

DAIRY COMMUNITY MULTIPLICATION PILOT PROJECT

Environmental and Social Management Framework

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ACRONYMS

AI Artificial Insemination
CAO Chief Administrative Officer
CDOs Community Development Officers

COVID-19 Coronavirus Disease, 2019
CSA Climate Smart Agriculture
CSO Civil Society Organization
DAOs District Agricultural Officers

DCMP Dairy Community Multiplication Pilot Project

DEOs District Environment Officers
DHS Demographic Household Survey
DPOs District Production Officers

EHS Health, Safety and Environmental ENR Environment and Natural Resources

ESIA Environmental and Social Impact Assessment

E&S Environmental and Social

ESMF Environmental and Social Management Framework

ESMP Environmental and Social Management Plan

FAO Food and Agriculture Organization

FPIC Free Prior Informed Consent GBV Gender Based Violence GDP Gross Domestic Product

GHG Greenhouse gases
GoU Government of Uganda

GRM Grievance Redress Mechanism

HIV/AIDS Human Immuno Virus/Acquired Immuno Deficiency Syndrome

IEC Information Education Communication ICT Information Communication Technology

IPM Integrated Pest ManagementMoES Ministry of Education and Sports

MoGLSD Ministry of Gender, Labor and Social Development

MoFPED Ministry of Finance, Planning and Economic Development

MoH Ministry of Health

MoLHUD Ministry of Lands, Housing and Urban Development

MoLG Ministry of Local Government

MoTIC Ministry of Trade Industry and Cooperatives

MoWE Ministry of Water and Environment

MVR Monitor, Report and Verify

NARO National Agricultural Research Organization
ND-GAIN Notre Dame Global Adaptation Initiative

NEA National Environment Act NFA National Forestry Authority

NEMA National Environment Management Authority NEMP National Environment Management Policy

NITAU National Information Technology Authority-Uganda

NGOs Non-Government Organizations
OHS Occupational Health Safety

OPM Office of the Prime Minister
PIU Project Implementation Unit
PPE Personal Protective Equipment
PES Payment for Ecosystem Services
PIM Project Implementation Manual

PMP Pest Management Plan

SEP Stakeholder engagement Plan

SH Sexual Harassment

SOPs Standard Operation Procedures SLM Sustainable Land Management SMEs Small and Medium Enterprises UBOS Uganda Bureau of Statistics UIA Uganda Investment Authority

UCSAT Uganda Climate Smart Agriculture Transformation Project

UNADA Uganda National Agro-inputs Dealers Association

UNMA Uganda National Meteorological Authority

UPDF Uganda Peoples Defence Forces
UPE Universal Primary Education

USAID United States Agency for International Development

UWA Uganda Wildlife Authority
VAC Violence Against Children
VHT Village Health Teams
WBG World Bank Group

WHO World Health Organization

GLOSSARY OF TERMS

- **Cumulative impacts/effects:** The total effects on the same aspect of the environment resulting from a number of activities or projects.
- ❖ **Disclosure:** Information availability to all stakeholders at all stages of the development of projects. Includes disclosure of project documents.
- **Environment:** physical, biological, and social components and processes that define our surroundings.
- **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.
- **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).
- ❖ 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
- ❖ 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 behavior, aspirations and needs of women and men are considered, valued and favored 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.
- **❖ 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.
- ❖ Involuntary resettlement: The forceful loss of land resources resulting from project activity that requires individuals, families and/or groups to move and resettle elsewhere.

- ❖ 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).
- ❖ 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.
- ❖ 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.
- ❖ 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.
- **Perpetrator:** A person, group or institution that inflicts, supports or condones violence or other abuse against a person or groups of persons.
- ❖ **Pests** Commonly include harmful insects, mites, ticks, weeds, bacteria, fungi, rodents, birds, and others.
- ❖ **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, nematicides, fungicides, antibiotics, rodenticides, plant growth regulators, etc.
- ❖ **Pest Management** Any deliberative action to prevent or reduce the density or harmful effects of a pest population.
- ❖ 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.
- ❖ **Pollution:** contamination altering the state of purity (e.g., chemical effluent discharge into a surface water body).
- ❖ **Project Brief:** The initial submitted document to NEMA to initiate the process that will lead to the issuance of the EIA certificate of approval.
- ❖ 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.
- ❖ 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.1
- **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.
- ❖ Survivor: A preferred term for a person who has lived through an incident of Gender-Based Violence and Violence against Children.
- **Suspect:** A person believed to be guilty of a specified offence or crime without proof.
- ❖ 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".

8

1 INTRODUCTION

FELITAI mixed Demonstration Farm with support from aBi partnership from May 2023 will implement a Dairy Community Multiplication Pilot Project. This project is establishing a demonstration facility training farmers on the climate smart dairy farming so as to supply the processing plant established by the Balawoli Kyebaja Tobona Dairy cooperative society. The project is formulated against the backdrop that the facility may remain grossly underutilised if farmers are not supported to cope with climate change effects for increased productivity and production volumes. There is a need to pilot greening initiatives under the zero grazing in Kamuli District to effectively use the established processing plant. This Green Challenge Fund project provides an opportunity to demonstrate greening interventions for the 20 demonstration small holder farmers while providing pasture seed, training and AI services to reach the targeted 200 farmers in Kagumba Subcounty.

The proposed project will promote Dairy productivity enhancing climate smart technologies of the Jersey breed that are early maturing, drought, vector and disease tolerant and will facilitate the generation of green energy and organic fertilisers to boost pasture growing, vegetable growing and that of other crops among the selected 20 demo farmers. The project will promote rearing planting of early maturing trees for nitrogen fixing, provision of animal nutrition (fodder), Vitamins from fruit trees, firewood during pruning and act as wind breaks; promote alternative energy efficient technologies of through biogas and train local youths in making of silage and hay at Sub County level as a viable pasture business with markets as far as Kenya.

Majority (60%) of farmer beneficiaries will be women recruited from the parishes in the pilot Kagumba subcounty.

Therefore, supporting FELITAI mixed Demonstration Farm under Green Challenge Fund offers an opportunity to leverage the current Efforts under the PDM approach by piloting climate adaptation and mitigation interventions to dairy farmers in Kagumba and ensuring effective utilisation of milk processing established infrastructure at Balawoli, Kamuli District.

1.1.1 PURPOSE/ GENERAL OBJECTIVE:

To increase milk yields among 200 dairy farmers in Kagumba subcounty attributable to climate change through adoption of sustainable practices and technologies

1.1.2 SPECIFIC OBJECTIVE:

- 1. To increase the use of sustainable farming practices and technologies for drought tolerant Jersey breeds that are efficient at Food conversion (Artificial Insemination of 1600 animals)
- 2. To promote use of biogas as an alternative energy efficient technology for cooking and source of organic manure among Dairy farmers by March 2024.

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1.1.5 THE PROJECT ACTIVITIES WILL INCLUDE:

- 1. Demonstrate zero grazing of the Jersey dairy breed (Feeds less, matures early, efficient food converter, drought tolerant, better milk yield than the current local animals, better milk quality in terms of butter and fat content than Frisians) among Dairy farmers
- 2. Set up 20 demonstration biogas units for 20 selected dairy farmers as a reliable source of clean, time saving cooking energy. This will reduce pressure on woodlands when finally adopted widely
- 3. Train dairy farmers on establishment and management of drought resistant and nutritious pastures such as Super nappier, Chloris Guyana, Lablab, centrosema, Bracharia mulato. The mother demonstration gardens will be established at the irrigated land at FELITAI Farm.
- 4. Train Farmers especially the energetic unemployed Youth on Climate Smart processing and preservation of pastures through making silage and hay.
- 5. Provide AI services to Dairy farmers so as to access the resilient and efficient Jersey dairy breed
- 6. Demonstrate the use of a web-based livestock farm management and traceability system to capture key records needed to promote marketability of Uganda's livestock products on the international market (capture birth, date, disease control, biogas establishment and management at the demonstration farms). This will be accessible online for all stakeholders.
- 7. Train farmers in agroforestry and distribute early maturing, fruit trees like Soursoup (Kitafeeri), Pomagranade, Jackfruit and fodder pastures such as Caliandra and sessbania to reduce soil erosion, provide nutritious pasture in the soils, provide firewood during pruning, fodder and act as wind breaks in addition to providing vitamins (fruits) to the households.

1.1.6 PROJECT BENEFICIARIES

This Green Challenge Fund project provides an opportunity to demonstrate greening interventions for the 20 demonstration small holder farmers while providing pasture seed, training and AI services to reach the targeted 200 farmers in Kagumba Subcounty.

2 ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

This section introduces the ESMF, rationale and purpose of using framework, and describes its preparation and contents.

2.1.1 RATIONALE AND PURPOSE FOR ESMF

The purpose of the ESMF is to provide guidance to the Project Implementation Unit (PIU) and the Subproject Proponents on the E&S screening and subsequent subproject assessments during implementation, including subproject-specific plans. 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.

2.1.1.1 OBJECTIVES OF THE ESMF

The specific objectives of the ESMF are:

- a. Establish clear procedures and methodologies for environmental and social planning, review, approval and implementation of sub-projects;
- b. Assess the potential generic environmental and social impacts of envisaged investments in the project;
- c. Propose generic mitigation measures which will effectively address identified negative impacts;
- d. Specify appropriate roles and responsibilities, and outline the necessary reporting procedures for managing and monitoring environmental and social concerns related to subprojects;
- e. 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;
- f. Establish the funding requirements to implement the ESMF.

2.1.2 APPROACH AND STUDY METHODOLOGY IN THE ESMF PREPARATION

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

2.1.3 DOCUMENT REVIEW

Review of the existing baseline information and literature material was undertaken to gain an indepth 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 preparation and implementation, especially in light of the new National Environment Act No.5 of 2019 and the National Environment (Environmental and Social Assessment) Regulations, 2020.

2.1.3.1.1 STAKEHOLDER CONSULTATIONS

Consistent with best practices in developing ESMFs, consultations were held during field visits with the key stakeholders and institutions including: Office of the Prime Minister, Ministry of Agriculture, Animal Industry and Fisheries, Ministry of Education and Sports, Ministry of Health, Ministry of Water and Environment, Ministry of Gender, Labour and Social Development, Ministry of Local Government, the Project Coordination Unit, District Local Governments and National Environment Management Authority (NEMA).

2.1.3.1.1.1 OBJECTIVES OF THE STAKEHOLDER CONSULTATIONS

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 project.

2.1.3.1.2 METHODS OF CONSULTATIONS

2.1.3.1.2.1 VIRTUAL MEETINGS

Cognizant of COVID-19 pandemic, the Consultant adopted largely virtual meetings were largely adopted to consult the stakeholders in the study. To ensure that stakeholders have a clear understanding of the purpose for being engaged, introductory telephone calls were first made the stakeholders prior to subsequent engagements. This helped to have an entry point and build rapport with the stakeholder earmarked for consultations. This was done with the use of a checklist to guide the interview sessions.

2.1.3.1.2.2 FACE TO FACE CONSULTATIONS

Where it was deemed feasible and safe, face to face consultative meetings were held following Ministry of Health COVID-19 Standard Operation Procedures alongside WHO Guidelines. 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 1-2 & 1-2);
- 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 admission;
- c. All participants were required to wear a face mask at all times, ensuring complete coverage of the nose, and mouth;
- d. The meeting areas were clean and hygienic and surfaces of plastic chairs and tables were regularly cleaned with disinfectants (soap and water) i.e., at least before and after the meeting;
- e. 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 provided waste 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;
 - 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.

2.1.4 SOME OF THE KEY STAKEHOLDER CONCERNS AND VIEWS

The stakeholders raised some concerns which can summarized as follows and details of the meetings are in Annex.

- ❖ Expectant on employment opportunities: There are high expectations from the project in the communities in that, they look forward to some employment opportunities in its various activities. The project should provide information to the public with respect to possible employment that are likely to be generated;
- ❖ Possible avenue for gaining on-job training and capacity building for those to be employed in the project. Implicit desire of affected people and the communities to develop new/existing skills needed for employment or to support entrepreneurial ambitions. However, skills development is part of the project interventions under its capacity building plans;
- ❖ Ensuring that, capacities of the beneficiaries to manage the investments at the end of the project cycle are built so that they are able replicate and adopt to their conditions;
- ❖ 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. Need for adequate involvement of diverse stakeholders taking into gender and related vulnerabilities in the communities; ensuring that technologies to be promoted in the project should be easily adapted to the local settings; This will help get women to be part of the project for their meaningful engagement in the project interventions;
- ❖ The livestock component has to come with technologies for Greenhouse gas management especially biogas technologies and applications;
- ❖ One of the challenges in farming is erratic weather, how does the project ensure timely early warning weather information reaches the grass-root farmers so that they are able to synchronize their cropping schedule in line with the rains?
- ❖ Issues of encroachment in swamps and wetlands by communities who grow rice growing hence, swamp reclamation. The project should come with alternatives so that people can easily get of wetlands if this DCMP project is to meaningfully support environment and natural resource management. The question is, why have communities continued to be engaged in wetland encroachment despite them knowing the benefits from wetlands in terms of their values and uses, this is what should be looked at in the project to be able to have tangible project interventions;
- ❖ Need for continued engagement with communities living near degraded and fragile ecosystems such as wetlands and forests so that, the project has responsive interventions that can enable communities abandon engaging in livelihoods in such ecosystems;
- ❖ Issues of tree cutting by the communities for charcoal and firewood has degraded the environment, the need for the project to come clear with tangible measures of tree planting and the women be on the forefront on this as well as the youth. How are schools being targeted as well as tertiary training institutions as well as academia?
- ❖ Need for continued sensitization and mobilization of the communities especially on the timelines of the project so that they are set to be meaningfully engaged in the project. The teams preparing the project should be providing such milestones;
- ❖ Need for adequate involvement of diverse stakeholders taking into gender and related vulnerabilities in the communities; ensuring that technologies to be promoted in the project should be easily adapted to the local settings;
- ❖ Enhancement of household livelihood initiatives under the project; ensuring there is a clear and robust communication mechanism for managing grievances without reprimanding victims

- especially where there are instances of gender-based violence (GBV), sexual harassment (SH) and sexual exploitation (SE);
- ❖ Insufficient water supply for farming purposes in that, farmers rely on rain water for irrigation. Therefore, irrigation technologies ought to be those which even the local communities can co-opt and operate;

3 POLICY, LEGAL AND REGULATORY FRAMEWORK

3.1 POLICY FRAMEWORK

3.1.1 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 the planned climate smart agricultural project activities, aspects of Environmental Assessment have been integrated into the project with the objective of ensuring sustainability in the project.

3.1.2 NATIONAL DEVELOPMENT PLAN III

The Third National Development plan (NDPIII) covers the period 2020/21 to 2024/25. Agriculture is one of the prioritized areas. Uganda is well-endowed with abundant natural resources, and a major thrust of the NDPIII is how to harness and sustainably use the country's natural resources for socioeconomic development for the benefit of current and future generations of Ugandans. The Agroindustrialization programme (Chapter 5) will address the dominant subsistence sector by increasing commercialization and competitiveness of agricultural production and agro processing. NDP-III is cognizant of the need to sustainably manage ENR and Climate Change (Chapter 7) in its development agenda. This will be key in ensuring resilience in food and clothing markets.

3.1.3 NATIONAL AGRICULTURAL POLICY (NAP) 2013

The Vision of the Nap is "a competitive, profitable and sustainable agricultural sector" and the mission being "to transform subsistence farming to sustainable commercial agriculture." This policy is hinged on 5 objectives namely: ensure household and national food and nutrition security for all Ugandans; increase incomes of farming households from crops, livestock and all other agriculture related activities. As in the NDP III, ENR and climate change are mentioned as important determinants of agricultural production, and accordingly prioritized. It thus aims at ensuring the coordination of the multi-sectoral interventions to remove any constraints to agricultural transformation which is taken cognizant of it and coordination mechanisms have been integrated into this Project.

3.1.4 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 Project should equally integrate gender into its implementation.

3.1.5 NATIONAL POLICY ON ELIMINATION OF GENDER BASED VIOLENCE, 2016

The policy emphasizes early intervention to prevent re-victimization of and long-term effects for girls, including interpersonal violence, sexual coercion, alcohol and drug abuse and mental health problems; Reporting cases of violence against children immediately. The project teams in liaison with district officials (especially Community Development Officer-CDO) will undertake initiatives to do away with Gender Based Violence-GBV cases relating to project implementation activities.

3.1.6 THE NATIONAL HIV/AIDS POLICY, 2011

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.

3.1.7 THE NATIONAL CLIMATE CHANGE POLICY, 2013

The goal of the National Climate Change Policy (NCCP) is to ensure a harmonised and coordinated approach towards a climate-resilient and low-carbon development path for sustainable development in Uganda. The overarching objective of the policy is to ensure that all stakeholders address climate change impacts and their causes through appropriate measures while promoting sustainable development and a green economy. The UCSATP will directly contribute to the objectives of the policy by undertaking activities that promote adaptation and mitigation. Overall, in its design, the project shall support the integration of climate change issues into planning, decision making and activities to be undertaken.

3.2 LEGAL FRAMEWORK

3.2.1 THE 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 UCSATP's compliance with the Constitutional obligations on sustainability, an ESMF has been prepared which outlines mechanisms for environment assessment and generic mitigation measures included therein.

3.2.2 THE AGRICULTURAL CHEMICALS (CONTROL) ACT, N^o. 1 OF 2006

Under this Act, the requirement of packaging, labelling or advertisement of agricultural chemicals is relevant in pesticides management to prevent illegal activities related to mis-labelling and mis-packaging. Section 4 provides requirements for Import, export and sale of agricultural chemicals, summarized here: no person shall import into or sell in Uganda any agricultural chemical unless that chemical has been registered, packed and labelled in accordance with regulations made under this Act and conforms to the standards specified in such regulations.

3.2.3 THE NATIONAL ENVIRONMENT ACT 2019

Part X – Environmental and Social Assessment contains Sections that provide requirements for E&S Assessments, level of assessments, risk categorization, application of mitigation hierarchy and decommissioning of projects. Schedule 4 of the NEA-2019 lists projects (Moderate E&S Risks and Impacts) for which a Project Brief (equivalent of ESMP) and Screening is required (specifically under Part-1: Activities No.1b Community Access Roads, No.4e Support facilities for utilization of water resources and water supply of less than 1000m³/day and valley dams & tanks of less than vol.

1,000,000m³, N°.6 Agriculture, livestock, range management and fisheries). ESMF outlines some of the salient impacts in DCMP project as well as mechanisms for conducting further assessments on the project sub-components.

3.2.4 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 structures shall be involved in the implementation of DCMP project.

3.2.5 THE EMPLOYMENT ACT, 2006

This Act spells out general principles regarding elimination of forced labour, discrimination in employment, sexual harassment and provisions to settle grievances. It further provides that, a child under the age of twelve years shall not be employed in any business, undertaking or workplace. No doubt, this law will oblige the project to ensure no employment of children below the age of 18 years in the project activities.

3.2.6 THE CLIMATE CHANGE ACT 2021

The Climate change Act, 2021 gives effect to the UN Framework Convention on Climate Change, the Kyoto Protocol, and the Paris Agreement. Section 9 of the Act permits the Minister responsible for Climate Change matters to develop further regulations regarding participation in climate change mechanisms such as emissions trading mechanisms, and section 23 allows the Minister to make further regulations regarding the responsibilities of private entities. This project will implement measures to mitigate risks to climate change and build resilience against the shocks of climate change across the selected value chains.

3.2.7 PROJECT LOCATION

The project will be implemented in the districts of Kamuli, whose general baseline is summarised as follows:

3.2.7.1 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. The terrain upon which Kamuli District is located is that of remnant Busoga surfaces and valleys. Physiographical, it rises from lowlands of 3,830ft (1,167m) to hilly surroundings of 91,2249m) 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 Kamuli District.

3.2.7.2 CLIMATE

The sub-region 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^{0} C to 27^{0} 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 900-1150mm. The district is of bi-annual season with the 1st rains covering March-June and 2^{nd} rains August–November.

3.2.7.3 SAFE WATER COVERAGE

Kamuli district is one of the districts in Busoga where safe drinking water is hard to come by. With water coverage of 54%, and over 242,000 people without access to safe drinking water, the district is in the ranks of 20 others categorised as "water stressed", according to the Ministry of Water and Environment (MoWE).

3.2.7.4 VEGETATION

The current vegetation cover in the areas of Busoga is a result of various human influenced or impacted activities, 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 *Markhamaia lutea* (Lusambya), *Ficus* spp (omutuba), *Melicia exelca* (Muvule tree), and *Albizia* spp. dominating most parts of the sub-region. However, the modified types dominate the large extent in settlement or built-up areas in the urban areas, along landing sites and fishing settlements.

3.2.7.5 SUGAR CANE GROWING AND FOOD SECURITY IN BUSOGA REGION

Experts have pointed out sugarcane growing as the cause of chronic poverty and hunger in rural Busoga. It is reported that, the natives have taken on commercial sugarcane growing at the expense of food crop, occupying vast land, and reducing food production and losing the indigenous varieties. A report by the Uganda Bureau of Statistics (UBOS 2017) revealed that Busoga sub region was among the most impoverished in the country. The report further found out that, the number of poor people in rural areas has increased to 10 million from 6.7 million in 2013. It is further reported that, most farmers in districts of Iganga, Mayuge, and Kamuli have stopped growing crops like cotton, bambara nuts (*empande*), sunflower, pumpkin, and millet due to low demand while buyers also offer low prices for such crops, adding that some crops are taken as old people's crops including millet.

In recent years, it is noted that, there is evident decrease in land availability for crop cultivation, food availability as well as a decline in livestock numbers. The declining land availability result here corroborates the results of the land use/cover change analysis results that show that increasing land for sugarcane cultivation has over the years taken over the arable for food crop production and other natural ecosystems. The combination of increased food crop failures, family sizes, and the decreased land available for food crop cultivation heightens the food insecurity situation in the study area. Most of the households now depend on their home gardens as the main source of food and nutrition. However, the sizes of these home gardens continue to shrink as some of them, and where they are located, is increasingly converted into the assumedly lucrative commercial sugarcane.

3.2.7.6 POVERTY IN THE BUSOGA REGION

Busoga region according to the Uganda Bureau of Statistics (UBOS 2021) report indicates that the incidence income poverty levels in Uganda during the COVID-19 pandemic have increased to 22% from 19% with the Busoga region at 14%. Busoga has over the years been ranked top among regions

with high poverty levels. In response, the government has come with several interventions but these seem not to be working since the poverty levels are continuing to rise. A report released by Uganda bureau of statistics indicates that poverty levels have increased from the time coronavirus was confirmed in Uganda last year. The report shows that poverty levels in the Busoga sub-region stands at 14.5%, followed by the Bukedi sub-region at 10.4 and the Acholi region with 10.3%. Out of the 8.3 million people believed to be below the poverty line, 1.162 million people are in Busoga sub region, where many cannot afford a pair of shoes. In the affected areas, children were subjected to child labor. This is explained by the 14% rise from 21% to 36%. Besides the rising poverty levels, access to education is yet another challenge, with most learners trekking long distances, which explains the high school dropout.

It is said that; poverty levels had increased in Busoga largely due to increased population caused by poor family planning. The region has high population density but people don't want to do low-level economic activities which has contributed to poverty. Also, most of them are farmers who deal in growing sugarcane which almost take two years to mature, this means that a person will spend two years lacking money. It is further noted 14.5% of people in Busoga are totally poor, in Bukedi they are 10.4% while Acholi has 10.3%. In addition, it is noted that, the outbreak of COVID-19 has also contributed much to increased levels of poverty.

3.2.7.7 TUNGIASIS/JIGGER INFESTATION IN BUSOGA SUB-REGION

Tungiasis, also called *Tunga penetrans* (commonly referred to as jiggers) infestation, is a parasitic skin infestation due to penetration of a female sand flea (*Tunga penetrans*) into the skin of its host. It is one of the neglected tropical parasitic diseases and has remained an important public health problem especially among economically challenged communities in sub-Saharan Africa. Jigger infestation is endemic in developing countries, particularly where poverty and low standards of basic hygiene exist. *Tunga penetrans* in communities could be attributed to: presence of animal reservoirs such as dogs, cats, pigs, cattle, sheep, horses, mules, rats, mice and wild animals in close vicinity to living quarters, illiteracy, ignorance and negligence, earthen floor houses, and walking bare footed or only with slippers. Poverty and prolonged dry spells are presumably the other factors favouring the high prevalence of tungiasis among communities. In most of the endemic areas, *T. penetrans* prevalence ranges from 15-40% but at times can be as high as 50% in some rural communities. Additionally, the prevalence of *T. penetrans* is higher in certain populations especially among certain age groups such as those between 20-60 years. People afflicted with tungiasis are at increased risk of getting open wounds and suffer from anaemia and tetanus.

A study carried out to determine the prevalence of *tungiasis* and associated risk factors in Busoga subregion in Eastern Uganda showed that the prevalence of *tungiasis* was still high and could be attributed to the poor hygiene, poverty and failure to seek treatment due to stigmatization². *Tunga penetrans* are still a big problem in rural settings in Eastern Uganda. Interventions should therefore be put in place to prevent and control *tungiasis*. More emphasis should be given to improving personal

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² <u>Solomon Tsebeni Wafula, Charles Ssemugabo, Noel Namuhani, David Musoke, John Ssempebwa</u>, and <u>Abdullah Ali Halage</u> (2016). Prevalence and risk factors associated with tungiasis in Mayuge district, Eastern Uganda. *Pan Afr Med J. 2016; 24: 77. Published online 2016 May 24. doi: 10.11604/pamj.2016.24.77.8916*

hygiene and general cleanliness, housing structures and health educating the community on the risk factors of tungiasis and their prevention and control.

3.2.7.8 GENDER BASED VIOLENCE IN BUSOGA AREAS

In the Eastern part of Uganda, Gender Based Violence (GBV) rates are higher than anywhere else in the country. In response to this, Irish Aid is supporting a programme to address GBV in Busoga region, together with the Government of Uganda and civil society organizations. Communities in Busoga region are troubled over an increase in cases of Gender Based Violence in the area. Kamuli and Namutumba districts have topped Busoga Sub-Region in violence cases against women and children during the lockdown, according to call-in records at Nyonga Women's Shelter, a facility counselling and helping in the mediation of survivors of Gender Based Violence (GBV). The shelter was constructed in 2017 by Women Rights Initiative (WORI). Kamuli is one of the districts in the region that is benefitting from this programme, where a GBV Advisory Centre is providing legal and counselling services to victims of gender-based violence.

4 POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND MITIGATION

4.1 POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND KEY ESF REQUIREMENTS

4.1.1 ENVISAGED POSITIVE IMPACTS

Dairy Community Multiplication Pilot Project (DCMP) is an integrated approach to managing livestock, —that addresses the interlinked challenges of food security and accelerating climate change. The planned DCMP project interventions is expected to simultaneously achieve the following positive impacts:

- a. *Improved nutrition amongst the population:* By and large, DCMP addresses food security, misdistribution and malnutrition. Uganda has made tremendous progress in reducing the number of people living below the poverty line, however, progress in reducing under nutrition and food insecurity remains slow due to the multiple nature of the causal factors³. However, the country still faces problems of malnutrition and there exists pockets of famine and hunger. Although the country as a whole is generally self-sufficient in food supplies, food shortages still occur. Therefore, through this project interventions are geared towards sustainable farming practices and technologies for drought tolerant Jersey breeds that are efficient at Food conversion and rise in milk yields.
- b. The use of resource efficient agriculture, sustainable land and water management, climate relevant/resilient agriculture infrastructure, and increased production, productivity and marketing for smallholder farmers will lead to improving the quality of life of the value chain actors, especially the smallholder farmers, including women and youths while at the same time reducing GHG emissions through practices involving feed improvement, manure management, breed enhancement, zero biomass burning, adoption and popularization of biogas use for cooking and lighting, tree planting amongst others. This will in turn lead to the realization of economic opportunities of green growth through market access and increased farm income for smallholder farmers, and employment/jobs for value chain actors leading to increased resilience to climate change;
- c. Sustainable Land Management (SLM) structures and practices will be promoted: Land degradation, including environmental degradation, through poor farming practices continues to impact negatively on agricultural productivity and negating any efforts to improve productivity through increased use of purchased agro-inputs. The SLM practices (soil erosion control, pasture management, intercropping and cover crop planting amongst others) can prevent, reduce or restore degraded lands by reducing soil erosion, improving water storage and increasing soil quality, and thereby increase productivity. These attributes also contribute to climate change

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³ Uganda Food and Nutrition Policy, 2003

- adaptation as well as mitigating climate change by reducing agricultural emissions of GHG and sequestering carbon in vegetation, litter and soils;
- d. *Promotion women empowerment in agriculture:* Despite women's dominant role in agriculture, they still face a myriad of constraints surrounding access, ownership, and control over the means of production. It is estimated that 69% of all women in Uganda don't own land and are only granted access through their spouses or other male family members. When women do not have effective ownership over land this negatively influences decisions about long-term investments in the land as well as their ability to access financial services since they lack collateral. These, amongst others, limit their ability to participate in higher nodes of value chains and restricts their capacity to grow within the sector. In the face of growing climatic threats to agricultural production, the project has set aside measures geared towards prioritized adaptation efforts as well as to identified mitigation opportunities in the agricultural sector which are meant to engender the interventions in the sector.
- e. *Measures for minimizing emissions from key sources in agricultural production systems:*DCMP project focuses on development of mechanisms that minimize greenhouse gas emissions from key sources in agricultural production systems through formulation and support of programs that promote development and use of low emissions technologies to manage livestock feed and manure. In addition, the formulation of improved feeds and feed additives to reduce enteric fermentation will be undertaken. Some of the activities that would reduce agriculture emissions will involve intensive livestock management systems using improved breed quality and improved feed, fodder and pasture quality that is more digestible; adoption of manure management practices including biogas production and utilization.
- f. *Potential increase in adoption of climate resilient agricultural practices:* Uganda's agricultural sector is experiencing climate change effects manifested through, frequent and severe dry spells, floods, high temperature and increased incidence of pests and diseases. Vulnerability to climate change is exacerbated by land degradation, resulting in reduced productivity, loss and damages.
- g. *DCMP addresses the relationship between agriculture and poverty:* Agriculture continues to be the main source of food, employment and income for many people in Uganda. Through the support of smallholder farmers in targeted areas will improve their knowledge, skills and technologies in climate change adaptation and apply climate relevant farming practices.
- h. *Envisages to bring about maintenance of ecosystems goods and services:* Ecosystems provide farmers with essential services, including clean air, water, food and materials. It is therefore imperative that DCMP interventions do not contribute to their degradation. The goal of the climate change, natural resources, environment and water management program is to stop and reverse the degradation of water resources, environment, natural resources as well as the effects of climate change on economic growth and livelihood security.
- i. *Increase commercialization and competitiveness of agricultural production and processing:* The agro-industrialization agenda is aimed at increasing commercialization and competitiveness of agricultural production and agro-processing. Some of the proposed interventions under the

agro-industrialization program that are of high significance for this project are its contribution to the Parish Development model.

- j. **Building resilience and associated mitigation co-benefits** DCMP project will help reduce vulnerability of Uganda's agriculture sector by increasing productivity, enhancing adaptation and resilience of the farming systems and reducing emissions intensity in the context of achieving sustainable development and poverty eradication.
- k. *Value chain integration* –This approach is holistic in that it considers input supply, production, agricultural services, marketing and business support services as necessary building blocks. Under the approach, both public and private sectors are seen as critical actors in the value chain. Knowledge and capacity building are critical strategic priorities to leverage innovations and increase efficiencies. The approach also provides enabling framework for integrating gender and the needs of the youth.

4.1.2 POTENTIAL NEGATIVE IMPACTS

Notwithstanding, the likely use of agro-inputs (such as acaricides, fertilizers) that may pose limited and site-specific E&S risks and impacts.

The key low to moderate environmental risks and impacts will largely occur during construction phase such as: i) Degradation of vegetation due to overgrazing; ii) community health and safety issues, and communicable diseases (e.g., HIV and AIDS, COVID-19); community health and safety risks associated with the generation and disposal of solid waste. In general, anticipated environmental risks and impacts are expected to be temporary, predictable and/or reversible with lower effects on human and in the environment.

Social risks associated with the project will mainly emanate from anticipated activities described above, and with specific focus on risks normally associated with social conflict over natural resources, spread of communicable diseases, GBV/SEA, Labor issues/disputes. Other anticipated risks include social exclusion based on gender, disability, age, sexual orientation and gender identity. Inadequate engagement of the various stakeholders and an inadequate grievance redress mechanism also present a risk. The project design includes elements to ensure transparency, accountability and good governance of the project implementation process. A strong emphasis is laid on social accountability. Sociocultural issues in some target communities hinder resource allocation/share, resource access and use, and equity issues in project implementation. These challenges affect project implementation and ownership. Therefore, in the project design, gender, and inclusion of youth will be mainstreamed at all levels of implementation as well as capacity building stakeholders in the weak areas.

4.2 POTENTIAL-GENERIC ENVIRONMENTAL AND SOCIAL MITIGATION MEASURES

The project has a potential to generate negative E&S impacts and thus affect negatively the environment and livelihoods of the host communities though the envisaged overall impacts are mainly positive. For the negative impacts the magnitude will vary in degree depending on the nature of investment under the project.

Table 4-1: Generic Environment & Social Impacts and Mitigation Measures associated small scale animal husbandry sub projects

Impacts	Mitigation		
Small Scale Animal Husbandry Sub-projects			
Small Scale Animal Social Environment Human health hazards Introduction of diseases to humans and contamination of water supplies for human use by animal manures and urine. Pollution and environmental disruption from inappropriate use of agro-chemicals. Transformation of indigenous (sometimes communal) tenure systems and organizations.	 Collect and store manure for composting and later application to fields. Keep manure and urine away from household areas and waterbodies. Consider using a bio-gas system. Provide protective clothes to minimize danger to field workers applying agro-chemicals. Avoid overuse of fertilizers. Apply herbicides and pesticides at recommended times and doses. 		
systems and organizations.	 Consider integrated pest management. Comprehensive community participation and attention to rights and needs of all groups. 		
Soil and Vegetation	•Limit animal numbers.		
 Degradation of vegetation due to Too many animals and overgrazing, possibly as a result of stock improvement measures. Excess harvesting of fodder and forage resources. Decrease in favoured fodder species and increase in inedible weedy species. Increased soil erosion due to: Clearing and degradation of vegetation, Trampling and loosening of soil, Animal paths scarring hillsides and triggering erosion, sediment-laden runoff and, possibly, gully formation. Increased rapid runoff due to vegetation clearing, soil compaction diminishing infiltration capacity. Deterioration of soil fertility and physical characteristics due to removal of vegetation, increased erosion, soil compaction diminishing infiltration capacity. 	 Control length of grazing time and succession of use on particular areas by using rotational grazing. Development of dry-season grazing areas and grazing reserves. Mix animal species to maximize use of vegetation resources. Reseed and produce fodder. Use cut-and-carry feed from elsewhere. Restrict animal access to unstable areas (e.g. by defining and fencing-off critical slopes). Use soil erosion control measures (e.g. reforestation, reseeding of grasses, land preparation, terracing. 		
Water Points	•Place water points strategically to spread the effect.		
•Degradation or depletion of vegetation and soil around water points.	•Develop many small-capacity water sources.		

Impacts	Mitigation
 Too much use of surface and groundwater sources results in reductions in surface flow and the water table. Lowering of the immediate water table and degradation of local vegetation through drilling wells and use of boreholes. Aggravation of the effect of droughts through poor planning, placement, management and control of water points. 	 Control use of water points (animal numbers and time of year). Fence off permanent water sources when temporary pools and streams are available. Limit well capacity by choice of technologies (e.g. handpumps or buckets instead of motor pumps).
 Water Quality Increased muddiness of surface water courses due to soil disturbances from grazing and increased soil erosion. Contamination of surface and groundwaters and negative effects on wildlife, vegetation, crop yields, aquatic ecology and wildlife by agro-chemicals used to control pests and diseases. Contamination of water supplies from leaching or runoff of animal urine and manures. 	 Use biological pest controls before chemical controls to reduce adding toxic residues to the environment. Choose agro-chemicals that are species-specific, with short active period and low impact on other plants. Choose appropriate spraying measures and timing to minimize water pollution. Fence off waterbodies from grazing animals.
 Wildlife Displacement or reduction of wildlife populations by loss of habitat. Disruption of migratory stop-over points. Competition for food and water resources. Increased poaching and killing of wildlife considered as pests or predators to animals, or as human food sources. Introduction of diseases to wildlife. 	 Plan and implement range management strategies (choice of species, animal numbers, grazing areas) that minimize adverse effects on wildlife and avoid excessive competition. Rehabilitate degraded areas nearby as wildlife habitat. Investigate management of wildlife ranching which will help protect wildlife resources. Consider wildlife ranching, tourism and controlled hunting as alternatives to animal production.
 Animal Processing Degradation of surface waters by effluents with high biochemical oxygen demand (BOD), chemical oxygen demand (COD), and suspended and dissolved solids. Introduction of diseases to humans through bacteria in discharge effluent. Land degradation through inappropriate disposal of solid wastes onor off-site. 	 Liquid and solid waste disposal or treatment to prevent contamination of water supplies by effluent from tanneries, abattoirs and other animal processing facilities. Proper management of animal processing facilities to reduce health impacts: Institute hygienic work practices Ensure adequate refrigeration Clean machinery

Impacts	Mitigation		
•Damage to aquatic ecosystem and water supply quality from	- Implement an operational health and safety programme		
equipment washing detergents.	•Monitor for changes in human health and water quality.		
•Human health effects within the facility, Unhygienic work			
conditions, Spread of animal diseases to humans, Attraction of			
predators and scavengers.			
Management of Wastes Ge	enerated by the Project Activities		
	Determine the volumes of waste materials by category (e.g. organics,		
Contamination of Soil, Water, and Air by waste produced	hazardous materials, burnables, recyclables, etc.), and design the		
	management system to deal with each waste category separately as		
	required.		
	Training and awareness on Safe Waste Disposal, importance of a healthy		
	environment and on the principles and values of waste reduction,		
	recovery and recycling to reduce waste disposal requirements and extend		
	the life of disposal site(s)		
	Assess nature and quantity of hazardous wastes, and provide for separate collection and disposal		
	Encourage home composting of organic wastes		
	Where recycling is practicable, have households' separate recyclables		
	from other waste <i>before</i> collection		
	• Site selection is critical. Locate project site(s) (e.g. landfill, incinerator)		
	with buffer zones from other land uses and waterbodies to minimize land		
	and water resource impacts, aesthetic impacts, and health risks		
	Minimize handling of waste, and maximize containment		
	 Enclose vehicle unloading and refuse sorting (for recovery and recycling) 		
	areas, as well as good ventilation and dust suppression		
	Contract NEMA approved waste collector & transporter. Waste oil		
	disposal to be undertaken by NEMA approved oil companies or agents.		
	disposal to be undertaken by NEWIA approved on companies of agents.		

5 ESMF PROCEDURES AND KEY INSTRUMENTS TO ADDRESS ENVIRONMENTAL AND SOCIAL ISSUES

This section defines steps, actions and responsibilities for 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 ESF ESS1 Assessment and Management of Environmental and Social Risks and Impacts. The screening will also be cognizant of Uganda's National Environment Act No.5 of 2019, especially Section 113 which provides for Projects Categorization.

5.1 ENVIRONMENTAL AND SOCIAL SCREENING AND RISK CLASSIFICATION

Environmental and social screening is undertaken to anticipate the likely risks and it facilitates early identification of potential impacts and consequently guide on the needed level and form of assessment that is commensurate with importance of possible impacts. The screening based on World Bank's ESF also establishes a Project's Environmental and Social Risk Classification whereas on Government of Uganda's National Environment Act this establishes the form and level of assessment required.

The classification of each subproject under the appropriate environmental category was based on the provisions of the World Bank Environmental and Social Framework (ESF), specifically (ESS-1 Assessment and Management of Environmental and Social Risks and Impacts), and in consideration of Uganda's NEMA (2019) and ESIA Regulations (2020) and Guidelines. The Bank as per its ESF classifies projects into four classifications: High Risk, Substantial Risk, Moderate Risk, or Low Risk. In determining the appropriate risk classification, the Bank takes into consideration issues such as project type, location, sensitivity and scale; nature and magnitude of potential environmental and social impacts; and the capacity and commitment of the Borrower to manage environmental and social risks and impacts in a manner consistent with the applicable ESSs. In addition, contextual issues are also taken into consideration including but not limited to legal and institutional considerations; nature of the mitigation and technology being proposed, governance structures and legislation; and aspects of stability, conflict or security. The Bank discloses the project's risk classification on their website and in project documents, such as in this ESMF. The risk classification is reviewed by the Bank on a regular basis, including during implementation, and will change the classification where necessary, to ensure that it continues to be appropriate. Any change is disclosed on the Bank's website.

Based on Uganda's NEA 2019, projects are *Categorized* based on the anticipated level and form of assessment (Section 113), largely determined by the following factors among others (Section 5(2) *Principles of Environmental Management*: nature and scale of proposed project or activity; the documented impacts of similar or related projects or activities previously undertaken in Uganda; and the anticipated magnitude of environmental, social, economic and cultural impacts of the proposed project or activity (NEA, 2019 Section 110 (2). Schedule 11 provides list of activities exempted from ESIA, whereas Schedule 4 provides list of activities which require a simplified form of ESIA called a Project Brief (ESMP) in accordance with Section 112 and Schedule 5 provides list of projects or activities that require mandatory detailed ESIA referred to as Environmental Impact Study. NEMA defines Project Brief as a summary statement of the likely environmental impacts of a proposed activity. The Tables 5-1 and 5-2 below provide summary explanation of environmental and social attributes under the various risk categories in line with the ESF and closely aligned with the NEA 2019 requirements:

High/Substantial Risk/Full and detailed ESIA –as per Uganda's NEA, these are typically projects with adverse environmental impacts that are *broad, diverse*, *beyond local site, irreversible*; usually entail major resettlement or conversion/degradation of natural habitats; and use of hazardous materials. The projects that entail full and detailed ESIA are classified as High and Substantial Risk projects.

Moderate Risk and Low Risk Projects Vs Project Brief/ ESMP projects — These are projects with potential adverse impacts more limited, fewer, site-specific, largely reversible, readily and reliably mitigated through known methods. As per Ugandan classification, they are either exempted from ESIA or require a simple form of ESIA, nationally called Project Brief or ESMP. They are likely to have no adverse environmental impacts, or minimal and easily mitigated. No ESIA required, but ESMP may be done to manage specific aspects. In line with the WB-ESF, the projects of this type are classified as Moderate or Low Risk projects, and their specific attributes are summarized on Error! Reference source not found.

The Dairy Community Multiplication Pilot Project: will generate Low E&S risks and impacts, as per the proposed activities. Overall, the environmental and social risks and impacts are expected to be minimal and not adverse, site specific, reversible, can be well identified and readily avoided, minimized, and readily mitigated/ manageable. However, the overall E&S risk is rated moderate considering the diverse activities to be included in the project, and inadequate Institutional E&S capacity of the implementing entities. These will be managed through in-depth stakeholder engagement during site specific assessments and development of ESMPs for civil works, Capacity building to strengthen implementation unit and local community organizations will also help to reduce risks. An in-depth E&S Management Framework will be implemented to help avoid significant adverse impacts on the environment and or potentially affected people.

PROJECT LEVEL GRIEVANCE MECHANISM

When local people present a grievance, they generally expect to receive one or more of the following: acknowledgment of their problem, honest response to questions about project activities, apology, compensation, modification of the conduct that caused the grievance and some other fair remedy. In voicing their concerns, they also expect to be heard and taken seriously. The project level grievance mechanism shall be outlined in the ESMF, and ESIA/ESMPs where applicable.

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, and project conditions and scale. In its simplest form, a grievance mechanism can be broken down into the following primary components:

- a. Receive and register a complaint.
- b. Screen and validate the complaint.
- c. Formulate a response.
- d. Select a resolution approach, based on consultation with affected person/group.
- e. Implement the approach.
- f. Settle the issues.
- g. Track and evaluate results.

Learn from the experience and communicate back to all parties involved

Level 1: Parish grievance redress committees (LGRC) will be initiated at the village level to record grievances and also help in mediation. This committee will comprise the Parish Chief, LC I

Chairperson, a trusted village elder, a religious representative, an elected PAP representative, representative of the Parish, Farmer Group and specific vulnerable group representatives of relevance to the village i.e. women, youth and the disabled. Disputes will be resolved at the village level as far as possible. The project will prioritize use of existing Grievance Redress Structures/ Committees as opposed to forming new ones. In such cases, the project will be introduced to the existing GRCs and taken through the project specific GRM requirements.

Level 2: The Grievance Redress Committee at the Sub County level

This will be established at sub county level to deal with grievances unsettled at the community or farmer groups level. It will comprise of approximately 5 members;

- 1. The Sub County Chief, Chairperson to the committee
- 2. The Community Development Officer, Secretary to the committee
- 3. Secretary for Production, as member
- 4. A representative of vulnerable groups (women etc.), as member
- 5. Agriculture extension officer, as member

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 PIUs or, 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.

6 STAKEHOLDER ENGAGEMENT, CONSULTATIONS AND DISCLOSURE

6.1 OVERVIEW

Stakeholder engagement is an inclusive process that will be conducted throughout all the stages of the project. It is aimed to support the development of strong, constructive and responsive relationships which are important for the sustainability and acceptability of the project. Stakeholder engagement is most effective when initiated at an early stage of the project development process, and is an integral part of early project decisions and the assessment, management and monitoring of the project's environmental and social risks and impacts.

6.2 OBJECTIVES OF STAKEHOLDER AND COMMUNITY CONSULTATIONS

The consultations with stakeholders and communities should be carried out to specifically achieve the following objectives to:

- a. provide information about the project and to tap stakeholder information on key environmental and social baseline information in the project area;
- b. provide opportunities to stakeholders and PAPs to discuss their opinions and concerns respectively;
- c. solicit the stakeholders' views on the project and discuss their involvement in the various project activities;
- d. discern the attitudes of the community and their leaders towards the project so that their views and proposals are taken into consideration in the formulation of mitigation and benefit enhancement measures;
- e. identify specific interests of and to enhance the participation of the poor and vulnerable groups; and
- f. Inform the process of developing appropriate management measures as well as institutional arrangements for effective implementation of the Project.

6.3 ENGAGEMENT WITH STAKEHOLDERS

The following key methods of engagement shall be used to inform the various stakeholders and public about the proposed DCMP Project, specifically its key activities. The public consultation period began on 6th December 2022 to March 2023. The process served to provide information about the project and the purpose of the ESMF as well as a framework plan for environment and social compliance during project implementation.

6.4 ISSUES OF FOCUS DURING STAKEHOLDER ENGAGEMENT

The stakeholders were invited to respond to specific questions relating to the proposed Dairy Community Multiplication Project (DCMP) and were also encouraged to make additional comments during the consultation process. Some of the key issues to be discussed with stakeholders regarding the project will be summarized as follows:

- a. Provision of information on the project to the stakeholders i.e. its development objective, key components, activities to be undertaken;
- b. Target beneficiaries of the project;
- c. Modalities of mobilizing communities to engage in the project with a focus on the youth, women and other vulnerable groups;
- d. Wider stakeholder fears in the use of AI services and acaricides to animal husbandry;
- e. Suggestions on how best the project could be implemented while ensuring sustainability; and

f. Any other suggestions to improve project plans and its implementation.

Table 6-6-1: Summary of earlier stakeholder issues during project formulation consultations

Date and Issues raised			Remarks and	Proposed Actions to
stakeholder met			clarifications during	address outstanding
			plenary	issues.
6 th December	Conflicts over some of	•	These issues have	Appropriate measures have
2022 to March	the production resources		been noted and they	to be defined in the SEF
2023	such as; grazing land –		will be taken care off	including the GRM
	among men and women		at the project design to	
Stakeholders	and youths within the		ensure inclusiveness	
include; District	households, wetlands		in the project	
CAO, DPO,	due to a proposal project,	•		
DAO, DVO,	wild life and human			
LLGs, and	settlements and farmer			
Farmers,	fields, pasture especially			
	among the pastoral			
	communities that are			
	doing communal			
	grazing.			
	Will the beneficiaries be	•	This will be clarified	Undertake farmer
	required to co-fund?		at inception of the	sensitisation
			project but obviously	throughout
			it's important for	project
			farmers to co-fund	implementation
	What will be the role of	•	Mobilize and involve	❖ Clearly map out
	local government in the		the beneficiaries to	stakeholders and
	project		benefit from the	define their role
			project	in the project
	Management of water	•	Engagement of the	❖ Need to
	infrastructure for it to be		established water	strengthen the
	sustainable		committees at the	water
			existing wetlands	management
				committees

6.5 FUTURE CONSULTATIONS

6.5.1 ISSUES FOR CONSULTATION

The project intended objectives, the locations, enhancement mechanisms, its ownership as well as the need of public consultation have to be briefly discussed in an inclusive, comprehensive, culturally sensitive, meaningful and effective manner to all to the participants that they can forward their views on these bases.

6.5.2 CONSULTATION DURING MOBILIZATION AND SENSITIZATION

At this stage, FELITAI will undertake awareness creation among the key stakeholders of the Project at district, sub-county and community levels. This will help create a good understanding of Project objectives, activities, access criteria, implementation modalities and inspire stakeholders to actively participate in Project implementation. The awareness creation will be done through electronic, print and traditional media, workshops, seminars and community meetings as an ongoing undertaking. The sensitization and mobilization campaigns are expected to initially stimulate community interest in the project support as well as promote effective stakeholder participation, transparency and accountability in Project implementation throughout the subproject cycle.

6.6 GENERAL CAPACITY DEVELOPMENT FOR MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

6.6.1 CAPACITY ASSESSMENT NEEDS

FELITAI has established a set of minimum standards of staffing and capacity who shall successfully implement the project. The staff shall have qualifications, skills and experience acceptable to implement this project. The details of staffing arrangements will be further elaborated in the Human Resource Manual.

Kamuli District shall ensure participation of the following staff as part of the District Implementation Support Teams: Natural Resources Staff (District Natural Resources Officer, District Environment Officer, District Community Development Officer, District Forest Officer, and Wetlands Management Officer) and Community Based Services Department (District Labour Officer, District Gender Officer, District Probation officer, Community Based Officers). The full structure for project coordination including roles and responsibilities will be clearly outlined in the Human Resources Manual.

In order to effectively implement the ESMF may hire Consultants to establish resident institutional capacity on Environment and Social Safeguards. The overall objective will be to build and strengthen the institutional capacity of the implementing agency 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 are followed throughout project implementation.
- b. Assist FELITAI in strengthening their capacity to deal with environmental and social issues in a sustainable and safe manner.
- c. Identify and assess overall needs for environmental education, information, awareness building and training.

6.6.2 TRAINING IN ENVIRONMENTAL AND SOCIAL 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. Each Module will be delivered in one day.

6.6.2.1 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 management requirements in Uganda;

- d. World Bank Environmental and Social Framework, summary of the 10 E&S Standards, and their requirements;
- e. FAO's Guidelines on Pesticides key aspects for implementation.

6.6.2.2 MODULE 2

- a. Introduction to Project Components, Implementation requirements and coordination/management arrangements, responsibilities of various stakeholders and communities, including formation and coordination of various project Committees;
- b. Environmental and social considerations of each project component;
- c. Environmental and social assessment processes;
- d. Mobilization and consultation of communities, taking into consideration vulnerable and marginalized groups;
- e. Screening using the Environmental and Social Screening Form;
- f. Development of and ESMP, its implementation, monitoring and reporting;
- g. Training of District Health Teams on Health impact surveillance and monitoring.
- h. Training on supervision of ESMP and associated implementation plans. This would address: how to ensure appropriate ESHS conditions included in project contracts, how to perform site visits to supervise/check works/activities, how to review project ES monitoring reports (e.g., from contractors) and how to prepare ES reports and notifications (e.g., to be sent to PIU, etc.), how to develop actions (plans) to resolve issues or non-compliances, etc.

6.6.2.3 MODULE 3

These will include:

- a. Introduction of the project components and E&S requirements
- b. Training all project workers on key provisions of project Code of Conduct;
- c. Management of Occupational and Community Health and Safety aspects including emergency response;
- d. Establishing and operationalizing Grievance Redress Committees, including their Training, Grievance Log maintenance and resolution of grievances;
- e. Reporting Serious and Severe Incidents and Accidents relating to project operations, in compliance with World Bank's Operational Procedures;
- f. Training project team on handling of Sexual Exploitation and Abuse cases; and
- g. Training of project staff on implementation and observance COVID-19 SOPs.
- h. Labour and Working Conditions, and Compliance with National Labour Laws
- i. SGBV, child labor and protection issues

7 GENERAL ENVIRONMENTAL AND SOCIAL IMPLEMENTATION BUDGET

7.1 ENVIRONMENTAL AND SOCIAL BUDGET COMPONENTS

Financial resources are required to support implementation of the ESMF and general environmental and social management activities. Below are budget estimates to support basic environmental and social project management activities. The project is urged to prioritize and financially fund the listed activities in order to mitigate the likely environmental and social risks and impacts of the project activities.

Table 7-1: ESMF Implementation Budget

Item	Year 2023(USHS)
Implementation of General Capacity Development Plan for Management of Environmental and Social Risks and Impacts in the project (Chapter 7.4).	3,000,000
ESSH compliance supervision by District ESS team	2,000,000
Enhancing FELITAI safeguards management infrastructure such as E-ESSH safeguards tracking system and analytical monitoring equipment	5,000,000
stakeholder engagements, preparation and implementation of site-specific instruments and tools including mainstreaming of ESHS aspects in other sector operations	2,062,300
Strengthening Grievance Redress Mechanism structures,	2,205,800
Strengthening stakeholder, institutional participation, and mindset change including protection of vulnerable groups	2,200,000
Total Annual Budget	16,468,100