Kituza, National Crops Resources Institute - Namulonge and other tertiary institutions. When pest problems occur that are novel or beyond the scope of NAADS in-house experts and the UCDA Extension Staff at the district level, advice will be obtained from NARO.
UBOS	UBOS will conduct agricultural censuses to generate data on agricultural production, cropped area, and yields of the crops produced by smallholder farmers. These agricultural statistics will be important in project evaluation.
LGs	Actual implementation of a large proportion of project activities will take place at district level and will fall under the responsibility of local governments. The LGS will: <ul style="list-style-type: none"> <li>• Conduct surveillance of pests and diseases</li> <li>• Mobilize farmers for training</li> <li>• Distribute pesticides as well as collection of empty containers</li> </ul>
GAL	GAL will play a role in inspection to verify via analysis the content of agrochemicals sold to the farmers and to control adulteration. In addition, GAL and other laboratories will be useful in testing of samples to monitor pesticide contamination and food safety issues.
NEMA	Role of NEMA will be to review and approve ESIA reports for the different sub-projects in addition to monitoring of pesticide use. Monitoring pesticides use and disposal of resultant waste, including expired pesticides.
MoH	MoH will be supported to collect and keep accurate statistics on pesticide poisonings events. In addition, it will create awareness raising actions that will target the different pesticide users in order to avoid such accidents and incidents.
ACB (This is established as part of MAAIF)	<p>The ACB will:</p> <ul style="list-style-type: none"> <li>• Register any new pesticides required under the project.</li> <li>• License any new pesticides suppliers</li> <li>• Development of the project specific IPM Pesticides List</li> <li>• Work with MAAIF inspectors to enforce the pertinent laws</li> </ul>
UNBS	UNBS will work hand in hand with ACB, NDA, URA and MAAIF to address issues of pesticides quality. It will have to ensure that the fertilizers and pesticides imported to Uganda for the project meet standards as per guidance of the ACB, NDA and UNBS.
URA	Will ensure that revenue from the products that are taxable is remitted to Government.

UNADA	UNADA to work with MAAIF and UNBS to address the issue of fake and adulterated pesticides as well as to train more UNADA members in safe agrochemical use so as to effectively advise farmers.
NGOs	<p>NGOs will collaborate with MAAIF and will work with farmers to:</p> <ul style="list-style-type: none"> <li>• Raise awareness among the smallholder farmers about the dangers of poor pesticide handling and use;</li> <li>• Work with extension staff to teach farmers about safe pesticide use and storage;</li> <li>• Work with farmers to develop community monitoring of the use and impacts of pesticides in order to alert the authorities as to the health and environmental impacts of pesticide use;</li> <li>• Empower the smallholders through training and other support to engage with the local government to address their concerns on pesticides use;</li> <li>• Do more to publicize to the public the environmental and health impacts of pesticide use</li> <li>• Work with Government to identify and support necessary policy changes.</li> </ul>

### TRAINING NEEDS AND STRATEGY

- a. **Training needs:** There is need for training of Agricultural Extension Agents in IPM to become better at providing practical and research-based knowledge of crop production and protection strategies, including non-chemical alternatives. All existing extension workers will be trained in IPM and safer pesticide use who will in turn train the farmers and those directly below them.
- b. **Approach:** Training farmers in IPM will be through using farmer field school (FFS) type of participatory learning and research programs, jointly with farmers, extension workers, and researchers. The FFS approach will involve a growing season-long informal learning experience in the farmers' own fields.
- c. **Pesticides use training:** The key training needs that have been identified among others include post-harvest handling of crops, storage, disposal as well as safe use and handling of pesticides. Training for "safer pesticide use" is a common approach to mitigate the potential negative health and environmental impacts of pesticides. This conventional approach will promote reducing health risks of pesticides by safer use of the products through training, use of protective equipment and technology improvements, as well seeking to reduce pesticide hazards via regulations and enforcement in addition to the training. Under ACDP, a well-illustrated booklet on safe pesticide use designed for self-learning will be developed and distributed to farmers, Extension staff, stockists and their staff. This booklet shall be applied and used in UMFSNP-AF.

### Monitoring and Evaluation

An annual report on the progress of pest and pesticide management will be prepared. The report will indicate the pest cases identified and treated using IPM approaches, location of pests, level of success of treatment, the amount and type of herbicide/pesticide used, level of cooperation from farmers and other relevant information (e.g., training programmes organized, farmer field schools held etc.). The project management will undertake annual pest and pesticide control and management reviews to confirm the implementation of the various control measures or programmes or actions outlined in the IPM. Recommendations from the reviews will help MAAIF to refocus and plan effectively towards achieving planned targets. The management review team will include, NARO, UCDA, NAADS, NEMA and MAAIF Crop Protection Department. Any other required additional technical guidance may be provided by the World Bank.

**Table 11-3: Generic Summary of the Pest Management & Monitoring Plan, and Pesticides Management & Monitoring Plan for UMFSNP-AF**

Potential Impacts and Risks	Mitigation Measures	Implementation tool	Expected result	Monitoring indicators	Responsibility
Threat from other crop pests and diseases	Educate and train farmers to adopt good agricultural practices (GAP)	Adoption of IPM techniques/ approaches	Farmers trained in IPM techniques and GAP	1. Number of farmers trained, Training records 2. Incidence of crop pests 3. Production losses from crop pests	UCDA, NAADS, MAAIF, DLGs
	Apply ACB approved or recommended pesticide if necessary	Inspection of pesticides at farm/storage gate prior to use (Project Policy)	Applied pesticides registered and approved by key stakeholders and in conformity with IPM principles	Records of pesticides applied at each farm	UCDA, MAAIF, NAADS, DLGs
Impact on post-harvest losses due to pests	Provide adequate and proper storage facilities	Post-harvest loss reduction plan based on IPM techniques in place	a.) Post harvest losses avoided or minimized b) Applied pesticides registered and	Number of farmers trained in IPM techniques for post-harvest storage; Number and condition of storage facilities in use	MAAIF, NAADS, UCDA, DLGs
	2. Monitor incidence of post-harvest pests		approved by key stakeholders and in conformity with IPM principles	Number of cases of post-harvest pests	UCDA, NAADS, MAAIF, DLGs
	3. Confirm status and integrity of pesticides at storage gate prior to use	Inspection of pesticides at farm/storage gate prior to use (Project Policy)		Records of pesticides applied at storage sites/ rooms	NAADS, MAAIF, DLGs
Improper use of pesticides by farmers and extension staff	Educate farmers and extension staff on proper use of pesticides and pesticide use hazards including use of	Pesticide hazards and use guide manual or leaflet for the project (include simple pictorial presentations)	Proper use of pesticides by farmers and farm assistants	Number of cases of pesticide poisoning occurring under the project	MAAIF, DLGs
	Control and supervise pesticide use on farms	Adoption of IPM approaches/ techniques	Farmers trained in IPM techniques	Number of farmers trained, Training records	MAAIF, DLGs

	Monitor pesticide residue in crops	Random sampling procedure for crops and storage products	Pesticide residue in crops within acceptable limit/MRL	1. Levels and trend of pesticide residue in sampled crops 2. Number of times exported crops are rejected due to pesticide residues	MAAIF, DLGs
Pollution of water resources and aquatic life	Control and supervise pesticide use by farmers	Adoption of IPM approaches/ techniques	Farmers trained in IPM techniques	Number of farmers trained, Training records	MAAIF, DLGs
	Proper disposal of pesticide containers by resellers/farmers	Pesticide container collection and disposal plan	Pesticide container disposal plan developed and implemented	1. Number of farmers/ resellers aware of pesticide container disposal plan 2. Number of containers collected	MAAIF, DLGs
	Monitor pesticides in water resources	Environmental quality monitoring plan (linkage with Project ESMP)	Pesticide concentration in water resources (boreholes, streams etc.)	Levels of pesticides in water resources	NEMA, GAL, MAAIF, DLGs
Abuses in pesticide supply and sales	Identify all pesticide distributors and resellers interested in providing services and products to farmers under the Project	Registration policy for all interested distributors and resellers under project	Only approved and licensed dealers and resellers supply pesticides under project	a) Company registration documents b) Evidence of license/permit to operate in pesticides c) Evidence of location and contacts of suppliers/resellers	ACB, UNBS, MAAIF, DLGs

	Confirm status and integrity of pesticides supplied under project  Ban big pesticide containers to minimize decanting cases	<ul style="list-style-type: none"> <li>❖ All pesticides are to be in the original well labelled pesticide containers prior to use.</li> <li>❖ No decanting of pesticides under this project.</li> <li>❖ Inspection of pesticides at farm gate prior to use.</li> <li>❖ Decanting policy (No decanting of pesticides under project)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Only approved and registered pesticides used under project</li> <li>❖ Banned pesticides avoided.</li> <li>❖ Fake and expired pesticides avoided</li> <li>❖ Integrity of pesticide guaranteed at farm gate level.</li> </ul>	<ul style="list-style-type: none"> <li>❖ List of pesticides supplied and used in line with Agricultural Chemicals Board.</li> <li>❖ Cases of pesticides found in non-original containers.</li> <li>❖ Inspection records for pesticides at farm gate prior to use.</li> <li>❖ Cases of pesticides found in non- original containers.</li> </ul>	ACB, MAAIF
Poisoning from improper disposal of pesticide containers	1. Educate farmers, extension staff and local communities on health hazards associated with use of pesticide containers  2. Properly dispose pesticide containers	1. Pesticide hazards and use guide manual or leaflet for the project  2. Pesticide container cleaning and disposal plan	Farmers, extension staff, local communities educated on pesticide health hazards  Pesticide container cleaning and disposal	Number of cases of pesticide poisoning through use of pesticide containers; Number of farmers returning empty pesticide containers at collection points; Number of farmers, extension staff, and resellers trained in proper cleaning of pesticide containers.	DLG, NEMA, MAAIF, DLGs, MoH
General health and safety of farmers/crops and environmental hazards	Educate farmers to adopt Best Practices based upon IPM techniques; and do not use chemical pesticides unless advised by MAAIF	IPM techniques with emphasis on cultural and biological forms of pest control	Compliance with national laws and WB policy on Pest/pesticide management	Number of farmers trained in IPM techniques; Number of farmers implementing IPM on their farms. Frequency of chemical pesticides usage.	MAAIF, DLGs, MoH
	Provide PPEs to farmers/extension staff for pesticide use in the fields	Health and safety policy for farm work	Farmers and accompanying dependents (children) protected against pesticide exposure in the fields	Quantities and types of PPEs supplied or made available under the project	MAAIF, DLGs



	Educate farmers/ farm assistants in the proper use of pesticides	Pesticide hazards and use guide manual or leaflet for the project (include simple pictorial presentations)	Farmers know and use pesticides properly; pesticide hazards and use guide leaflet or flyers produced.	Number of farmers trained in pesticide use; Number of farmers having copies of the pesticide hazard and use guide flyers;	MAAIF, DLGs
	Properly dispose obsolete and unused pesticides	Obsolete and unused pesticide disposal plan	obsolete and unused pesticide disposal plans prepared and implemented	Relationship between pesticide supply and usage	MAAIF, NEMA, DLGs
	Educate farmers to obtain or purchase quantities of pesticides required at a given time and to avoid long term storage of pesticides	Pesticide use policy/plan	Only pesticides needed are purchased; long term storage of pesticides by farmers avoided	Relationship between pesticide supply and usage	MAAIF, DLGs
	Provide emergency response to pesticide accidents and poisoning	Emergency response plan	Pesticide accidents and emergencies managed under the project	Number of pesticide accidents and emergencies	MAAIF, DLG, DLGs, MoH

## 11.5 ANNEX 5: COVID-19 MANAGEMENT AND MONITORING PLAN

**Table 11-4: COVID-19 Management and Monitoring**

Potential Impacts and Risks	Mitigation Measures	Implementation tool	Expected result	Monitoring indicators	Responsibility
COVID-19 Spread and Infections	Develop COVID-19 SOPs as part of PIM.	Community Farmers/ and Schools Awareness Trainings and sensitizations.	Implementation of SOPs.	Number of cases of COVID-19 infection cases under the project	MAAIF, MoH, DLGs
	Observance of social distance as guided by MoH, non-shaking of hands, regular use of hand-sanitizers and washing hands with soap, wearing of face masks while in public, use of temperature guns to screen project participants during project events that bring participants together, reporting protocol of any likely infection of persons, regular training of communities and leaders on COVID-19 control measures	Workshops, Meetings, Trainings, IEC.	Implementation of SOPs and avoidance of COVID-19 infections spread.	Number of farmers trained, Training records, Number of cases of COVID-19 infection cases under the project.	MAAIF, MoH, DLGs
	Provision of appropriate Personal Protective Equipment (PPE) to all project workers and visitors (Nose Masks, Sanitizer, Hand-Wash Facilities and soap.	Workshops, Meetings, Trainings, IEC.	Implementation of SOPs and avoidance of COVID-19 infections spread.	No. of COVID-19 PPE provided and hand-washing facilities.	MAAIF, MoH, DLGs
	Undertake rapid testing of workers for covid-19 on medical advice.	Health Impact Monitoring	Implementation of SOPs and avoidance of COVID-19 infections spread.	No. of COVID-19 Tests undertaken by the project.	MAAIF, MoH, DLGs.

## 11.6 ANNEX 6: GUIDING QUESTIONS FOR COVID-19 RISK CONSIDERATIONS

GUIDING QUESTIONS	PROVIDE INFORMATION	POSSIBLE MITIGATION MEASURES
<b>1. DISCRIMINATION AND SOCIAL INCLUSION</b>		
Will the project affect or benefit different groups or individuals who are vulnerable or disadvantaged? Have they been identified?	The project benefits women and children that are affected by the problem of malnutrition as identified in the original project.	Provision of MNR inputs and nutrition commodities.
Will the needs of the groups or individuals who have been identified as vulnerable or disadvantaged be considered specifically?	The project specifically considers and deals with the needs of those affected by malnutrition through the promotion of MNR crops, nutrition education and access to nutrition commodities and community-based nutrition services.	N/A
Will it be possible to take differentiated measures to reduce the adverse impacts on vulnerable or disadvantaged persons or groups?	This project will not have adverse impacts on vulnerable or disadvantaged persons or groups.	This project takes measures to provide benefits to women and children through project inputs, nutrition services, and training.
Will it be possible to take differentiated measures to facilitate access of the identified vulnerable or disadvantaged persons or groups to the benefits of the project?	These groups will access MNR inputs, nutrition commodities such as IFA, deworming tablets among others through existing criteria.	Interventions such as MNR inputs, nutrition education and nutrition commodities will be implemented.
Has the role of women been considered in project design and implementation?	The project works with 60% women in implementation of its activities including pregnant and lactating mothers and school going girls of teen years.	Women are encouraged to participate in project activities including nutrition forum and parent groups meeting among others.
Does the project have positive or adverse impacts on Indigenous Peoples, and if so, does it consider issues relating to them, including any specific requirements on design and access to benefits and consultations? Does the project set out a process for free, prior and informed consultation, leading to their broad community support?	The project doesn't have any positive or adverse impacts on Indigenous People. The project benefits community members. They are provided with agricultural inputs and nutrition commodities, in addition to nutrition education.	N/A
<b>2. LABOR<sup>17</sup></b>		
Are the national labor requirements on terms and conditions of work adequate to protect workers?	The national labor requirements are adequate and protect workers in the demonstration gardens both at school and community levels.	A strong ESMF has been designed and implemented to ensure worker protections.
Will national requirements protect all types of workers or are some excluded? If so, which ones?	All workers are equally protected. These requirements are complemented by World Bank safeguard policies.	All workers hired or to be hired under the project will operate under the provisions of the relevant national law with any

<sup>17</sup> Please note that all references to 'project workers' and 'workers' refer to staff employed by UMFSNP implementing agency.

		additional measures relating to code of conduct, use of child and forced labor, health & safety measures and maintaining a GRM being detailed in the ESMF.
Are the national requirements on worker health and safety adequate, including for those workers that are vulnerable? Do they address COVID-19 issues?	National requirements on health and safety for workers are adequate. The national SOPs for the management and prevention of COVID-19 adequately address the workers' health and safety.	N/A
If national requirements are not adequate to address COVID-19 issues, will the project include specific requirements?	N/A	N/A
Is there a risk of child labor or forced labor, including trafficked labor?	There is minimal risk of child labor or forced labor. The implementation arrangements are against child labor and this is always checked from time to time through supportive supervision activities.	The project will continue to ensure that there is no child labor and any incidents reported to the GRM are handled appropriately.
Will workers be able to raise workplace concerns through a grievance mechanism and will they be addressed effectively?	Workers can raise workplace concerns through the GRM committees formed at all levels of implementation.	Provision of log books are there at all levels (districts, schools and community) for registering their concerns
Have workers been trained on acceptable behavioral requirements including application of a code of conduct, with other workers and in relation to nearby communities? If so, what requirements are being included in the project.	There have been trainings and refresher trainings in regards to acceptable behavior and code of conduct. The project is being periodically provides refreshers training.	N/A
<b>3. MEANINGFUL CONSULTATIONS AND PARTICIPATION</b>		
Will there be timely disclosure of information at an appropriate level of detail and in accessible locations?	The project has mechanisms of disclosure of information through the sectoral communication offices, regular radio and tv programmes.	Regular media programs will be organized.
Will affected communities be consulted regarding the design and implementation of the activities, and their responses considered in a meaningful way?	N/A	N/A.
Will other stakeholders be consulted, and their responses considered in a meaningful way?	There will be consultative meetings for all stakeholders in a multisectoral approach. Their responses will be considered during implementation.	Regular engagements with the stakeholders.
Will the project implement targeted measures to enable the identified vulnerable or disadvantaged persons or groups to input into the stakeholder engagement process?	N/A	N/A

Are there requirements that address the safety of communities, in particular COVID-19-related considerations? Have these been discussed with the communities?	The country SOPs for the prevention and management of COVID-19 applicable to the implementation of the project, have been widely disseminated to the communities.	Continued observance for compliance of country SOPs for prevention and management of COVID-19, through project M&E and supervision.
What measures will the project implement to consider and incorporate the views of all stakeholders into project design and implementation? Specify mode of consultations and frequency.	There will be consultative and orientation meetings through which stakeholders' views will be received. These will be incorporated into the implementation arrangements.	Stakeholder consultative meetings will be held across the implementing areas.
Does the project have adequate measures to conduct monitoring of project implementation, including the use of third party monitors where appropriate, especially in emergency situations?	The project has robust data collection processes and project management structures in place to monitor project implementation. The project uses a Geo-enabled technology that helps to collect real-time data and is able to facilitate third party monitoring.	Continued use of the geo-enabled M&E technology.
<b>4. SEXUAL EXPLOITATION AND ABUSE/SEXUAL HARASSMENT (SEA/SH)</b>		
Will the project increase the risk of SEA/SH?	The project is not expected to directly increase the risk of SEA/SH. However, extra precaution will be taken to mitigate any risk of SEA/SH through sensitization and stakeholder engagement about SEA/SH.	N/A
Does the project have a clear statement on Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) of any worker, women, girls, men or boys? Has this been communicated effectively?	No	
Are there responsive and effective grievance processes available to communities and workers, in relation to SEA/SH?	There are GRM committees at the different levels of implementation. These facilitate the process of reporting the grievances and get redress.	Continued monitoring of the redress process to make sure that any grievance registered is concluded with appropriate resolution.
Are all project grievance mechanisms designed to reflect gender issues and sensitivities?	The GRM handles gender related issues.	
Have GBV service providers been identified to effectively respond in case of incidents of SEA/SH?	No	N/A
<b>5. EXPOSURE TO COVID-19</b>		
Will the project introduce risk of exposure to different types of diseases, including COVID-19?	The project introduces minimal increased risk of exposure to COVID-19 through its interventions, e.g. monthly nutrition forum, etc.	Continued observance of COVID-19 SOPs as guided by the Government of Uganda.
Has the risk of exposure to COVID-19 been adequately assessed?	The COVID-19 situation is assessed following the Government	The project will continue providing information following

	procedures.	Government's COVID related SOPs.
Does the project include reasonable measures to minimize the risk of COVID-19?	The project provides measures to minimize the risk of COVID-19 following the Government SOPs including social distancing, wearing masks, washing/sanitizing hands regularly, and using PPE (when/if necessary) among others.	The project will continue the good practices for protecting COVID and providing information following Government SOPs.
Does the project include measures to assist workers where they get sick, including providing support to local health facilities where relevant?	The project disseminates information on prevention and management of COVID-19 as per the Government guidelines.	The project will continue providing information following Government SOPs.
Does the project include measures to mitigate risks arising in connection with addressing COVID-19, for example waste management, data protection?	No.	N/A
<b>6. USE OF SECURITY PERSONNEL</b>		
Will the project involve the use of security personnel?	No	N/A
If so, is it clear what activities security personnel will carry out?	N/A	N/A
Are the security personnel public or private or both?	N/A	N/A
Are there clear requirements on appropriate behavior for both public and private security personnel, including use of force and interface with workers and communities, and have these been communicated?	N/A	N/A
Is there a Code of Conduct for security personnel, or similar document?	N/A	N/A
Is there a regular training program for security personnel, and does it cover all aspects of required behavior?	N/A	N/A
Has an assessment of the security risk been conducted? If not, will it be conducted?	No	N/A
Have appropriate mitigation measures been proposed based on the risk assessment?	N/A	N/A
<b>7. TRAFFIC AND ROAD SAFETY</b>		
Will the project create traffic and road safety risks that will adversely affect the safety of communities and workers?	No	N/A
Will project activities be conducted on public roads, including movement of workers and equipment?	No	N/A
Will the design and implementation of project activities consider traffic and road safety risks?	No	N/A

Would the traffic and road safety risks in the project be better understood through a road safety assessment?	No	N/A
Will monitoring and reporting include traffic accidents and incidents?	No	N/A
<b>8. Grievance Mechanism</b>		
Does the project include responsive and effective grievance processes available to communities and workers?	The project has established grievance redress mechanism committees at the different levels of implementation.	The project team will continue monitoring the grievance processes to have all registered grievances settled timely.
If not, will the project develop effective grievance mechanisms?	N/A	N/A
Will the grievance mechanisms consider the specific needs of different groups, including those that are vulnerable or disadvantaged?	The GRM considers grievances from all stakeholders on issues caused by the project interventions.	
Will the project have a process in place for actively monitoring, responding to and resolving grievances?	The project has GRM committees. It has logbooks where the grievances are registered. The committees handle the grievances and report on how they have been resolved. The project team through their established supervision system monitors the progress of resolving the grievances.	The project team will continue monitoring the grievance processes to have all registered grievances settled in a timely manner.
<b>9. IMPACTS ON INCOMES AND LIVELIHOODS</b>		
Does the project design include temporary or permanent measures addressing COVID-19 issues (including implementation of emergency legislation and WHO guidance etc.) that may require land acquisition, and / or economic or physical displacement?	No	N/A



**Table 11-5: Summary of Stakeholder Consultations Proceedings**

<b>Nº.</b>	<b>Name of stakeholder</b>	<b>Date of Interview</b>	<b>Issues raised</b>	<b>Remarks</b>
1.	Jennifer Twebaze – District Coordinator Kabale	24 <sup>th</sup> March, 2021	Pregnant women were the major target focus, the project aimed at improving their feeding and that of children within the age bracket ranging from age one to four years so as to improve on their cognitive abilities. Women at household level are encouraged to have kitchen gardens and people now, know that every meal should have some vegetables. However, small gardens within the compound are usually left for the women to cultivate for family consumption while big gardens are majorly used by men for commercial production	Noted
			There is need for increased gender sensitivity by MNP project staff. According to them, they work with both men and women but pertinent issues concerning gender relations between men and women resulting from the patriarchal nature of these societies impede on women's rights and enjoyments are not taken care of. There is need to integrate gender into the coming phase of the project so as to address all the gender concerns that might arise.	The project will require extensive gender sensitization through training of staff, community sensitization and awareness creation on gender using gender sensitive language, gender sensitive and inclusive IEC material and radio talk shows.
			In most cases, lead farmers provide pieces of land that are used as demonstration gardens but often time, they get tired and also want to use their gardens for their personal use. Besides, lead farmers are not paid, they work on voluntary basis	Lead farmers should be selected on a rotational basis to avoid fatigue. They should also be gender balanced in nature by giving both women and men opportunity to lead at community level

N°.	Name of stakeholder	Date of Interview	Issues raised	Remarks
				Issues of nutrition should not be left to women but a concern for both men and women. Family nutrition is normally relegated to women because of the reproductive role they play where food preparation and family sustenance is assumed to be the prerogative of the women.
			Therefore, there is need for refresher trainings because of new technologies on the market. Radio talk shows, sensitizations and IEC materials should be gender inclusive and should emphasize importance of family cohesion and equal decision making between women and men so as to promote sustainability, reduce work for women and promote a holistic development approach benefiting pregnant women, unborn babies, children under four and the whole family at large in terms of nutritional needs and access to income from proceeds got from surplus.	Sensitization and awareness of all the schools and farmers involved in the project is key and shall be undertaken before start of the project.
			The land tenure system in most project areas in Kabale district is customary in nature where land is passed on from one generation to the next through the male gender lineage consequently, decision making on how land is used and what can be planted on that land is decided upon mainly by men. Thus, in case of expansion in terms of production and commercialization of the agricultural products, women might lose out because of lack of decision making power.  Lead farmers are mainly recommended to be from both gender but it's true that there are more male lead farmers because they own land and are able to give land that is used for the demonstration garden unlike women who only have use rights on land and they use it on the basis of being	Gender inclusive sensitization targeting radical negative patriarchal beliefs and norms that marginalize women relegating them only to access to land without decision making powers on what to cultivate as well as the proceeds accruing from their labour

N°.	Name of stakeholder	Date of Interview	Issues raised	Remarks
			<p>mothers, sisters and wives to the ones who own it. Land is passed on to the male children</p> <p>Although the project majorly promotes crop nutrients, animal nutrients are left out which are also an important aspect of nutrition. Therefore, there is need that the project integrates animal component so that it is promoted and included. For example, promoting fish farming where families/communities are able to get cheap sources of fish, rearing of rabbits for families to consume an animal source of protein. In most cases when most farmers and children are randomly asked how often they eat meat, most of the say they only eat meat at Christmas and in rich people's funerals. It is also noted that whereas pregnant women never get the opportunity to eat meat, men usually go to the trading centers where they drink and eat meat before returning home.</p>	<p>Recommendations shall be made where the program integrate animal production.</p>
			<p><b>GRM:</b> Under the structures, there is a school nutrition committee, District Implementation Committee, Procurement committee and Grievance Redress handling committee (5 members including LCI and must have female). At school and community levels, in case of any grievance, the head teacher invites the committee to handle grievances and if not handled, they forward to the District Implementation Committee comprised of DHO, DEO, District prod officer).</p>	<p>The 2-year extension will continue using the existing Local grievance redress committees (LGRC) will be initiated at the school/village level to record grievances and also help in mediation. This committee will comprise the LC I Chairperson, the School Head Teacher, a trusted village elder, a religious representative, and specific vulnerable group representatives of relevance to the village i.e., women and the disabled.</p>

N°.	Name of stakeholder	Date of Interview	Issues raised	Remarks
			Most families use fertilizers and pesticides in order to get better yields. The Project introduced a safe box to store chemicals and chemical wastes to protect school children and users, they bought PPE to protect users. There is need to have measures to help reduce the impact of the chemicals on soils.	There will be training for “safer pesticide use”. Trainings in IPM practices, post-harvest handling of crops, storage, disposal as well as safe use and handling of pesticides will be undertaken.
2.	David Baineomugisha – District Project Coordinator Bushenyi –	30 <sup>th</sup> March, 2021	<p>There is an active involvement and engagement of the existing structure. They were using primary school committees and VHTs to deliver health and nutrition education for communities.</p> <p>VHTs would mobilize health workers who would demonstrate cooking classes of how to prepare foods for the different categories and also educate them on key important food nutrients important for a pregnant woman’s diet.</p>	
			The project promoted demonstration gardens at primary and community level where they established nutrition sensitive demonstration gardens. Every household was encouraged to have a vegetable garden and promoting iron rich beans. Such interventions should continue to the second phase.	
			In terms of access to and availability of food, it was noted that sometimes there is availability of food but it is all meant for sale. When there is available market, some people end up selling all their food and forget the importance of family nutrition	<p>Sensitization of communities will be recommended.</p> <p>Interventions will be primarily delivered at primary school and community-level and to improve coverage of nutrition services in agriculture, health, and education; and increase access and availability of nutrition information, inputs, and commodities</p>

N°.	Name of stakeholder	Date of Interview	Issues raised	Remarks
			For the project to succeed, there is need for massive community mobilization by using different forum such as radio talk shows, community leaders, through churches, public gatherings among others.	
			<p>There is already an existing structure in place to handle grievances. The project had Grievance management committees that were established. These included:</p> <p>At Primary and community level the committee was composed of Chairpersons school management committee, head teacher, science teacher, VHT, and an Opinion leader (elder).</p> <p>At Sub-County level, there was a Sub-County Chief, chairman LC 3, Agricultural officer, and an opinion leader.</p> <p>District level, there was the CAO, Project coordinator and chairman LC5.</p>	The 2-year extension will continue using the existing Local grievance redress committees (LGRC) which will be initiated at the school/village level to record grievances and also help in mediation. This committee will comprise the LC I Chairperson, the School Head Teacher, a trusted village elder, a religious representative, and specific vulnerable group representatives of relevance to the village i.e., women and the disabled.
			Women are taught how to cook the different food stuffs but in most cases, men do not buy these food stuffs for their wives to cook and also supplement their diet.	More sensitizations will be carried out at community level to sensitize communities including men on the importance of micronutrient foods. The overall approach of the project is to promote year-round consumption of micronutrient-rich foods by increasing community knowledge about how to produce nutrient-rich foods, awareness about nutrition, and how to prepare and why to consume these foods.

N°.	Name of stakeholder	Date of Interview	Issues raised	Remarks
			<p>There have been no outstanding impacts resulting from the use of pesticides but there is need to take strict precaution on this</p>	<p>The project will create awareness on pesticide aspects such as safe usage, handling and disposal of pesticides, including support to a pesticide poison information facility.</p> <p>There will be emphasis that the project undertakes trainings on use of pesticides before using them</p>
			<p>There is need for continue sensitization and training of communities on the importance of proper nutrition. Behavior change is not a one off thing. Mankind by nature even with sensitization may stray so there is need for continuous sensitization, training on safe use of chemicals and pesticides</p>	<p>Sensitization and awareness of all the schools and farmers involved in the project is key and shall be undertaken before start of the project.</p>
			<p>There will be need to follow the SOPs during the implementation phase of the UMSNP to avoid Covid-19 infections in the communities and schools</p>	<p>There is going to be increased community and schools' level awareness on infection prevention and control measures against COVID-19, including implementation of Standard Operating Procedures.</p>
3.	Elizabeth Kasenene – Project Coordinator Kabarole	30 <sup>th</sup> March, 2021	<p>Project has benefited a lot because families that are not in the groups of lead farmers and learners have learnt from them. Majority of families have backyard gardens where they plant variety of vegetables.</p>	<p>This two-year phase will concentrate on a adoption of the project into the community</p>
			<p>Previously there was a lot of stuntedness in children. Although Kabarole has a lot food and is food basket of Uganda, majority of families had stunted children. But the program has improved greatly on majority of children. For example there is increase in enrolment, and performance of</p>	

N°.	Name of stakeholder	Date of Interview	Issues raised	Remarks
			school children have improved which is attributed to availability & accessibility of nutritious foods.	
			School was a gateway for communities. Had demo gardens where parents of students came to learn different nutritious crops.	
			Parents are encouraged to come and learn from school demo gardens so as to go back home and replicate what they have learnt.	
			<p>Lead farmers and lead mothers where they have monthly cookery demos. This has helped families prepare.</p> <p>Health worker helps mothers on how to prepare food nutrients that are beneficial for the body.</p> <p>Have VHTs, who come to school and provide iron and folic tablets to girls, dewomers and carrying out Growth monitoring and promotion (GMP).</p> <p>Most schools are not in the swampy areas or wetlands and so the environment will not be affected</p> <p>Most farmers in Kabarole do not use fertilizers since soils are so fertile. However, for some crops (such as cabbages, carrots) that need the use of fertilizers, the schools have proper storage for the chemicals that are used. For example, most schools and lead farmers have storage boxes where they store delicate chemicals that could be dangerous to the learners.</p>	

N°.	Name of stakeholder	Date of Interview	Issues raised	Remarks
			There is a general gender blindness by implementing partners thus there is need to integrate gender through training of staff, and sensitization of the community members on gender so as to bridge the gender gap between women and men and promote gender equity and equality. Gender mainstreaming and GBV issues should be included in the monitoring tool.	There is going to be an increased community gender awareness that may lead to bridging the gap and disparities that have long existed between women and men in these communities
4.			Demonstrations should be done in small groups of about 20 persons at community level in order to reduce the impact of Covid-19.	There is going to be increased community and schools' level awareness on infection prevention and control measures against COVID-19, including implementation of Standard Operating Procedures.
			GRM: The GRM committees exist at all levels. There are also School management committees and school nutrition committee that handle issues of nutrition. There is need to retool the nutritional committees and even train them on how to handle grievances at community level to strengthen the capacity of the existing GRM committees at community level.	The 2-year extension will continue using the existing Local grievance redress committees (LGRC) which will be strengthened at the school/village level to record grievances and also help in mediation. This committee will comprise the LC I Chairperson, the School Head Teacher, a trusted village elder, a religious representative, and specific vulnerable group representatives of relevance to the village i.e., women and the disabled.
<b>MINISTRY COORDINATORS</b>				



N°.	Name of stakeholder	Date of Interview	Issues raised	Remarks
5.	Sarah Ngolobi – Coordinator for MOH	20 <sup>th</sup> March, 2021	<p>Ministry of Health (MOH) mainly provides health facility staff at school level who give nutritional education to girls from primary four (P.4) to primary seven (P.7) these are the are girls mainly that have started menstruation periods</p> <p>Menstruation is integrated into the MNP program but you find that the program leaves out some of the P.2 and P3 girls who have also started their periods.</p> <p>Menstruation is a sensitive topic so MOH ensure that girls do not get stigmatized over this topic</p> <p>MOH also integrates de-worming into the MNP project, where children from age one (1) to twelve (12) years, are given de-worming tablets.</p> <p>On a monthly basis, health workers organize nutritional forums in schools where cooking demonstrations are carried out for students, teachers and mothers, they are taught how to cook without denaturing the quality of food.</p>	Sensitization and awareness of all the schools and farmers involved in the project is key and shall be undertaken before start of the project.
6.			<p>Each school has two groups and each group is constituted of 30 members.</p> <p>Participation in these groups is voluntary, as much as men participate in these projects; most of those who volunteer to come and attend are women. Men usually want to make money and therefore they like to attend forums where there is transport allowance or payment but not free things.</p> <p>The two groups usually meet at the lead mother's home however, it has been established that some lead mothers are not comfortable to host people for personal reasons and constraints so in such cases, meetings have been moved to the LCs home. It is in these meetings where mothers bring their children for growth assessment.</p>	There is going to be an increased community gender awareness that may lead to bridging the gap and the disparities that have long existed between women and men in these communities

N°.	Name of stakeholder	Date of Interview	Issues raised	Remarks
			Although people have learnt to live with COVID-19, there might be challenges in social distancing	There will be increased community and schools' level awareness on infection prevention and control measures against COVID-19, including implementation of Standard Operating Procedures. There will be increased supervision on observation of SOPs and use of masks
7.	Susan Oketcho – Coordinator for MOES	21 <sup>st</sup> April, 2021	<p>Schools are the entry for all the other stake holders i.e MOES is in charge of monitoring the project, reviewing the project, opening up demonstration gardens.</p> <p>Main aim is to teach young people about MNR crop gardens which are supposed to be replicated in the communities.</p> <p>Each school has a lead parent, a lead mother and a lead farmer. We promote both production and consumption. We teach basics on nutrition, feeding and hygiene.</p> <p>The coordination role that MOES plays helps it in multiplying the impact in the community through the distribution of seeds to parents. Monthly nutritional forums bring in all stake holders including politicians, religious leaders and others.</p> <p>Schools act as visual learning centers for instance, there are talking compounds (messages) in schools and aspects of WASH are easily seen and can be learnt by both learners and parents. In schools where parents participate in school activities, students' school and academic performance is also good and this project has attracted parents to school</p>	Noted
			<p><b>Some of the challenges include:</b></p> <p>The new varieties of crops are prone to infestations.</p>	Strengthen measures and policies at school level to address GBV. Gender is a key aspect in the project but gender mainstreaming has not adequately been handled and this needs to be handled at the start of the project

N°.	Name of stakeholder	Date of Interview	Issues raised	Remarks
			<p>Pesticides and pumps have been provided but storage is still a challenge.</p> <p>There is need to establish who does the spraying and who disposes the containers and where exactly? This is because the extent to which chemicals are used and the effects of the chemicals to the humans is not known and needs to be established</p>	<p>Carry out a study on the extent and effects of the chemicals/pesticides on the humans within the projects</p> <p>The project will create awareness on pesticide aspects such as safe usage, handling and disposal of pesticides, including support to a pesticide poison information facility.</p>
			SOPs are being observed and school gardens are flourishing. social distancing is being observed, schools have water stands for washing hands and the schools have temperature guns.	Observation of SOPs is highly recommended throughout the project.
			Weather challenges, especially during dry seasons thus, it's a challenge to have vegetables growing throughout the year	Need for water sources at school in addition to provision of simple irrigation technologies to ensure that MNR crops are grown throughout the year
			As an employee, this work is not a mainstream activity for which some people are evaluated upon, so people have to really fix time for it.	MOES should incorporate nutrition into their work so that there are permanent staff, also its good for continuity of the programe
8.	Andrew Musoke - Coordinator for MOLG	21 <sup>st</sup> , April, 2021	<p>The Major role of MOLG is to ensure the existence and functionality of the nutrition structures. Structures are established at district and lower levels for instance, City level, district, sub county levels etc.</p> <p>Nutrition coordination committees are put at all local government levels. These are important for coordination, resource mobilization, committee mobilization, advocacy and resource allocation.</p> <p>MOLG also ensures that district nutrition coordination committees, sub county committees and national committees are in place and functional</p>	

N°.	Name of stakeholder	Date of Interview	Issues raised	Remarks
			<p>Ensures that plans are aligned to the nutrition action plans at the district and local levels and to the National Development Plans (NDP)</p> <p>Ensures that there is adequate labour for the work to take place for instance, puts in place the District Production Officer (DPO), District Education Officer (DEO), District health Officer (DHO) etc.</p> <p>MOLG does support supervision</p> <p>MOLG advocates for resources</p>	
9.			<p><b>Some of the challenges include;</b></p> <p>Luck of staff, has been a big challenge in Local Governments, currently, staffing is only at 56%. There are no key technical personnel that would ensure smooth running of work like health personnel, water engineers</p> <p>Luck of capacity to align the nutrition plans</p> <p>Luck of capacity to align to the strategic plans</p> <p>It is not easy to bring all the actors together, all the actors think that it is the role of the other to perform these duties and yet its supposed to be a combined effort</p> <p>Inadequate resources for support supervision.</p> <p>Some of the local governments have development partners supporting their work and yet other do not have the same support so there are disparities in terms of resources among local governments at district level.</p>	Lobby for more technical personnel to carry out the work
			<p><b>Impacts:</b></p> <p>The technical arm have been able to provide resources for sensitization of communities on nutrition.</p> <p>Communities have appreciated the program</p> <p>Local governments have appreciated the importance of resource allocation to this cause</p>	Need for more advocacy and sensitization on nutrition
			<p><b>Impacts on Covid 19</b></p> <p>Covid 19 affected work and all planned activities, we could not do support supervision</p>	Ensure that all SOPs are strictly followed and adhered to avoid infections

N°.	Name of stakeholder	Date of Interview	Issues raised	Remarks
			<b>Grievances:</b> Most grievances are mostly due to attack to the demon gardens by stray livestock	This is handled through the GRM committees at community and school level.
			We have a new breed of political leaders who have just come on board and therefore, they need to be sensitized We have new local governments i.e new cities that have just been curved out and one district so these need new coordination committees for support supervision	Noted